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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.

Opposite Merchants' Coffee House, Main Street.

VOL. I.

RICHMOND, OCTOBER, 1841.

No. 9.

DRAINING.

We hope we shall not be considered pertinacious in our frequent allusions to this improved mode of Agriculture. Satisfied of the importance of the subject, we desire most earnestly to impress its value upon our readers. The following letter comes from the pen of the lamented Buel, one of the soundest minds and clearest heads that this country has ever produced. We shall not fail to avail ourselves of every opportunity to second his views upon this important point:

KEEP YOUR LAND DRY.

The importance of draining is not duly appreciated, nor its practice well understood among us. Although water is indispensable to vegetation, too much of it is as hurtful as too little. It is necessary to the germination of the seed, to the decomposition of the vegetable matter in the soil—to the transmission, of the food from the soil to the plant—to its circulation there—and to the maturity of the product. All these useful purposes are defeated, where water remains in the soil to excess—the seed rots, the vegetable matter which should serve as the food of the crop, remains insoluble, in consequence of the absence of heat and air, which the water excludes; or, if the seed grows, the plant is sickly, for want of its proper food, and there is consequently a virtual failure in the harvest. It is not from the surface only that we are to determine whether land is sufficiently dry to support a healthy vegetation; but we are to examine the surface stratum, into which the roots of the plants penetrate, and from which they draw their food. If this is habitually wet—if it grows marshy plants—if water will collect in a hole sunk fifteen inches below the surface—the land is too wet for cultivated crops, and means should be adopted to render it more dry. From my partial acquaintance with this country, I feel assured that much of your best land is rendered unfit for tillage, or the growth of the finer grasses, by reason of the excess of water, which passes or reposes upon the sub-soil unnoticed by the cultivator. These lands are denominated cold and sour, and they truly are so. Cold, sour lands are invariably wet lands below, if not upon the

surface. But if the superfluous water were judiciously conducted by efficient under drains, (for the construction of which you possess the best materials in abundance,) these lands would be rendered warm and sweet, and highly productive, and the outlay would be repaid by the increased value of two or three of the first crops. Wet lands are generally rich lands, abounding in vegetable matters, which water has preserved from decomposition, but which readily become the food of plants, when the water is drawn off. Let me imagine a case, which I am sure will be found to exist in many parts of your country. There is a slope of a little hill, half a mile in extent, terminating in a flat forty rods wide, through which a brook meanders. The soil on this slope and in this flat is of a light, porous quality, six to twelve inches deep, reposing on a sub-soil impervious to water, as clay, rock, or hard-pan. By soil, I mean the upper stratum, in which vegetable matters are blended with earthy materials, and which constitutes the true pasture of plants. Near the top of this slope, all along on a horizontal level, or perhaps lower down, spouts or springs burst through the sub-soil, a thing very common in hilly districts, the waters from which finding an easy passage through the loose soil, spread and run down the slope, and upon the sub-soil, and through the flat, till they find their level in the brook. A thermometer plunged down to the sub-soil, will indicate, at midsummer, a temperature probably not greater than sixty degrees, whereas to grow and mature many of our best farm crops, we require a heat in the soil of seventy or eighty degrees. How shall we remedy this evil, and render this land profitable to the occupant? Simply by making an underdrain or drains, in a gently inclining direction; a little below those spouts or springs, and, if practicable, somewhat into the sub-soil. These will catch and conduct off the spouting waters, and by laying the lower plane dry and permeable to heat and air, develop all its natural powers of fertility.

I will suppose another case—that of a flat surface, underlaid by an impervious sub-soil. This is rendered unproductive or difficult to manage, by *stagnant* waters. The rain and snow waters, penetrating the soil, are arrested in their downward passage, by the sub-soil, which not having slope to pass them off, they remain, and stagnate, and putrefy, alike prejudicial to vege-

table and animal health. The mode of draining such grounds and rendering them productive and easy management, is, first to surround the field with a good underdrain, and to construct a sufficient open drain from the outlay to carry off the waters. Then with the plough, throw the land into ridges of twenty to thirty feet in breadth, according to the tenacity of the soil, in the direction of the slope, and sink an underdrain in each of the furrows between the ridges, terminating them in the lower crossdrain. The materials of the underdrain, which are generally stones, should be laid so low as to admit of the free passage of the plough over them. The superfluous water, by the laws of gravitation, settle into these drains, and pass off, and the soil becomes dry, manageable and productive. An acquaintance called upon a Scotch farmer whose farm had been underdrained in this way, and being informed that the improvement costs sixteen dollars an acre, tile having been used, remarked that it was a costly improvement. "Yes," was the farmer's reply: "but it cost a deal mair *not to do it*," which he illustrated by pointing to an adjoining farm, like situated, which had not been drained, and was overgrown with rushes and sedgegrass, and then to his own fields teeming with luxuriance and rich in the indications of an abundant harvest.

I have dwelt upon the subject of draining with more detail, because I have personally realized its benefits, and am sure it may be extensively gone into with certain prospect of reward.

Judge Buel.

FLOWERS.

We have repeatedly advocated the cultivation of flowers. It is an innocent and elegant amusement, and although it may not be so productive of *thrift*, as some other modes of employment, it is productive of refinement and happiness, which thrift cannot always procure.

To the lover of flowers, and who does not love these beautiful gifts of nature, the following treatise will be extremely interesting. But the principles here laid down, for the proper assortment of colors, is general in its application, and will serve as well to guide the dashing belle in the arrangement of her wearing apparel, as the gentle maiden in the disposition of her flower garden:

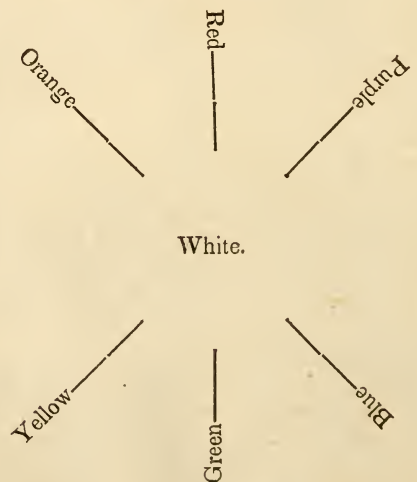
THE FLOWER GARDEN.

Arrangement of Flowering Plants.

In a recent number of the Gazette we offered some observations on turning out flowering plants into beds and borders, with reference to soil and exposure; and we shall now add some remarks on the arrangements of such plants in

beds and borders generally, with a view to the colors of their flowers.

All scientific directions respecting the arrangement of colors are founded on a law of nature, the truth of which every one can prove for himself, viz. that every color has what is called its complimentary color, and which complimentary color, when placed adjoining it, affords most satisfaction to the eye, or, in the language of artists, contrasts better with it than does any other color whatever. To discover what color is complimentary to any other color, take a piece of white paper, say a page of letter paper, and place on the middle of it a round blotch or patch (a colored wafer for example,) of black, and also of the color of which you wish to find the complimentary one. Then fix the eye intently on the patch of black for a few seconds, and afterwards for a few seconds on the color for which you wish to find the complimentary one; and on the white paper round the latter color, and close to it will be seen a faint shade of the complimentary color. Suppose the circular patch to have been blue, then you will find it surrounded with a narrow zone of orange, which color is therefore the complimentary one of blue, or that which pleases best when placed beside it; or, in other words, contrasts best with it. In like manner red is the complimentary color of green, and yellow of purple. If we imagine the six primitive colors, together with white, which for gardening purposes, is to be considered as a color, placed as below, we shall form a source from which rules can be drawn for the arrangement of colors in every case that can occur in the practice of gardening.



In this diagram, or formula, white is placed in the centre, because it forms a suitable contrast with every other color, becoming in fact, to a certain extent, the complimentary color of whatever color may be placed adjoining it. Supposing you have a flower of any particular color,

and wish to know what other flower will best contrast with it, then look in the diagram for the color which comes nearest to that of the flower of your plant. Suppose it to be straw color, then yellow being the nearest color, look opposite to it, and you will find purple, which is its complimentary or contrasting color. In like manner blue will be found opposite to orange, which two colors assort better together than with any others, and so on; white being in the centre, and as before mentioned, assorting with all.

As far as mere color is concerned, therefore, colors may be placed in any order of succession, provided white is introduced between every two colors. If white is not introduced, then the order may be any variation which the planter chooses of blue and orange, purple and yellow, and red and green, or any of the shades of these colors; but green being the color of foliage, it goes for nothing in the arrangement of living flowers, and, therefore, white must be used as a substitute for it.

Thus far as to the harmony of colors seen in succession along a border of miscellaneous flowers, or in a row of one kind of flower, such as the dahlia or the pansy, of which there are several colors. But in many cases, another source of beauty is required in the arrangement of colors, even in a line, or in a border—that source is regularity, or the repetition of the same colors at fixed intervals. There are various reasons why regularity in form or color, as in the succession of sounds, is satisfactory to the mind; but the principal one is, that it affords decided evidence of design or art on the part of man.

The arrangement of colors in rows and in borders, if made judiciously, produces little effect on the eye of the spectator, compared with a good or bad arrangement of colors in masses; whether in one large bed of miscellaneous flowers, or in a flower garden consisting of a number of beds grouped together, so as to form a whole. If the colors do not unite in forming a whole, as well as the beds, the result will be unsatisfactory.

Not to perplex the reader with too many reasons and details, we shall briefly observe, that the two principal points in arranging colors in mass in a flower garden successfully, are symmetry, and the preference of warm to cold colors. Warm colors are red, orange, and yellow; while green, blue, and purple are cold colors. Green, therefore, being a cold color, and forming a large proportion of the surface of most flower gardens, it is not desirable to increase it, or to introduce either blue or purple flowers with it to any great extent. Every bed in a symmetrical flower garden, except the one which forms the centre, must have a corresponding bed, resembling it in color as well as in form and position. If the space between the beds are of grass, then red,

yellow, and orange, or shades or compounds of these colors ought to prevail; but if the intervals between the beds are of yellow gravel, then blue, purple, and white, with their different shades and variegations, ought to be most abundant, because these, being cold colors, contrast best with the yellow, or yellowish-brown of gravel, which is a warm color.

Principles, which are applicable to the use of colors in the arts and manufactures, and even in landscape and flower painting, will in many cases, not apply in gardening, from the large proportion of green in some cases, and of dug soil and gravel-walks in others, which are continually present; but the following rules if attended to, will prevent any gross violation of propriety:

1. In all borders of uniform width, that are planted with miscellaneous flowers, let the white flowers bear a considerable proportion: equalize the mixture as much as possible throughout, and see that the same plants and the same colors, or plants and colors as nearly resembling one another as possible, recur at regular distances.

2. In borders irregular in width and in direction, the disposition of the colors may be irregular also; but still to preserve harmony and produce force of effect, white flowers should be interspersed throughout.

3. In all merely regular flower-gardens, by which we mean gardens consisting of a repetition of one or more forms at regular distances without any centre, the colors should be repeated in the same manner as the beds; thus suppose a square spot laid out in twelve parallel beds, all of the same length and width, with grass paths between them; then the colors may be—1, red; 2, white; 3, yellow; 4, purple; 5, orange; 6, blue; 7, red; 8, white; 9, yellow; 10, purple; 11, orange; and 12, blue.

4. In all symmetrical flower gardens, by which is meant such as have a centre, or centres; in other words, an axis or axes of symmetry, arrange the colors symmetrically. "Let one half the platform just reflect the other." Where the spaces between the beds are in turf, use chiefly warm colors, such as yellow, orange, and red, with their shades; but where the space between the beds are of gravel, or paved, use a large proportion of cold colors, such as blue, purple, and white.—*Gardeners' Gazette*.

ROTATION OF CROPS.

