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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 & L. M. BURFOOT, Editors.

VOL. II.

RICHMOND, JULY, 1842.

No. 7.

We are much indebted to the Agricultural Society of Powhatan for the following very able reports upon the subjects of wheat and tobacco. We submit them to the criticism and comments of our correspondents:

## WHEAT.

The Committee appointed at the last meeting of this Society to report upon "the best kind of wheat for cultivation, the best mode of raising it, and the probable causes of the frequent failures of the wheat crop," beg leave to make the following report:

In investigating the subject matter submitted to them, it has been deemed best to invert the order of the inquiry, so as to take up, first the question of "the probable causes of the frequent failures of the wheat crop;" next, "the best mode of cultivating that crop;" and, lastly, "the best kind of wheat for cultivation." This arrangement is made in order to begin at the "root of the evil" of our present system of wheat culture, to endeavor to point out the true nature and causes of that evil, and thence to deduce the remedy, that great agricultural panacea after which we are seeking.

First, then, "what are the probable causes of the frequent failures of the wheat crop" in Virginia, within the last twenty or twenty-five years, for it is only within that period that these failures, at least in this middle region of our State, have become so frequent and so disastrous. In order to arrive at the true solution of this question, it would seem advisable to go back and trace up the history of cultivation, but more particularly the cultivation of wheat, from the first settlement of the country to the present time—to note the original nature and productiveness of our lands when new—the actual crops of wheat then produced—the mode of cultivation then and since—at what time and under what circumstances the product of our lands in wheat first began to decline—the changes of our climate, if any—together with any other facts which might appear to have a bearing upon the question. But your Committee are not aware of the existence of any such history, or even of any such minute statistical facts as would throw light upon the subject. They must, therefore, confine themselves to such *general* facts relative to the history of agriculture in

our State, as are recorded in the general history of the country, or to be gathered from tradition or other sources, whence to draw their conclusions in the investigation before them.

It is a fact, generally admitted, that most of our lands at the first settlement of the country, both in the tide water and middle region of the State were much more productive in grain and tobacco than they now are, and that for many years, those lands continued to produce grain crops (wheat included) both abundantly and certainly. It is also equally well known that in lower Virginia, where in the beginning they used to cultivate wheat and tobacco successfully upon their best and alluvial soils, those lands had altogether ceased to yield those crops profitably, until of late years, when they have been resuscitated by the use of lime, and become once more the finest wheat lands in the State. It is furthermore well known to this Society that our lands in this section of country some twenty or thirty years back, when they were then comparatively fresh and unexhausted, yielded crops of wheat in abundance and without fail, whilst we are left at this early day to inquire why it is we cannot make wheat at all.

The failure of our wheat crops has been by some attributed to a supposed change in our climate. Your Committee know of no facts sufficient to authorise the belief that any permanent and material change has actually taken place in our climate. In the oldest records and histories our climate is mentioned as one subject to rapid and extreme vicissitudes of temperature as well as of moisture—the winters sometimes extremely cold, at other times extremely mild; and the summers sometimes hot, sometimes cool—now wet, and then dry—and this we find to be precisely the character of the climate at this day. Nor is it at all philosophic to suppose that any such permanent change of climate can take place in a given region of country as materially to affect the staple crops of that region. We hear of no such changes of climate as this in the oldest countries of Europe, and all the known laws of nature are opposed to any such theory. But even allowing that a change and that a considerable one has taken place in our climate, it would yet remain to be shown that such change exerted any appreciable effect upon our wheat crops. Wheat thrives not only in temperate but in very hot and very cold regions, in Africa and

Siberia, as well as throughout the greater part of the United States—in Great Britain and throughout Europe. It flourishes too in all situations from the level of the sea to the altitude of six thousand feet in favorable latitudes—thus evidently manifesting the beneficial design of Providence to render this great staff of life in a measure independent of the *vicissitudes of climate*, that its bounties