Upon an analysis of plants, so far as it has been carried, it appears, that the substances, extracted from the soil, for their nourishment, differ in different plants. Hence the necessity of cultivating, in succession, those plants that draw their nourishment from different sources. By this means the exhausted supply is regained from the store-house of nature, whilst

the rejected properties are now yielded to the new plant. Our knowledge of the chemical properties of plants is as yet very imperfect and there is no more important field of investigation in the science of agriculture. Enough has been discovered however to prove that substances enter into the composition of corn that are not found in clover, several in tobacco that are not found in wheat, &c. &c. But Professor Liebig has shown, that, even in this chemical analysis, regard must be had to the climate in which the plant was raised; since, the same plant extracts different substances in different climates. How much study and observation are required to master the profound and intricate science of agriculture!

GATHER UP ALL THE MANURE.

All the manure, of every description, around buildings, should be removed to the field, and very rich soil, not wanted in its present place for purposes of cultivation, should be exchanged for pure earth, which will be more clean, pleasant, and healthy. All decaying vegetable matter, around or near the house has an unhealthy effect, which alone is a sufficient reason for cleaning up all around the dwelling, to say nothing of the advantage of collecting manure.

Near some buildings are piles of ashes, which have been accumulating for years. They should be put on light lands. Ashes that have been leached, and have laid long exposed to rains, are still valuable. In such cases, a hard, smooth crust is formed over the top, that throws off the water, and protects the greater part of the pile from being drenched in rains.

In order to keep the air pure and sweet, the mud and filth produced from the sink should be carried away. A farmer of good taste will be careful that neatness and order prevail around his premises. This can be done by every one, let his circumstances be what they may. It costs nothing but good management, which in the end always proves to be cheap.

Yankee Farmer.

WHEAT.

We extract the following from an address delivered before a South Carolina agricultural society by Mr. J. B. Oneale, who seems to unite in his own person the two professions of farmer and miller. Speaking of wheat he says:

"The seed ought not only to be selected from a good variety, but it should be well prepared for being sown. In the first place, it should be thoroughly dried by the sun before it is put up for seed: this prevents weavils, and gives sound and healthy grains for vegetation. In the next place, sift the seed carefully with a good sand

sieve: this will take out all the small immature grains. In the third place, for twenty-four hours before you sow it, soak your seed in a preparation of water saturated with about one pound of bluestone to every five bushels of wheat. Before you take out your seed wheat, which will be found at the bottom of the cask or tub, in which you soak it, skim off the floating grains and trash. When I have pursued this course, which was recommended to me by my friend, John S. Carwile, I have escaped the smut."

SIMPLE CURE FOR COUGH IN HORSES.

Two years ago (says a correspondent of the Cultivator, (one of my carriage horses had an extremely bad cough, which had continued for six or eight months; different applications were made without effect. I applied to a man who I knew dealt in horses, and had paid some attention to their diseases, for a remedy. He at once told me that he had never found any thing so effectual for a bad cough as human urine, given a few times, by discharging into a bucket of water and letting them drink it, or on their food and eat. I directed my driver to do so, and in one week the horse was completely relieved. I have frequently had it tried with the same good effect.

We copy the following from the Farmers' Cabinet, *verbatim*, because, after a careful inspection, we cannot find a word that could be omitted without loss. Such we generally find to be the style of Mr. Kinzer's communications; from which we have formed a very high estimate of his character as an enlightened, judicious, and practical farmer:

From the Farmers' Cabinet.

IMPROVED SYSTEM.—ROTATION OF CROPS.

Mr. Editor,—Although my time and attention have already been sufficiently taxed in commenting on articles contained in the April number of the "Farmers' Cabinet," yet I must say a word, by way of reply, to our agricultural friend who hails "all the way" from Hannibal, Missouri. I allude to John M. Johnson, who requests information under the above head, and is not too modest to enrol his real name on our list, that he may be addressed, should occasion require.

The very best rotation of crops, is a subject vastly more important than any other one connected with the farming Business. As such, it has been for years to me a matter of deep anxiety and interest, the object being, to digest a system, which shall in its detail, yield the greatest immediate return, and ultimately improve the fertility of the soil;—to be an augmenting and ameliorating system—a desideratum to farmers

of more intrinsic value than a remedy for the Hessian fly and "cause and remedy" for mildew combined; because this system will prove, in its very operation, the best cure for all these evils, of any yet known. Farmers may expatiate as they please, about the cause and effect of all the ills that wheat is "heir to," yet in the main, the whole may be ascribed to a bad, exhausting, and depleting system of rotation. Take the seasons as they come, and is not the best grain found

always on the richest ground, cultivation in other respects corresponding?

The inquiring farmer of Missouri, proposes to lay off his farm in eight fields; so I shall submit a system—that has cost some labor and experience—in tabular form; and which, if adopted in a proper spirit, may be enclosed in a frame for convenient reference. It will be observed, the ruinous practice of "wheat after wheat" is entirely obviated; I, *too*, practise what I here preach.

	Field No. 1.	Field No. 2.	Field No. 3.	Field No. 4.	Field No. 5.	Field No. 6.	Field No. 7.	Field No. 8.
1st Year, -	Wheat	Rye	Wheat	Clover	Corn	Wheat	Clover	Oats
2d " -	Rye	Clover	Corn	Wheat	Oats	Clover	Wheat	Wheat
3d " -	Clover	Wheat	Oats	Rye	Wheat	Wheat	Corn	Clover
4th " -	Wheat	Corn	Wheat	Clover	Clover	Rye	Oats	Wheat
5th " -	Corn	Oats	Clover	Wheat	Wheat	Clover	Wheat	Rye
6th " -	Oats	Wheat	Wheat	Corn	Rye	Wheat	Clover	Clover
7th " -	Wheat	Clover	Rye	Oats	Clover	Corn	Wheat	Wheat
8th " -	Clover	Wheat	Clover	Wheat	Wheat	Oats	Rye	Corn

Where there is not sufficient available manure, the field of oats may be fallow; but if the means of accumulating manure, on a good farm, be well husbanded, which can be done by compost to any extent, the wheat-stubble should and can be manured for corn, and the oat-stubble also for wheat. The second crop of clover is ploughed under, to manure the wheat. Corn, oats, and rye, all exhausting crops, it will be observed, can only occupy each field once in eight years, while each field is twice well manured with stable manure in the same term of years, in addition to the clover ploughed under. Barly may be substituted wholly or in part for oats. Being partial to the permanent pasture afforded by our native green grass, I keep an additional enclosure for that purpose, and mow both clover-fields, which, in addition to the corn-fodder, will winter a large stock, using the straw only for litter. Although formerly partial to timothy for hay, I would not now tolerate it, under the above system. My reasons are plain; clover hay made on the plan of curing in the cock (*or shade*), instead of scattering it out to the breeze, sun, dew, and rain, I prefer to timothy hay for all purposes; while the former, belonging as it does to the leguminous class of plants, is ameliorating, and a fertilizer, the latter being of the tuberous rooted or culmiferous class of plants, exhausting the soil by feeding on the specific food of wheat, is a sterilizer. I beg to ask one question of Mr. Johnson—why does he insist on the cultivation of roots for stock in a soil so exuberant that one hundred bushels corn may be raised to the acre, and with less expense and trouble? Would the farmers of Europe, who occupy the *beet zone*, and raise beets, turnips, &c. more nutritious than we can by odds, "touch them with a ten-foot pole,"

as food for stock, if their climate would mature corn? Well, I myself have tried roots, and would not condemn them wholly; but I contend, the acre of ground forced by manure and culture, producing a good crop of beets, will under like circumstances, produce an equal, if not greater amount of solid nutriment, in the shape of corn. If Mr. Johnson *must* experiment with beets, they may be cultivated in his corn-field, without obstructing the above system. But mark, if the system of rotation above described, on account of furnishing the best food for stock, summer and winter, and *insuring* good crops, while it improves the soil, does not meet general favor, long after the present mania and fever for beet culture shall have collapsed, to be noticed only among the things "that have been." Perhaps I ought to add, that it is necessary on some farms, to subject parts of the land to tillage crops, to clean and clear them of binding grass before adopting this system, which was my case: it must be remembered that lime is a great auxiliary to this, the same as to other systems.

And now, Mr. Editor, aware of a partiality to beet culture for stock, I shall look out for a censorial notice from some ready pen; nevertheless, I shall not be *easily* driven from my ground.

W. PENN KINZER.

Springlawn Farm, Pequea, }
Lancaster Co. May, 1841. }

For the Southern Planter.

SHELTERS.

Mr. Editor,—Are farmers aware of the interest that may be obtained from a judicious outlay for good shelters? I asked a friend, with whom I was riding the other day, why it was

that our farmers did not spend more money in providing coverings for their stock, implements, &c. He replied, that he could account for it only by the fact, that, generally speaking, those, who had been farmers for any length of time without such provisions, had necessarily gotten into that situation, that they had very little to spend in any thing. There was much of truth in that assertion. He can never be a thriving man who, permits his stock to suffer from the inclemency of the weather, or his implements to be exposed to the destroying effects of alternate rain and sunshine. To say nothing of the inhumanity of the man, who fails to provide for the comforts of the poor brutes entrusted to his care, can there be a more false economy than that which exposes them to suffering and disease for want of the expense of comfortable housing? Sir Jonah Barrington says, that, sometimes, the surest way to avoid danger, is to meet it plump; and so I say, that often the surest way of saving money, is to expend it.

A prudent man wont have a pair of spectacles without providing a case for them, and a sensible farmer will not have a plough or a harrow, without having a covering for it. But above all, let me entreat my brother farmers to provide good and comfortable quarters for their stock of all kinds. Let them be assured that they will find a most ample return, in their consciences, as well as pockets, for any expenditure

that they may make in this behalf. The food that will be saved, the first winter, will more than pay the expense; for it is a fact, and a reasonable one too, that an animal, kept warm and comfortable, will keep fat on half the food that is necessary to maintain one exposed to the rains and sleet of the pitiless heavens.

In an early number of your excellent periodical, which, I believe, is destined to be invaluable to the farmers of Virginia, a most excellent and economical plan of building is described. It was adopted by one of my neighbors, and has given him and his visitors great satisfaction. I know of nothing that can be made as cheap, that is likely to answer the purpose so well. But let it cost what it will, I repeat, he is no good farmer that is not provided with good stabling. If he cannot provide for all, the good man, or even the provident man, will dispose of some, that he may take care of the rest.

When I speak of shelters, I do not mean the miserable affairs made of brush and corn-stalks, against which poor tucked up cattle are seen to creep for protection against the northern blast. Not at all. I mean good, warm stabling, in which an ox will neither know nor care whether it is snowing, raining, or blowing without.

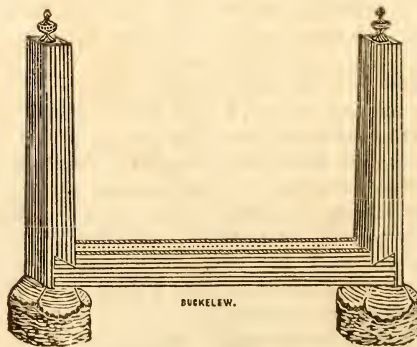
With many wishes for your unbounded success, I remain

Your friend,
Hanover, Sept. 1841.

G***** L***.

For the Southern Planter.

G A T E .



Mr. Editor,—As you have in your early numbers afforded me much information upon the subject of gates, in return, I send you what I have found, by experience, to be an excellent plan for setting gate posts. The drawing is intended to represent two posts, with the fixtures ready to go in the ground. Just above the butt, on each side, a piece of plank twelve inches wide, and two inches thick, is tenoned on the

posts with a dove-tail; the distance between the shoulders being, of course, regulated by the intended width of the gate. By this simple contrivance, great permanency is obtained for the proper position of the posts. It is evident that they can neither approach nor recede, and, since the plank is sunk beneath the surface of the earth, which ought to be well rammed on both sides of it, the posts are guarded against the

effect of a side blow, as from a wheel, by the mass of earth that must be moved before they can yield.

Your readers will find this fixture, I assure you, worth ten times the additional labor it will cost them.

Your obedient servant,
A COUNTRYMAN.

For the Southern Planter.
AGRICULTURAL SOCIETIES.

I am much pleased, Mr. Editor, with your suggestion of a frequent report from agricultural societies. I conceive that, if in every county a society was organized, and an executive committee appointed, whose duty it should be to report monthly, for the columns of the Planter, an abstract of all the interesting facts that may have transpired in their district, a fund of information might be collected, valuable and interesting beyond all precedent. I mention the Planter particularly, because you were the first to suggest such a scheme, and because your paper, from its price alone, must soon be, if it is not already, the most widely disseminated in the State. Is it not practicable to organize such a system? Will not the Executive Committee of Henrico set the example? So apparent would be the advantages, that I believe it would be immediately followed throughout the State. Then, instead of having to rely upon hap-hazard communications, without a name, and often without foundation, you would be furnished, regularly, with facts from the most responsible sources. What a valuable record the Planter would become. It would be worth its weight in gold.

Try, Mr. Editor, and see if you cannot, to a certain extent at least, effect this desirable object.

Your friend, D. S.

The plan proposed by our correspondent is certainly the one, above all others, calculated to enrich the columns of the Planter, and of course to benefit its readers; these, we hope, will soon compose the great mass of the agricultural community in the State of Virginia. So far, therefore, patriotism, as well as self-interest, leads us to hope that his views may be realized. The plan is certainly feasible, and the object most important. Its value to the agricultural interest of Virginia can hardly be estimated. It only needs a little spirit and enterprize to effect it. Shall they be wanting in such a cause? For our part, we will furnish twenty copies of the Planter, gratis, to any society whose executive committee will undertake to report to us a monthly summary of agricultural memoranda.

There will be no difficulty or trouble in making

such a report. Practice will soon render it perfectly simple. To general statistical facts, may be added any thing of particular interest. For instance, about this time, might be reported the quantity of wheat, rye, and grass seeded, at least, whether the quantity is more or less than an average—whether the seeding has been late or early—the quantity of corn harvested, &c. with a relation of any particular fact or experiment that may have come to the knowledge of the committee. Several societies, both in this country and in Europe, are in the habit of publishing such monthly reports at considerable expense, and they have been found to be records of the most inestimable value. We propose a cheaper mode of effecting the same object, and, although, we certainly remain the obliged party, still the authors of these reports will find themselves amply remunerated for what they afford in what they mutually receive.

SMUT MACHINE.

The Editor of the American Farmer speaks in the highest terms of a machine, lately invented by a Mr. Barrett, for separating smut, garlic, dirt, &c. from wheat. If the machine is all that it is described to be, the inventor will obtain a suitable reward for his ingenuity in bringing it to this market. Our millers are proverbially enterprizing and liberal.

CARRION.

How few there are who fully appreciate the value of carrion; and, instead of making a suitable and profitable use of it, carry it out into their pastures, or perhaps leave it uncovered near their buildings, where it will pollute the air and raise an offensive stench, until the action of the atmosphere has destroyed its use, or the fowls of the air or some animal has eaten it up or carried it away.

Now a *wise* man, if he has a horse, a cow, a hog, or sheep to die, will not leave them to rot where the stench will be offensive or draw them off, and let them lie uncovered, where there is no prospect of their carcase enriching the ground: no—but he will dig about his fruit trees and there bury them. The body of any small animal will do more good placed at the roots of an apple tree than they were worth when alive, as will be seen by the growth of the tree so favored, when the body of the animal has become putrified.

Those who have been in the habit of wasting carrion may not believe this statement; but I can assure them that they will find it true; and

if they will but once try the experiment, they will be *convinced* of the fact at once. Let the unbelieving try it.—*New England Farmer*.

SOILING CATTLE.

By soiling is meant feeding cattle in their stalls or yards, with green grass cut for the purpose, instead of suffering them to feed at large in the grass field. We find in the Nashville Agriculturist a very interesting article on this subject, extracted from an English agricultural paper. The writer asserts, and, we think, proves, that three cows may be provided with food in the house all the year from the same quantity of ground which will scarcely feed one under pasture for the summer; that one cow so fed in the house will give as much as three fed in the field; and that each cow fed in this way will produce as much manure as three fed in the ordinary way! We speak from some little experience of our own, when we affirm that soil-feeding possesses all the advantages claimed for it, especially on small farms. One hand, in two hours every evening, can cut and haul grass enough, from a convenient field, to feed twenty or twenty-five head of cattle a day. Suppose it requires three hours daily labor, and then calculate the gain. On land much requiring manure, the additional manure saved would more than pay for this labor. Then there is the great advantage of making a small farm equal to one double the size, conducted on the other plan; or the advantage of being able to dispose of half one's large farm, and make as much as before, on what remains. Think of it, and decide how far the situation and nature of your farm may permit you to adopt the soiling plan.—*Louisville Journal*.

NEW WAY TO MAKE FRUIT TREES.

Two of the best farmers in the range of our knowledge, one a resident of Coos county, and the other in Orange county, Vermont, have communicated to us the manner in which they secure their fruit. It is this: they dig at some distance from the body of a favorite tree, until they find a root, which they cut off. The part disjointed from the tree is turned up so as to appear above the ground. It sends forth shoots the first season, and bears, in a few years, fruit precisely like that upon the parent. Let those whose trees are decaying, or who wish to increase good varieties, try the experiment.

N. H. Whig.

SHUCKS.

Mr. J. A. Grimes, of Horrodsburgh, Kentucky, gives the following as his method of feeding milch cows:

"We procure in the fall, all the corn-shucks

we can, as the farmers put little value upon them. When we commence feeding, we have a large kettle in which we can heat water, and a basket holding the quantity we intend for each animal. We then take the shucks to a common cutting box, and cut them as you would hay or oats, and scald them a few minutes in the kettle. Then take them out and sprinkle three quarts of meal to the bushel of cut shucks, and you will have a better feed than three gallons of corn or meal, fix it as you will. When I was last in Mississippi, the corn crop was very short, and I suggested this way of feeding to some of my friends, for feeding mules and horses as well as milch cows, and before I left, was told the cows had improved very much in the quality as well as the quantity of their milk."

American Farmer.

We can, from our own experience, fully sustain the assertions of Mr. Grimes.

ELDER.

We have seen it stated somewhere, that elder branches, intermixed in their layers between bundles of oats, &c. will prevent rats from destroying the grain. Will any body vouch for it?

WHEAT.

The Germantown Telegraph, which has much credit for its agricultural articles, speaking of the crop of Mr. Lukens, of Pennsylvania, says:

"From the appearance of the straw, we should judge that the crop had been cut at a *proper* time—we mean *early*—earlier by a week than most farmers are in the habit of entering their grain fields. Indeed, we have long been of the opinion that the generality of farmers almost always cut their grain *too late*, and subject themselves, in consequence, to heavy losses, from the injury, and in some cases, the destruction of their crops, by mildew and rust; for it is a fact, susceptible of the clearest proof, that nearly all the harm received by the wheat and rye, from these causes, is effected *after* the crop has *sufficiently* matured for cutting.

"Farmers should not be afraid of cutting too early. We have repeatedly known grain to be cut while in its milky state, and to produce as heavy and handsome a berry as a miller would wish to grind, with not a speck on the straw to mar its golden hue. While on the very next farm, where they were 'not going to be such fools as to cut grain before it was ripe,' and delayed harvesting it a week or ten days longer, nearly the entire crop was destroyed by rust. Let the experiment be tried, at least in a small way, by our agricultural friends, when each one

can judge for himself; and let the result be communicated to us, that the farming interest generally may reap the advantage of it, whatever it may be."

TOBACCO.

A writer in the Farmers' Register maintains, that tobacco is not more exhausting in its nature than any other great staple, extensively cultivated. He esteems it the most profitable, indeed the only reliable, crop for Eastern Virginia, especially that portion of it, which would be contained between two lines from the Atlantic to the Mississippi, passing through the towns of Raleigh and Fredericksburg. This, he says, has been designated, par excellence, the tobacco country. The cheapest mode of making tobacco, he says, is the one pursued by Mr. Old, of Powhatan. He keeps two lots, which are alternately cultivated in oats and tobacco. The oats rolled down, when *perfectly ripe*, and, if convenient, ploughed in. If the lots are rich when the system is commenced, they will yield, every other year, at least one thousand pounds to the acre, and continued to improve.

The author is evidently a sensible and pleasant writer, and one very highly spoken of by the Editor of the Register.

To the Editor of the Southern Planter:

My Dear Sir,—I am much pleased with an article that appeared in one of your early numbers, on the subject of a post and rail fence, and have determined to try it. I am in want of a morticing axe, such as you describe, and will avail myself of your offered services to procure one. I have already gotten together a large quantity of posts, for winter work, and hope to show you a pretty line of post and rail fence when you visit me next spring.

Yours,

* * * *

The above is an extract from a private letter, but as we have had several applications for the morticing axe, some of which may appear to have been neglected, we will avail ourselves of this opportunity, to say, that we ordered a lot from Mr. John Hitchcock, some time ago, to meet the wishes of our friends. The necessary delay attendant on an extensive establishment for the manufactory of edge tools, which he is erecting in this city, has prevented their completion. We have, however, every assurance that they will be ready, now, in a few days, when we shall be happy to supply all those who are

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desirous to make preparations for this excellent plan of fencing. The description alluded to may be found at page 20, vol. 1 of the Planter.

VINEGAR.

In the Detroit Farmer, Mr. Holt gives the following statement of a mode of obtaining vinegar from the sugar beet:

"The last season I grated about a bushel of the sugar beet to a fine pulp, and pressed the juice therefrom, of which I obtained six gallons. I put the same in a vinegar barrel, which was entirely empty, and in less than two weeks I had as good and as pleasant vinegar as I ever obtained from cider, and was equally as strong and clear. I see no reason why our farmers cannot have good vinegar as abundantly as if they had a plenty of apples for making cider."

LIME.

An ingenious writer in the American Farmer has ventured the suggestion, that the beneficial action of lime and plaster of paris is to be attributed to the acid, rather than to the bases, of these substances, and infers, that a series of experiments should be made with different acids. He states that gardeners, in the neighborhood of London, are in the habit of watering their cucumbers with a weak dilution of sulphuric acid. He also attributes a peculiarly green and healthy appearance he once observed in a portion of a corn crop, to the fact, that that portion of the seed had been steeped in a solution of sulphate of iron, to prevent the depredations of the crows.

As the writer himself suggests, the theory needs observation and farther facts to confirm it.

HESSIAN FLY.

From Silliman's Journal, a work of unrivalled reputation, we extract the following, the conclusion of a minute examination into the history and nature of the Hessian fly:

"A few suggestions may be made respecting the best modes of preventing the ravages of the Hessian fly. They have all been published before, by others, but they are of such a nature that there is little probability that any of them will ever exterminate the insect. The stouter varieties of wheat ought always be chosen, and the land should be kept in good condition. If fall wheat is sown late, some of the eggs will be avoided, but risk of winter killing the plants will be incurred. If cattle are permitted to graze

the wheat fields during the fall, they will devour many of the eggs. A large number of the pupæ may be destroyed by burning the wheat stubble immediately after harvest, and then ploughing and harrowing the land. This method will undoubtedly do much good. As the Hessian fly also lays its eggs, to some extent, on rye and barley, these crops should be treated in a similar manner."

SUCKERS.

The following is an extract from a letter received from Mr. D. P. Curtis, of Warwick county, Virginia:

"I perceive that farmers differ much as regards the propriety of suckering corn. My own experience teaches me that suckers, which spring from below the first joint of the mother stalk, will put forth surface roots and produce as good corn as the stalk itself. Provided the season is favorable, and the corn too thinly planted, this may prove an advantage. But it seems to me, that a good farmer would plant his corn as thick as his land would bear, and keep off the suckers."

TRANSPLANTING.

We are pleased to find from inquiries addressed to us, that our suggestions about the advantages of a good orchard have not been unavailing, and as this is the proper season for transplanting, we will take the liberty of warning our friends against the common error of setting trees too deep. They should never be set deeper than they were before removal. In that case, the upper roots will be very near the surface. A stake, rather than extra depth, should be relied on to stay them. Dig a hole four feet square and two feet deep—fill it up, to within five or six inches of the top, with rich mould, taking care to cover the bottom of the hole with two or three layers of small stones. This will serve to draw off the superfluous moisture, and wonderfully improve the growth of your trees, as well as the quality of your fruit. Be careful not to bruise the tender roots, but let them assume the position nature assigned them, and you will not lose one tree in a thousand.

FATTENING.

We copy the following excellent rules for fattening animals from the Albany Cultivator. We would only add to them the requisition of comfortable quarters, good straw beds, and cleanliness, with occasional irritations of the skin.

Close attention to these directions will ensure success.

"1st. *The Preparation of Food.*—This should be so prepared that its nutritive properties may be all made available to the use of the animal, and not only so, but appropriated with the least possible expenditure of muscular energy. The ox that is obliged to wander over an acre to get the food he should find on two or three square rods—the horse that is two or three hours eating the coarse food he would swallow in fifteen minutes if the grain was ground, or the hay cut as it should be—the sheep that spends hours in making its way into a turnip, when if it was sliced it would eat it in as many minutes—the pig that eats raw potatoes, or whole corn, when either cooked, could be eaten in one quarter of the time now used, may indeed fatten, but much less rapidly than if their food was given them in a proper manner. All food should be given to a fattening animal in such a state, that as little time and labor as possible, on the part of the animal, shall be required in eating.

"2d. *The food should be in abundance.*—From the time the fattening process commences, until the animal is slaughtered, he should never be without food. Health and appetite are best promoted by change of food rather than by limiting the quantity. The animal that is stuffed and starved by turns, may have streaked meat, but it will be made too slowly for the pleasure or profit of the good farmer.

"3d. *The food should be given regularly.*—This is one of the most essential points in feeding animals. If given irregularly, the animal indeed consumes his food, but he soon acquires a restless disposition, is disturbed at every appearance of his feeder, and is never in that quiet state so necessary to the taking on of fat. It is surprising how readily any animal acquires habits of regularity in feeding, and how soon the influence of this is felt in the improvement of his condition. When at the regular hour, the pig has had his pudding, or the sheep its turnips, they compose themselves to rest, with the consciousness that their digestion is not to be unseasonably disturbed, or their quiet broken by unwonted invitations to eat.

"4th. *The animal should not be needlessly intruded upon between the hours of feeding.*—All creatures fatten much faster in the dark than in the light, a fact only to be accounted for by their greater quiet. Some of those creatures that are the most irritable and impatient of restraint while feeding, such as turkeys and geese, are found to take on fat rapidly when confined in dark rooms, and only fed at stated hours by hand. There is no surer proof that a pig is doing well, than to see him eat his meal quickly and then retire to his bed, to sleep or cogitate until the hour of feeding returns. Animals while fattening should

never be alarmed, never rapidly driven, never be fed at unseasonable hours, and above all things, never be allowed to want for food."

WHEAT.

From the same paper we copy the following observations on the preparation of seeds:

PREPARATION OF SEED.

Next to having good seed, in our estimation, is the preparation of it previous to sowing. This should never be neglected. Washing it assists materially in freeing it from all foul seeds, destroying the ova of insects that may have been deposited upon it, and the alkaline solutions which should always be used, act a most important part in aiding the germination of the seed. Among the experiments which have been made to test the effects of various washes or steeps, the following from Young's Annals of Agriculture, and which have been frequently repeated and varied, but with similar effects, may be considered the best and most conclusive:

"December 7th, sowed fourteen beds with the same seed wheat, as black with smut as ever I saw any.

	<i>Results condensed.</i>	<i>Smutty ears.</i>
Bed No. 1,	sown dry, nothing done to it, had	377
" 2,	washed well in clean water, - -	325
" 3,	" in lime water, - -	43
" 4,	" in a lye of wood ashes, -	31
" 5,	" in arsenic and salt mixture, -	28
" 6,	steeped in lime water four hours, had	12
" 7,	" in lye four hours, had	3
" 8,	" in arsenic four hours, had	1
" 9,	" in lime water twelve hours, had	6
" 10,	" in lye twelve hours, had	0
" 11,	" in arsenic twelve hours, had	4
" 12,	" in lime water 24 hours, had	0
" 13,	" in lye twenty-four hours, had	0
" 14,	" in arsenic twenty-four hours, had	5

M. Dombasle, the celebrated French agriculturist, prefers a wash made of Glauber salts, the seed to be soaked in this three or four hours and then dried in caustic lime. This would not be materially different from the practice now so common of washing or rather soaking the seed wheat in brine, and then drying it with quick lime, a practice we can unhesitatingly recommend to every wheat grower. Let the brine be strong enough to float all light or defective seeds, and after a thorough soaking, drain the seed slightly, pour it upon a floor, and dry it with newly slaked lime, as on the causticity of this, much of the benefit of liming is depending. We have tried drying brined wheat with gypsum instead of lime, but so far as the smut was concerned, it was a decided failure. That part of the field sown with the gypsumed seed was about the smuttiest wheat we ever saw, while that part which was limed was perfectly free and pure. In addition to the advantages of liming wheat for the prevention of smut, we are convinced that alkaline substances, such as lime,

soda, wood lye, &c. perform an important part in aiding the germination of the seed, by converting the deposit of nourishment which nature has provided in the seed itself in the shape of starch, flour, gum, or mucilage, into a substance suitable for the food of the young plant, more quickly than would be done if not thus aided. Every person who has made the experiment with seeds prepared with lime, and those unprepared, must have been surprised at the difference in the time of their coming up, and the vigor of their growth. Thus beet or turnip seed soaked and part dried in lime, and the other sowed without, has been found to have the advantage altogether on the side of the limed part; and the same result will be had in the preparation of wheat.

M. Maltreu, in a series of experiments on the germination of seeds, found that they germinated much quicker in alkaline solutions than in acids; that they germinate sooner at the negative or alkaline pole of a galvanic battery, than at the positive or acid one; and as galvanic or electric agency is now known to exert a powerful influence over vegetation, it can scarce be doubted that the alkaline agency is exerted in this way in the chemical changes necessary to fit the starch, gum, &c. for the food of the young plant.

PINE SAW DUST.

A Mr. White, from Mississippi, inquires, in the Cultivator, with what benefit pine saw dust can be applied as manure. It may be, as the Editor suggests, that it can be used advantageously in stables to absorb the urine, but we are satisfied, from our own experience, as well as the testimony of others, that the saw dust of the southern pine will lie in the ground for years without an approach to decay. It is esteemed, hereabouts, rather injurious than otherwise, and we have known the manure from stables, where it was used for bedding, refused as a gift.

REMEDY FOR THE TURNIP FLY.

Mr. B. P. Johnson, in the Cultivator, says, that he has tried with great success the plan, recommended by Mr. Parsons, of soaking turnip seed for twenty-four or forty-eight hours in tanners oil, and then rolling them in plaster, to facilitate the sowing. It is an effectual preventive against the ravages of the fly, or flea, that is so much dreaded by the cultivator of turnips.

PRESERVATION OF TIMBER.

To the Editors of the Cultivator.

My name having been unexpectedly associated with the publication in your columns of

the discoveries of M. Boucherie, relative to the preservation of timber, by the infusion of various antiseptic fluids into the previous circulation of the tree, it seems proper that I should communicate a few explanatory facts.

There seems to be some doubt in the minds of many of the practicability of infusing liquid substances in the manner recommended. To such I respectfully suggest, if they happen to have a favorite ash or oak growing near their dwellings, to bore a few holes with an auger near the place where trees are usually cut with an axe—entirely into the heart of the tree—fill the hole with the preserving or coloring substances, plug up the holes carefully, and mark the progress of the fluid by means of the leaves. This is a very cheap and easy process, and is a practical remedy for those who apprehend any difficulty in placing large timbers in tanks and saturating them by external applications.

Under Kyan's patent, (obtained in England, throughout the most of Europe, and in this country,) corrosive sublimate has been used for preserving from the dry-rot, timber and textile fabrics. This salt combines with the fluids of the timber, and forms solid precipitates that are not capable of absorption from the atmosphere of either nitrogen, oxygen, or ammonia. Many cheap substitutes have been suggested, and as early as six years ago, Dr. Woollaston proposed sulphate of copper, or blue vitriol; and some trials were reported to the House of Commons. The whole evidence produced and submitted to that assembly is important; it seems to prove beyond dispute that Dr. W.'s discovery is more important than Kyan's, and was suggested by his acquaintance with the copper mines, where he had noticed that wood subjected to the operation of the cupreous waters had been preserved many years, while those in the iron and lead mines soon decayed. He has since made numerous trials with various salts, and has uniformly found that sulphate of copper is the best preservative. Since his experiments have been successful, Mr. Margery has taken out a patent for the exclusive right of using sulphate of copper for this purpose, and it has excited much interest in the English journals. A patent, I understand, has been refused in this country, either on account of the individual not being a citizen, or of his not being the inventor.

In the Boston Daily advertiser, of a few weeks back, you may find a copy of Margery's specification. I have not the paper by me, but the following is part of the specification: "To one pound of sulphate of copper add four gallons of water; let it be for about two days, frequently stirring it; then let it run upon the wood or other substance intended to be preserved, which should be allowed to remain in a tank, and be kept un-

der the fluid two days more; it should be submitted in a perfectly dry state."

Respectfully, &c. CALEB CARMALT.
Friendsville, Susquehanna co., Pa. }
7th month 26, 1841. }

We have frequently noticed the colored waters of the upper part of the Chickahominy river. It evidently proceeds from some mineral, which we have heard suggested, with no great likelihood, to be copper. In this water, many trees and shrubs are growing. Can any of our Hanover friends inform us, whether the wood of this growth is tinged with the color of the water, or whether any peculiar quality has been imparted to it? The subject is very curious, and any information will be interesting.

We should as soon expect to find a good nutmeg made of wood, as the delicate flavor of our favorite herb extracted from an American weed: But nothing is too difficult for Yankee ingenuity. We find the following novel announcement in the Farmers' Visitor:

AMERICAN TEA.

Loudon, N. H., July, 1841.

To the Editor of the Farmers' Monthly Visitor.

As there are many inquiries respecting the gathering and drying our native American tea, I would observe that this tea has mostly been used for a medicine as a remedy for pleurisy, which has given it the name of ribweed: therefore the best method of drying it to make it palatable has been little studied. My method has been to strip the leaves from the stalk with the hand in the field as it stands—put them in tin pans and set them in a warm oven till wilted—then dry them on blankets in the shade. Great improvements may be made on this method, I have no doubt.

Habit has a strong hold on man: there are those who have taken this tea at first as medicine, and who prefer it to the tea imported from China after using it for a while. This plant may be found in almost every part of New England—it has all the exhilarating properties of foreign tea, and may be secured with little expense.

Respectfully yours,

SHADRACH CATE.

The Chinese had as well knock under at once. The lazy louts will find Yankee enterprize more difficult to contend against than British oppression.

ASSOCIATION.

The advantages resulting from association are universally admitted. Man is by nature grega-

rious. UNION is the guardian spirit of our institutions. Its strength has been exemplified by Æsop with a bundle of rods. All classes but the agricultural have felt the benefit of united action. It is true, they are more separated than other classes, and possess less facility of communication. But until that difficulty is overcome, until farmers erect themselves into a class, and pursue their profession as such, they will never bring their art to the perfection which it is capable of attaining. Individual and isolated action needs the stimulant of public exhibition. The gratification of an honest pride, the applause of friends, are nobler, and we believe stronger incentives than pecuniary interest. In England, where the landed interest is the great support of a wealthy aristocracy, the annual meetings of their agricultural associations are gotten up with great splendor, and with great effect. The time is a jubilee and a holiday, throughout the land. The farmers meet in thousands to witness the great exhibitions of agricultural improvements, and, probably, in a few days, he learns more from the wisdom of others, than his individual exertions have obtained for him during the year. It is true, that these meetings are gotten up and supported by the aristocracy, who are identified with agriculture. But we too have an aristocracy, much more numerous, and much more powerful than any that exists in Europe. We all belong to that class, and the interest of all is identified with agriculture. It is the primeval, natural, occupation of man, and its supremacy is absolutely necessary to the existence of free institutions. Let us, then, all unite in sustaining this great art, by which all others are sustained. Let us form associations and annual exhibitions; not poor, meagre shows, unworthy of attention, but let the powerful and wealthy landed proprietors, in every district, unite in getting up an annual exhibition, worthy of the name. The mechanics lately held a fair in the city of Boston, at which there was an attendance of seven thousand persons on the first day. Associations are springing up all around us. Let us not be behind our sister States. Every little paper in South Carolina is crowing over us, with its published list of seventeen agricultural societies. Give us a list of *twenty*, and we will publish it at the head of our paper.

We hear complaints from some sections of the country that the calling of the farmer is in disrepute. It is not so here. We are a great agri-

cultural people. Manufactures and commerce are looked upon as subsidiary to the great art, which calls them into being. The cultivator of the earth is the lord of the land. The wealth, refinement, and information of the State are to be found in this class. Indeed it is the cynosure of all eyes. It is the haven of rest that all seek. Amidst the busy mart, in the toil and dust of the streets, the weary merchant, the exhausted artisan, lays the flattering unction to his soul, that he will, one day, be enabled to rank with the easy, stately, and dignified farmer he has just passed in his hasty walk. It behoves all such to lend their aid in perfecting the science to which they are looking for repose, and as the best means to effect it, to contribute their assistance to the support of agricultural societies.

FALL PLOUGHING.

The following article, from the *Genesee Farmer*, on the subject of fall ploughing, seems to us judicious and well timed. It coincides, too, with our previously formed opinions on the subject, which, we believe, are those also of a majority of farmers. And yet, we understand that some of our most practical men, and best informed farmers, are opposed to the system. Mr. William Wickham, we understand, condemns it, and Mr. E. Winston expressed to us his determination to abandon it. We should be much pleased to learn the objections of either of these gentlemen to a system that is so generally approved. It may be, that their land is of the porous character alluded to in the last paragraph; at any rate, we should be glad to be informed upon the subject.

The following are the reasons given in favor of fall ploughing:

"The 'Practical Farmer' says, the more scientific opinion is in favor of *fall* ploughing, because to the action of air and moisture, it adds that of *frost*, whose sceptic or dividing quality is second only to that of the plough itself. In clay soils the preparation should never be omitted; because on those the action of the frost is greater, and because one ploughing of *this* kind, may save two in the *spring*, when time is every thing.

"The *Monthly Genesee Farmer*, vol. 1, page 180, in an article on this subject, says:

"1st. It is one of the established principles of philosophical agriculture, that the soil derives much of its productive property from the air, and that chemical changes and combinations are constantly going on, by which fertility is much

increased. These alternative effects of the atmosphere, and these changes of the qualities of the soil, are the more active and efficient as new surfaces are exposed to new action. For instance, much greater quantities of carbonic gas will be absorbed by a given surface of earth, if the earth is frequently stirred, than if it was allowed to remain with a single saturated surface. Ploughing, by exposing new surfaces to the action of the atmosphere must be productive of essential benefit; and as fall ploughing generally takes place after crops which have partially exhausted the surface of some of its nutritive and absorbent qualities, its service in aid of spring crops is greatly enhanced.

"2d. There is always on land more or less grass, weeds, stubble, or other vegetable matters convertible into mould by fermentation and decomposition, a process which is greatly aided by being turned under the surface of the earth. Fall ploughing renders such substances much sooner available in advancing the growth of crops, than they would be if left uncovered during the winter, independent of the great loss necessarily sustained by the washing away of the lighter materials and their dispersion by the winds.

"3d. Nothing acts more efficiently on moist soils in promoting vegetation, than high pulverization; and fall ploughing aids this operation most essentially. Lands that if ploughed in the spring only, will remain in large cakes or lumps, defying the efforts of the farmer to reduce them suitably, will, if ploughed in the fall, be found loosened in texture and fitted for early operations in the spring of the year. Frost is the most efficient disintegrator of the soil with which the agriculturist is acquainted, and he should avail himself of its valuable labors in all practicable cases.

"4th. The earlier the ground can be prepared for the suitable reception of spring crops, such as corn, spring wheat and barley, the better it will be found for the cultivator; and in nine cases out of ten, early sown crops are the heaviest and most productive.

"5th. Ploughing land acts more effectually in destroying insects than any other mode of treatment, and fall ploughing for this purpose is preferable to any other. Those insects which produce the most mischief to the farmer, such as the fly, cut worm, grub, &c. cannot resist the frost of our winters, if prematurely exposed to its action by a fall ploughing. The cut worm which accumulates in such numbers in old meadows and pastures, is thus destroyed, and crops planted on them saved.

"Lastly. Our summers are so limited in duration, that unless the time allotted to vegetation is fully occupied by the growth and ripening of plants, the certain failure of crops may be anticipated. Hence the farmer usually is more hur-

ried by his work in the spring than he ought to be, in order to avoid having his crops caught by the frost and snow. It should be the object of the farmer to have his necessary labor as nearly equalized through the season as possible, and thus avoid all pressures at inconvenient seasons of the year. Experience shows that the farmer in most cases, has more leisure hours in the fall of the year than at any other time, and he who would work it right, should employ this time in advancing his next spring's work, for such fall ploughing emphatically is, and thus preventing the pressure of business then usually felt.

"On soils very porous, those composed of gravel or sand, in which, for the want of a retentive sub-stratum manures are apt to sink, and their good effects to be lost; or on lands liable to be washed, as side hills, where the finer particles of the soil are in danger of being carried off by every rain, or the melting of the snow, fall ploughing may not be admissible, but on most others we are confident its adoption will be attended with beneficial effects."

To the Editor of the Southern Planter:

Sir,—In looking over the September number of your very useful and valuable paper, I was struck with the article by W. W. on manuring, in which he advances the very singular doctrine that "the mere covering of the land makes it wonderfully productive," and asserts "that a galled spot on which a few planks are laid will become extremely fertile." Now, sir, I agree with him in thinking that a heavy top dressing of straw is better for the land than the usual quantity of manure ploughed in, so soon as it is hauled out. But I account for it in a totally different manner. I do not think that the mere covering has much, if any thing to do with the increased improvement which that mode of using it effects; but that it is brought about by the straw remaining on the land during the whole spring and summer, and of course each rain carrying fresh nutriment from it to the roots of the clover or other grass, which very much increases its growth, thereby affording a much larger quantity of vegetable matter for turning in on the fallow fields. But if he will pass, the straw, which he now places unrotted on his land, through his stable yard, and have it there well decomposed, before he hauls it out, he will find it at least one-third more efficient, provided, he will use it in the way which he now uses his straw, that is, if he will top dress the fall before he fallows for wheat. In one way, and in one way alone, do I conceive the covering of the land to be valuable, and that is as a protection to the roots of the clover from the winter's frosts, giving an earlier start than it would otherwise have, which is of course desirable.

As for the planks, if W. W. were to use them

extensively, he would find it rather an expensive mode of improving his land, and if he can ever, or by any process make his "galled spots extremely fertile," he entirely beats all of my farming acquaintances, the most of whom have long since given up every hope of succeeding in the cure of any of their *regular galls*.

Sept. 27, 1841.

A HANOVERIAN.

We were aware that the plan of our esteemed correspondent, "W. W." would meet with much opposition, on account of its variation from the established mode. We are glad to see that it has excited interest, and hope the subject will be thoroughly discussed. If any of our subscribers can bring their evidence to the support of W. W. we shall be glad to get it. "A Hanoverian" has friends enough—his is the established mode, and so far has the merit of common consent. We have shown the communication of "A Hanoverian" to "W. W." and he says, that he has no theory to advance, he only repeats the fact, that having tried both modes, he finds his farm much more productive under the system he advocates, than the trampling method, generally used. We can assure our readers that "W. W." is not a man likely to make a mistake about his own interest; he can calculate dollars and cents as closely as any man, and we hardly know one upon whose judgment we would sooner rely.

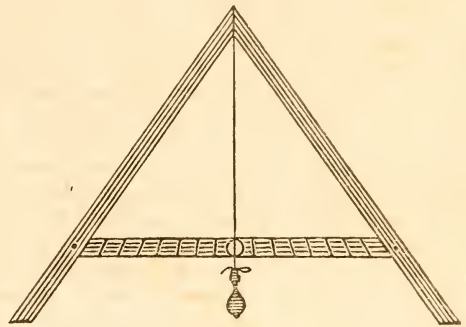
We are sorry to hear "A Hanoverian" say that his friends know no method of making galled spots productive. There are a good many "galled spots" in old Hanover, that we hope one day to see covered with verdure. One of the most productive spots we ever saw had been a gall, reclaimed by a cover of old leather, and other animal matter. There are many ways certainly of reclaiming galls, dependant upon the cause from which they proceed. Generally, they arise from the washing away of the upper surface or mould, leaving exposed an impervious and unproductive clay sub-soil. Here an admixture of sand, lime, and vegetable matter may be necessary. We should be in a bad way, indeed, if galls could not be made fertile. As to the theory of "covering" we do not know much about it, but have been under the impressiom, that any thing, even a *plank*, which covered the ground, made it productive. If we err in this, we shall be glad to be corrected.

TO OBTAIN WATER.

In our August number appeared a notice of

an article in the Albany Cultivator, upon the subject of obtaining water in dry situations, by artificial means. We expressed ourselves a little sceptical at the time; our suspicions of its being an entire humbug have been confirmed by numerous reports from correspondents, who are unanimous in stating that they have tried it on a variety of soils, invariably without success.

LEVEL.



To the Editor of the Southern Planter:

My Dear Sir,—I have lately become a subscriber to your agricultural periodical, and rejoice much to find that we are gradually extending the list of home productions. We have now, I think, no occasion to cross the Potomac for an agricultural paper. But I well know that empty compliments will not pay the expenses of printing. I am, therefore, employed in obtaining for you a list of subscribers, which I will send you as soon as it is complete. Such exertions are necessary in the infancy of every paper, and I hope every friend to the cause of agriculture in Virginia will stir himself in your behalf. We can and will sustain a cheap periodical in the Old Dominion, provided, it is of the right character, and if you, sir, will continue to bestow upon your work the same labor that marks its pages to this period, you need be under no apprehensions for want of a liberal support.

But the main object of my taking pen in hand was to express my approbation of your efforts to introduce into Virginia that most valuable system of under draining. A little experience on the subject has convinced me that it is entitled to all the encomiums bestowed upon it. It is absolutely necessary to relieve lands from superfluous moisture to make them productive. Most of our lands are overlaid with a retentive sub-soil, and are of the very kind to be most benefited by this system. Of open draining I have done a great deal, and assure you I have found

my account in it. I am certain that thorough draining will often quadruple the product, and, indeed, it is calculated to render some lands, now productive only of noxious weeds, the most fertile in the country.

It has been found by experience, that, to carry off the water, a fall of at least three inches in every fifteen feet is necessary, and as it is useless labor to make it more than is required, this is the proportion I have adopted in my draining operations. To guide me in effecting this object, I use the common span level, figured at the top of this article. But in my mode of using it, I lay claim to a little originality. The feet are exactly fifteen feet apart, and one of them three inches shorter than the other. The instrument is now placed upon a perfect level, and the place where the bob line falls on the cross piece is marked plainly. This is, of course, out of the centre, one leg being shorter than the other. My instrument is now completed. I have only to set the shortest leg in the direction in which I want the water to run, and lower it, until, the line falls on the mark, and I have, of course, a fall of three inches in fifteen feet. I now move the long foot of the level to where the short one stood before, and again make the bob play in place. Of course, the fall is continued.

This will be found to be a very simple and efficient instrument, and may be placed in the hands of a man of the plainest understanding. In making water furrows, it is frequently a most valuable auxiliary. These directions, simple as they are, are not useless, for there are many overseers, eye, and proprietors too, who are ignorant of the use of a span level. If I shall enlighten a single cultivator of the soil, I hope you will esteem this worth the place it will occupy.

A DRAINER.

STUMPS—TO REMOVE.

We published an article, some time since, in reply to enquiries for a stump extractor. In addition thereto, we copy the following plan from the Western Farmer. It possesses the great recommendations of cheapness and simplicity.

"Procure a dry red-elm lever, about twenty feet long, and about six to eight inches in diameter—a good stout log chain, with two yokes of oxen; this is all the machinery that is necessary. The mode of operation is thus: wrap the log chain around the stump a little above the ground, and make what is called a log-hitch; lay the lever horizontally on the ground, the large end next to the chain and against the stump; make the other end of the chain fast to this end of the lever, drawing the lever tight against the stump; the cattle are hitched to the

small end of the lever, and driven around the stump in a circle of which the lever is the radius. One revolution of the oxen round the stump will generally twist out the largest of them; but should not the power thus applied be sufficient to move the stump, the side roots may be uncovered and cut partly off; after this is done, the stump will be easily removed. You will find this plan much preferable to any "patent stump extractor," that you may have seen puffed in the papers."

EGGS—TO PRESERVE.

A patent has been obtained in England for the following method of preserving eggs, which, it is asserted, will keep them sound and fresh for several years.

One bushel of quick lime, 32 oz. salts, 8 oz. cream of tartar. Mix the same with as much water as will reduce the composition to a consistency that will swim an egg. Put in your eggs and keep the top covered.

HESSIAN FLY.

A Mr. Oglesby of Pennsylvania asserts that he has discovered an infallible preventive of the ravages of the Hessian fly, as we learn from the following paragraph in the Harrisonburg Telegraph.

"Passing the farm of Mr. Oglesby the other day, our attention was called to a field of wheat of extraordinary promise, on which we were informed he had applied his preventive of the Hessian Fly. At a short distance from it on ground equally good, we were shown a field, where the remedy had not been applied, that was greatly injured by the fly. It would not, we thought, produce one-third part of the other field per acre. In the former field the fly has not been seen since the wheat came up, while in the latter it was visible in the fall, winter and spring. These have been the test fields for the season, and they still more conclusively satisfy Mr. Oglesby that he has made the important discovery that must result in an incalculable benefit to the country. He has proposed to Congress that a committee be appointed to test the remedy, and if they find that it is an infallible one, of which he has no doubt, that they will allow him a proper compensation, and then publish the discovery to the world for the benefit of all.

"What is important in the matter, is, that the remedy is within the reach of every one. Mr. O. informed us that it does not cost him more than ten cents per acre."

Such is the fancy of the farmers in this country to be represented by the legal profession,

that we doubt whether Mr. Oglesby can find a committee in Congress who can tell a Hessian fly from a cock-sparrow. At any rate we would advise the committee to look sharp, for many, as wise as Congressmen, have been fooled with remedies for the Hessian fly. If Mr. Oglesby has really made the discovery, and will declare it to the world, he is entitled to all the honors and emoluments due to a benefactor of the human race.

SOILS.

We have lately met with an excellent extract from "MORTON ON SOILS," the purport of which is, that the proper qualities of soils are deducible from a correct understanding of the office they perform. The soil itself affords no nourishment—it serves only as a great spring to receive and give up water, air, light, heat and decomposed vegetable and animal matter, the great elements of plants. There are three great earths the due admixture of which goes to make up a productive soil. Silix or sand, alumina or clay, and lime. Organic matter, whether vegetable or animal, should be kept in an active state of decomposition, because it is only the substances which are evolved in the process that afford food for plants.

It is the property of silix or sand, to decompose the manure bestowed upon it. So far it is useful; but unless tempered with a due admixture of clay, the porousness causes evaporation and waste.

A dry, light, sandy soil, on a clay subsoil, is more productive than on a sandy, gravelly subsoil, which permits the sinking of the valuable qualities of the manure. The clay underneath also affords a ready opportunity, by deep ploughing, of tempering the sand.

A tenacious, compact clay is even less productive than a soil composed of sand. In such a soil decomposition goes on very slowly, whilst in sand and gravel, the process is very rapid. Adhesive clay is also impervious to water, which is collected and retained in too great quantities for the purposes of vegetation.

Calcareous matter forming a soil is, generally, a carbonate of lime. It attracts moisture, and chemically combines with it. When burnt lime is slacked, whether by exposure or other process, it takes up one-fourth of its weight of water, and is as dry and powdery as the finest flour. When it is exposed to the atmosphere in this state, it soon absorbs the carbon, which was expelled from it by burning, and becomes of the same nature as it was before it was burned, namely, a carbonate of lime, but only finely divided. In its caustic state, that is before it has attracted the carbon, it is a powerful decomposer

of animal and vegetable matter; afterwards, it has a tendency to preserve these substances from decay.

The decomposition of organic matter, be it remembered, forms the chief food of plants. The free ingress and egress of light, air, heat and moisture, are necessary to this process. We see then the necessity of frequently opening and moving the earth. We also see the necessity of a due admixture of the primitive earths—the SAND to promote decomposition, and correct the tenacity of the clay—the CLAY to prevent too hasty evaporation and loss, and the CARBONATE OF LIME to attract moisture. We see also the value of a clay subsoil, and the necessity, so frequently urged, of subsoil ploughing.

What should be the proportion of the different constituents of a productive soil, have been variously stated by different authors, and will, of course, depend much upon the moisture or dryness of the climate: according as it is moist, the soil should be friable and porous, as it is dry, it should be adhesive and retentive. Under these circumstances the proportions may vary from 50 to 70 per cent. of silicious matter; from 20 to 40 of clay, or aluminous matter, and from 10 to 20 of calcareous matter. The decomposable vegetable or animal matter should not exceed one-fourth of the weight of the earthy constituents.

We desire to draw attention too, to the opposite effects of caustic and carbonate lime, a point too little regarded in experiments made with this article. It is not an uncommon practice to spread lime on the manure heap, with very different results as reported. Now, if the lime is used before exposure, it hastens the decomposition of the organic matter, and although some of the gases evolved may be retained by the lime, the probability is, the greater part are lost. The carbonate, on the other hand, prevents the natural decay, and preserves these qualities for the growth to which they are to be applied. But if administered in too great quantities, it will retard decomposition beyond the period when it is desirable that it should take place. Lime is like an edged tool, which although invaluable in the hands of a skilful operator, may prove very injurious when wielded by an unpractised hand.

AMERICAN AGRICULTURE.

The inquiry has often suggested itself to us, whether if capital and enterprise were thrown into agriculture in the same way as manufactures and commerce, it might not quite as often prove to be profitable, and lead to great improvements in this art which lies at the foundation of all others. It is quite evident that in this country, agriculture often fails for want of capital. In every other employment, capital is lavished with a liberal hand; but it is stinted out to this

in meagre pittances, and there is comparatively but little interest taken in improvements which tend to abridge labor, and in the acquisition of knowledge in regard to the art of cultivation. Even results are often not attended to at all, and while every thrifty mechanic, manufacturer and merchant, knows precisely the amount of his outlay, and income, and the exact cost of production, very few farmers pay a careful attention to these statistics.

In England capital is devoted as liberally to agriculture, as it is to commerce and manufactures, and is even a more favorite investment with the nicely calculating capitalist than either of these last.

Another thing in which our agriculture fails, we apprehend, is a disregard of the proper division of labor. To entire success in any occupation it is necessary that the whole power of mind should be thrown into it. The mechanic who should undertake to learn many different trades, and to make his own shoes, hats, clothing, household furniture, &c. would surely fail of success; and the different branches of agriculture, are separated by quite as distinct and broad a line as the various mechanic arts. There is not a single vegetable, useful to man or beast, the careful cultivation and preservation of which is not sufficient to employ the whole study and attention of a lifetime, and in relation to which a man may not every year be learning something new by close observation and experiment.

Our opinion, founded on theory and observation, is that with a greater division of labor, farmers would make much more money. We do not suppose they will agree to this; many objections will be brought against it, which we have not time now to notice; but there is no doubt that the time will come, when the belief, now so common, that a farmer must raise a little of every thing, will be numbered with old and exploded errors. Sufficient confirmation of this is found in the simple fact, those farmers who concentrate their attention upon a few articles, now almost without exception succeed the best. To carry out this system, a different division of farming lands, to some extent will be required; those engaged in careful tillage, will require, comparatively, but a few acres, while those engaged in the raising of stock, &c. may need their hundreds and thousands.

The above is taken from the "Newburyport Herald" and is worthy of deep consideration.

It is undoubtedly true, that many of the arts owe their high degree of perfection to the division of labor, by which, the whole intellect is concentrated on a small part. Nothing is more conducive to the attainment of excellence as well as economy of production. How far the principle is applicable to the peculiar art of agri-

culture, is the question. If one man could employ his capital in the constant production of one crop, and obtain, with facility, the articles he did not produce, it would, most manifestly, be to his interest to confine himself to the single production; but the art of cultivation, unlike any other, is dependant upon the season. When a crop is planted, the action of nature must be awaited. She is the handmaid, whom it is the farmer's business to keep constantly employed. Her contract is to mature one crop at a certain period, and another at a different one; and the stubborn jade will not be driven from her resolution, even to afford an opportunity of exemplifying the great principle of the Editor of the "Newburyport Herald." Most happy would it be for the art of agriculture, if it were otherwise—if, like other arts, it could be subjected to the complete dominion of man, to be, like them, subdivided and allotted out in special departments. None, but those who are familiar with mechanical operations, are aware of the vast effect produced by a minute subdivision of labor. It often leads to a reduction of nine-tenths of the cost of an article. It is by this process, that a paper of pins is produced, at a cost, that would hardly cover the price of a single pin, if wholly manufactured by one individual. To the fact that advantage cannot be taken of this principle, to its fullest extent, in agriculture, we chiefly ascribe the retarded progress of this noble science. But, although, we cannot here avail ourselves of the skill and facility that are acquired by even the commonest mind in the constant repetition of the same simple operation, we may carry it to a much greater extent than is commonly practised. Whenever an operation is to be repeated, the farmer should be careful to employ those hands, who may be supposed to have acquired some skill by a former process. As far as practicable, his drivers, ploughmen, wood cutters, &c. &c. should be well taught, and kept each at his specific business. Every hand should know precisely the duty of the day, which should be, as near as possible, that of the day before. Great loss of time is occasioned by a change from one occupation to another. The mind, as well as the body, has to be turned into a new channel—another set of tools has to be looked up, and it frequently requires a new hand longer to *get ready*, than to do a job.

Moreover, we think that a farmer should confine himself to as few productions as the nature

of things will permit. The general opinion, we know, is, that he should raise all that he needs for consumption. There are certainly many additions to his main crops that may be made with labor that would otherwise be idle, and all such it is, of course, the farmer's policy to produce. There are also some necessities that it is cheaper to raise for himself, because of the inconvenience and expense of procuring from market, but, although the arbitrary arrangements of nature prevent his concentrating all his energies on one crop, still, he should consider the diffusion of his powers a necessary evil, and should carefully guard against its extension further than is necessary. There is much wisdom in the old saying, "A Jack-of-all-trades is good at none."

To the Editor of the Southern Planter:

Dear Sir,—I come now to the profit of the hog. Aye? the profit, the profit? "that's the rub." And if I can succeed in convincing my brother farmers, that the hog is indeed a profitable animal to raise, I doubt not that in these pinching times, hogs will soon become "thick as blackberries."

But before entering formally on this subject, we must settle a few preliminaries. And here I would state in general, that I pretend not even to conjecture, much less to know the *ultimate* effect, which the great and rapid multiplication of hogs would have upon the market. Its *immediate* effect, I doubt not would be, just what I aim at in these essays—to arrest the present immense importation of pork from the west, and the immense drain of our money from the east, which is rapidly reducing us to poverty. So that, to avoid starving, many of us are compelled to sell out our patrimony, and go to the west, where meat is cheap. Their present profits will not enable them to buy meat, at a high rate, and remain where they are.

What, therefore, I undertake to prove is that as matters now stand, it would be *cheaper* for all farmers in ordinary circumstances, to *raise* their own meat, than to *buy* it. And in regard to a large portion of them, it would be to their interest to raise a considerable surplus for market. The proposition being thus stated, I proceed to settle the preliminaries alluded to above. The first is the usual price of corn, and the second is, the common price of pork. If it appear upon inquiry, that the man pays more for his pork, than he can get for the corn necessary to raise it, the matter is at once settled, for it will then be evident, that in buying the former and selling the latter, he is doing a losing business. I am fully aware that the price of these two articles, is subject to considerable fluctuations. But I

presume it will be conceded, that sixty cents the bushel or three dollars the barrel for corn; and six dollars the one hundred pounds for pork, is about their fair average price. Last year corn was cheaper and pork higher. The probability is, that this year, corn will be dearer and pork cheaper. It will also be conceded by all practical farmers, that a hundred ears of corn of the common size, will make a bushel. Now I do affirm, and that not upon theory but upon the trial actually made hundreds of times over, so that now it is reduced to a regular rule—that two ears of corn a day, with other auxiliary food, is not only sufficient, but a liberal allowance for a hog for the first six months of his life; and that four ears is a plentiful supply for the next six months; so that three ears will be the average for the year. Beyond this age, I do not think it advisable to keep the hog. Indeed I generally dispose of him at from six to nine months old. Now, as the year consists of 365 days, three times that number, or 1,095 or say 1,100 is the number of ears that a hog will eat in a year.

The next inquiry is—to what weight can you raise the hog in that time? And here for an answer, I will not go to Doctor Martin with his Woburns, or to the Editor of the Kentucky Farmer with his Berkshires, but I will go to my own hog pen, where (till lately) I had none but the common hog of the country; and I do affirm, that with the above amount of corn, and no clover lot to run in, my hogs did, not in one instance only, but in many instances, reach 200 lbs. But as I intend not to be extravagant in any case, but to limit my calculations to the concessions of every practical farmer, I will put down the weight at 150 lbs. These preliminaries being settled, the arithmetic will stand thus. For 1,095 ears of corn, or say eleven bushels, you get a hog weighing 150 lbs. which at the price settled above is worth \$9. Eleven bushels of corn at 60 cents, amounts to \$6 60—that is, for corn which in market (leaving out of view the expense of carriage, commissions, &c.) would bring \$6 60, you have a hog worth \$9. The difference of \$2 40 is the profit on each hog. And upon a hundred hogs, the profit, at the same rate, would be \$240—a sum not to be despised these hard times.

Now, let it be borne in mind, that throughout the whole of the above calculations, I have assumed nothing, stated nothing, that can be construed as even *bordering* on the extravagant. I have taken the common hog of the country for my subject, nor have I stretched him a whit beyond his proper dimensions. So far from it I have actually gone below what a moderate and accurate estimate would warrant, and yet the result is a handsome profit.

But suppose, instead of our "land pikes and alligators," we take Dr. Martin's Woburns, or

the Kentucky Farmer's Berkshires, what would be the result? The Doctor made some of his pigs gain 4 lbs. or more a day, whilst the Farmer's (as I suppose would be the case with most farmers) fall considerably below. Some one, I see has recently beat the Doctor with a half Berkshire. But all these I consider as extraordinary cases. I am content at present with the very moderate calculations made above.

But were I to stop here, I do not feel that I should do the justice to my proposition to which it is entitled. It is a fact that we have what every body admits, is an improved breed of hogs among us. And it is also a fact, that this breed is rapidly supplanting the common hog every where. So eager are the farmers to obtain the Berkshire, that they suffer themselves, in many instances, to be imposed on by a spurious article from the north. This is always to be suspected, where the price is even *one cent* below twenty dollars the pair. If you must get your pigs from the north, the best plan is to send on your agent and let him make judicious selections. Nor do I say this because I am a breeder. All my pigs have thus far been engaged as fast as they made their appearance, and many of them long before.

We will suppose, then, and as the man said, I really think it a "very reasonable supposition to suppose"—that instead of the "land pikes and alligators" constituting, as they now do, the common hog of the country, the graceful and thrifty Berkshire will have this honor, then may we not, in all moderation, estimate the weight of our hog at from 200 to 300 lbs. at a year old? We will fix on the lowest number as a safe estimate. And how do matters stand now on the score of profit? We here have a hog worth \$12, and we have got him for corn which in market would bring us only \$6 60. On this hog, then, we have a clear profit of \$5 40, and on a hundred such hogs, the profit would be \$540.

But you will inquire, do you allow nothing for the extra food of which you have spoken more than once?—for the time and trouble in taking care of them? To this I reply that for all these, I make the most ample allowance. But before I tell what it is, I beg leave here to define what I call extra food. And that I may state the matter in as luminous a form as possible, I will mention the different kinds which I consider most valuable, and also the different periods of the year when they ought to be used. I will begin then with the month of May, when (if I lived at a distance from a hay market) I would turn all my hogs on a clover lot, but as I can't afford this indulgence to my hogs, I come as near to it as possible in a more economical way—that is, I have cut and carried to them as much clover as they will eat. A small spot of clover with its first and second growth, will ge-

nerally supply extra food from first of May till about the middle of July, at which time the cymlin crop (of which I am careful to have a pretty large one) begins to be fit for use. The cymlins, with beet or cabbage leaves, weeds, purslin, &c. last till first September, when I begin to gather pumpkins freely from the corn field, and these are now my dependance till the end of the year. During the remainder of the winter I depend on the sugar beet—and during spring, up to the first May, my dependance is on the ruta бага turnip. Now my compensation for clover, cymlins, pumpkins, beets, turnips, time, care and all, is the *manure* of my hog; so that for all extra food and attention, he pays me, and I think amply, in his manure, and for his corn, he pays me with his carcass with the profit stated above.

In conclusion, please give my respects to Mr. "Amateur Bacon Eater" and say to him, that as he seems to have a decided preference for the "long legged, lean alligator," and my preference is equally strong for the short legged, fat Berkshire, that I propose an exchange with him; and as I am somewhat keen to drive a bargain, I will even give him two for one, and my hearty thanks to boot. This proposition must, however, be accepted, before the next killing time. After that, it will be too late.

In the next, which will probably be the last of these hog-essays, I shall offer my views on the proper treatment of the hog. Wishing you all possible success in your laudable undertaking, allow me to subscribe myself your very sincere friend,

J. H. TURNER.

WOOD CUTTING.

The Editor of the Boston Cultivator reprehends the practice, which is common here too, we think, of permitting trees to get old before they are cut. The consequences are indifferent fuel, and a great destruction of the surrounding growth in the falling of the tree. On the contrary, if the thick young growth is occasionally trimmed out, you have infinitely better fuel, and the stump will put up many more vigorous shoots. The Editor compares the man, who permits his fuel trees to get old, to one who fails to eat his fruit until it begins to decay. By the improved system, it is maintained, a much greater growth can be obtained from the same quantity of ground.

For the Southern Planter.

Mr. Editor,—Flowers have been called "the stars of earth," "the alphabet of the angels," and "the smiles of God." The love of flowers has been esteemed the joy of infancy, a charm for maturity, and the source of delightful souvenirs

for the rest of life. The study of flowers is said to fill our mind with agreeable ideas, to lead us through paths of pleasantness and ways of peace, and to fill us with a love of nature and nature's God. If these things are so, you still perhaps may find a place for some other curious plants from the scrap book of A NATURALIST.

CURIOUS PLANTS.

Rhinanthera Coccinea.—This plant is the gem of flowers. It is found in the greatest perfection in the woods of Cochin China, where it so interlaces and festoons the trees that the whole forest becomes one mass of crimson and gold, of so intense a color that the eye can scarcely look upon it, exhaling a fragrance as refreshing as its colors are brilliant. This is a parasitical plant.

Avena Sterilis is a variety of oat, and is grown as a curiosity, under the name of "Animal Oat," on account of its singular hygrometrical properties. After its seeds have fallen, the strong beards are so sensible of alteration in the atmosphere, as to be kept in an apparently spontaneous motion, when they resemble some grotesque insect crawling on the ground.

Rhus Vernex.—This plant furnishes the true Japan varnish. The whole shrub is in a high degree poisonous; and its poison is communicated by touch or smell. In forty-eight hours after smelling or touching this plant, inflammation appears on the extremities, attended by burning and itching pustules.

Cocos Nucifera, or cocoa nut tree, grown in most places within the tropics. Some of these trees are deprived of their fruit buds in order that they may produce a drink called "Paviah Arrack." It is the employment of a certain class of men to climb to the top of these trees, in the evening, with earthen pots tied to their waists, which they fix there to receive the juice, which is regularly carried away before the sun has had any influence upon it. This liquor is sold by the natives under the name of *toddy*—in this state it is drank with avidity: after being kept a few hours, it begins to ferment, acquires a sharp taste, and a slight intoxicating quality. It is used for yeast, and forms an excellent substitute. A variety of this tree growing in the Sechelles Islands produces leaves from 12 to 15 feet long, and 7 to 8 broad, so that a single one is used to cover a whole family.

Asclepias.—One species of this plant, growing in Sierra Leone, has a juice of the color of blood, and Lindley says "if that plant had but grown in Palestine, it might be supposed to represent the enchanted tree which so surprised Tancred in the sorcerer's wood.

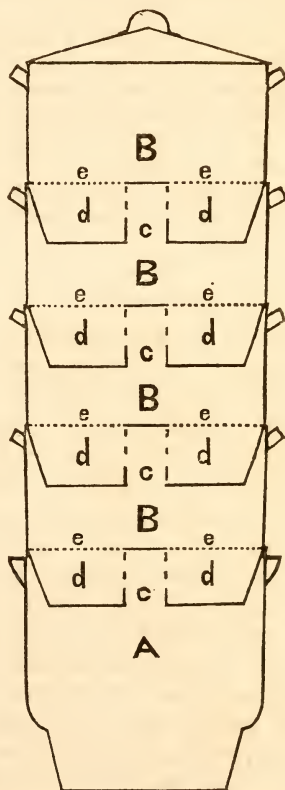
'When dreadful to his view
'The wounded bark a sanguine current shed
'And stained the grassy turf with streaming red.'

Achras Mammosa.—This tree, a native of

South America, grows thirty or forty feet high; it has leaves a foot long, and three inches wide; its flowers are cream colored, and are succeeded by large oval shaped fruit, covered with a brownish skin, filled with a thick luscious marmalade, in consequence of which, the tree is called the American Marmalade tree.

Sarvacœnia Flara.—This is called the side-saddle flower, from the resemblance of its stigma to a woman's pillion. Its leaves are tubular, and hold water, and are furnished with lids which are said to close over them in dry weather, so as to prevent the exhalation of the water, and in great droughts animals and birds have been seen to resort to them for drink. This plant grows in the bogs of Virginia and Carolina.

A STEAMER.



Mr. Editor,—As you seem to attach some value to a potato steamer, I send you a sectional drawing of one of the most useful culinary articles I have ever seen. It is probably the only one in this country, having been brought by my father from England, many years ago. It has been fitted to an ordinary cooking stove, and is now in daily use.

A is an iron pot in which the steam is generated. B B B are a continued range of tin ves-

sels, fitting, the first on the pot A, the balance in one another. Thus we have several apartments, in which various kinds of food may be cooked, and all, by the steam generated in the pot. Nor is there any possibility of a commingling of the one with the other, for, whilst the steam is made to pass through all, the flavor of the one can by no possibility get to the other. Thus, the steam generated in A passes through the side holes in the pipe (c) into the lower part, d d of the vessel B. e e is a false bottom, pierced with holes, upon which the food rests, and through which the steam finds its upward passage. The same process is continued through as many ranges as you choose to fit to your boiler. But the holes in the pipe (c) are an inch or two above the level of the real bottom d d of the tin vessel, consequently, the drippings from one vessel are caught in the bottom of the same, and can never get into the food below, without rising to the height of the holes in the pipe (c).

From the use of this vessel I have learned, that steaming was the best mode of cooking many other vegetables besides potatoes. If your readers, who are fond of good cooking, and that done with the greatest convenience, will only incur the trouble of providing themselves with this simple implement, I will guarantee they would not be without it for four times its cost.

Yours, J. B.

MAD DOGS.

The Editor of the American Farmer states, that the practice of worming dogs renders them innocuous to the poison of rabid animals. He says he knew a wormed dog to be bitten thirteen times by others, laboring under hydrophobia, without taking the infection. We never heard before that worming would do more than prevent the generation of disease in the natural way, and were inclined to consider even that a popular superstition. But here we have the most respectable testimony to the contrary. Surely if this fact were generally known, or even generally believed, no dog would be free from this operation, which we understand to be a simple one. If there is any preventive for this horrible disease, which almost mars the value of the noble animal who is the subject of it, it is well worth the while of medical men to test it. The friend of humanity would rejoice at the establishment of a principle, that would free mankind from the fear of this revolting malady.

GUM ON TREES.

A subscriber requests us to inquire for a remedy for the gum, which so frequently collects

around the insertion of a bud in the peach tree. He says he has lost several fine trees from this cause.

For the Southern Planter.

We are all very anxious, Mr. Editor, to secure a good Secretary of the Treasury for the National Government, and look upon the financial department as one of the most extreme importance. In a Secretary we seek an individual who will, in the best manner, by hook or by crook, provide the means to meet the necessary expenses of the government. Suppose our country politicians who are, no doubt, as much devoted to their hobby as my uncle Toby was to his, should seek to indulge their favorite propensities in a similar manner—let each of them erect his own farm into a model government, and let him dub himself SECRETARY of the TREASURY. Let him remember that the ways and means to carry on his government must be provided, and that his character as a politician is at stake to see that they are not wanting. Here is an opportunity afforded every individual to conduct a government on exactly his own principles, and to prove to his unbelieving neighbors that his system is the best that can possibly be devised. The man that the people reject may, by this means, prove to them what a genius they have lost, whilst the country is sure to be benefitted by his operations, which cannot always be predicated of those who play the part of public politicians.

But jesting aside, Mr. Editor, I do consider this universal devotion to politics the besetting sin of the country. If the genius that is annually wasted in empty political brawlings was only devoted to the advancement of agriculture, if the general excitement, which is felt upon this subject, was turned upon one much more worthy of it, how greatly would the wealth and happiness of the country be increased.

I do not mean to say that a man should be ignorant of, or indifferent to, great political questions; but I do mean to assert, that many hours are bestowed upon heated and fruitless discussions that might be much more profitably employed. What a glorious day it will be for Virginia when her sons, who have ever been distinguished for their sagacity and wisdom, can be induced to permit *agriculture* to share at least with *politics* in their consideration. The same zeal, the same depth of thought, and the same indomitable spirit which have caused her to rank first in politics, would place her also in the front rank in agriculture. And, sir, the day, thank God, is coming, when this consummation, so devoutly to be wished for, will be attained. At this moment, the road to ambition lies through the fields of agriculture. Such is now the spirit abroad for this noble pursuit, that he who dis-

tinguishes himself in it, will be greeted with the applause of his admiring countrymen, and the time will shortly come, when the individual most distinguished for his knowledge of agriculture, will command a position superior to him who has attained the highest pinnacle of political fortune.

Yours,

R. G. H.

VIRGINIA AXES.

We have, at our office, a specimen of axe manufactured by Messrs. J. F. Barnes & Co. of this place, which will compare, we believe, in point of finish, with any northern production whatever. Most heartily do we rejoice to find that so many of our wants are about to be supplied, and so well supplied too, by our own people. There are many manufacturing establishments in this city well worthy the farmer's notice, to which we intend, at a more convenient opportunity, to call his attention. In the meantime, we invite him to examine this beautiful production from the factory of the Messrs. Barnes. There are many advantages in purchasing an article made at home. The manufacturer, who warrants the article, is on the spot, and his pride and interest are most deeply excited to furnish you a good one. There is a great deal of repairing to be done, and specific orders to be given, that can never be supplied, without great inconvenience, by the foreign manufacturer. In short, the advantages of home establishments are so numerous, and so obvious, that we take it for granted, that the preference will always be given to the home producer, where the article is equal in quality, and not greater in price. These requisites are fully satisfied, by the article under consideration.

MISCELLANY.

BLUNDERS.

It so happens that some remarkably fine paintings in the world are defaced by most extraordinary oversights in the artist. These defects are sometimes not less singular, than amusing :

"In the chapel of one of the principal colleges in Paris, there was a picture representing the general-in-chief of the army of Egypt, attended by some of his aides-de-camp, paying a visit to the plague hospitals. Since the restoration of the Bourbon family to the throne of France, Bonaparte has been converted into Christ, and his aides-de-camp into apostles. The artist who has made these alterations, has not, however

thought it necessary entirely to change the costume, and our Saviour appears in the boots of Napoleon.

"But, of all the blunders which artists have committed, none is perhaps so great as that of the painter, who, in a picture of the Crucifixion, represented the confessor holding out a crucifix to the good thief who was crucified with our Saviour."

THE YOUNG PEOPLE'S BOOK,

Is the title of a periodical laid on our table by Messrs. Randolph & Co. It is beautifully gotten up, and in its list of contributors enumerates some of the most distinguished names of the city of Philadelphia. From an observation of its contents, we are inclined to rank this little work very far above the great mass of *trash*, that flows from the monthly press. Its articles are well written, handsomely illustrated, and aim at something more than the mere gratification of a morbid desire for amusement. We extract the following as a specimen of the truths it inculcates :

PUNCTUALITY.

There are few particulars in which Washington may not serve as a model to the youth of America. He was a great and noble character, formed by self-instruction. One of his most striking traits was his remarkable punctuality. Many anecdotes are related of him which all go to establish the fact, that he regarded punctuality as a high moral duty. It undoubtedly is ; and, moreover, it is one of the most important means of success in life. In both these points of view we would commend it to our young readers, and we wish to urge upon them the importance of forming early in life the habit of rigid punctuality.

Let us suppose the case of a young man setting up for himself in business. If he has formed this habit, its practice is easy. He keeps every appointment which he makes, without any painful effort. Every order for work or merchandize is executed on the very day and hour agreed upon ; and every person who has dealings with him, learns to count upon his punctuality with the same confidence that he counts upon the daily rising of the sun. Whenever an order is to be given which imperatively demands despatch and certainty, he receives the preference ; and he not only finds his business increasing among the most valuable customers, but his character is every day rising in the estimation of his fellow-citizens.

Look now at the reverse of this picture. A young man commences business with a sound capital and a host of friends. Confident of success, he neglects the duty of punctuality. He decides that a trifling omission in keeping his

engagements is easily overlooked and readily forgiven; and, so it is, for a time. But the customer, who is willing to be disappointed once, loses all patience when he has been disappointed ten times. He begins to compare notes with others, who have suffered in a similar manner, and the result is, that the delinquent is pronounced to be a person, on whose promise no dependance is to be placed. When things come to this pass, his character as a man of business is lost; and all the world knows that capital and friends are not long retained after character has departed. If he is not summarily ruined, he has to struggle through life against a thousand adverse influences; and can never know the happiness of ease and security.

To all our young readers, therefore, we say, form in early life the **HABIT OF PUNCTUALITY**. Be punctual at school, in the performance of your tasks, in the keeping of your engagements with your parents, your teachers, and even your play-fellows. Be punctual of your own accord, even where punctuality is not exacted by others. The habit is what you should form. What is habitual is easy; and if you begin early and resolutely, the formation of a habit of punctuality is just as practicable as the formation of a habit of negligence. One leads to honor and prosperity, the other to failure and disgrace.

NAMES ALTER THINGS.

A few years since, a tract of land belonging to North Carolina, was ceded to South Carolina. A young lady very *wisely* observed, "I am sorry father's plantation is in that tract; for every body says North Carolina is more healthy than South Carolina."

Richmond Markets, October 7th, 1841.

BUTTER—Mountain butter, wholesale 12 1-2 a 16 cts. for firkin; 20 cts. for roll.

COAL—12 a 16 cents per bushel.

COTTON—10 a 11 cents per pound.

CATTLE MARKET—Cattle on the hoof \$5 a \$7 per hundred pounds according to quality. Rough Fat 5 a 7 cents per lb. Mutton \$3 a \$6, according to quality.

FISH—Mackerel, No. 3, \$7. Herrings, No. 1, N. C. \$3 50; No. 2, \$3; Potomac cut, \$3 25. Shad \$8 50 per barrel.

FLOUR—Receipts are still small, and sales are confined to city dealers. Good brands are wanted for shippers, and would bring \$6 25. The returns of our Inspector show a deficiency of 20,000 bbls. compared with the same quarter last year, which was also short. City Mills is held at \$7 50.

GRAIN—Wheat \$1 20 a \$1 25 for red and white of the better qualities—merchantable may be quoted at \$1 15 a \$1 20. Corn—sales at 65 cents per bushel. Oats—much wanted, and good parcels would bring 40 a 42 cents.

LUMBER—Clear white pine \$36; refuse clear \$32—merchantable \$22; refuse last sale at \$14; flooring \$15 a \$25 per M.

LIME—\$1, and dull—supply good.

MEAL—70 cents per bushel.

PROVISIONS—Bacon—Smithfield, 8 cents for a prime article; inferior 7 a 7 1-2; Western sides 5 a 6 1-2, as to quality; shoulders 4 a 6 cents. Stock of all kinds

good—demand fair. Lard, 8 a 8 1-2—demand only for retail purposes.

PLASTER—Last sales at \$3 25 at Rocketts.

SALT—\$1 90 a \$1 93 3-4 by the cargo.

TOBACCO—Sales have been a little animated this week with a shade of improvement. It is thought the frost has materially injured the crop in the mountainous districts.

FREIGHTS.

FOREIGN—Rates to London 30s. and to Liverpool 25s. Continent 30s. a 32s. 6d.

NEW YORK—Flour, per bbl. 25 cents—very little going. Coal, 6 1-2 cents per bushel. Tobacco, \$2 50 per hhd., boxes 20 cents, kegs 25 cents.

PHILADELPHIA—Flour, none going. Tobacco, \$2 50 per hhd., 20 cents for boxes, 25 for kegs—none going. Coal, 7 cents per bushel. Richmond measure.

ON THE CANAL—To Lynchburg and intermediate places, 10 cents per 100 lbs.

EXCHANGE.

FOREIGN—On London 13 a 13 1-4 per cent. premium.

DOMESTIC—New York Checks, 3 1-2 premium.

Philadelphia, 1-2 a 3-4 premium.

Baltimore, 1 1-2 a 1 3-4.

North Carolina Bank Notes, par.

Do. do. do. under \$10, 1 discount.

South Carolina, par a 2 premium.

Savannah, 3 discount.

Augusta, 2 discount.

Alabama, 7 discount.

Tennessee, 8 discount.

Specie, 2 1-2 premium.

Northern exchange scarce and in demand.

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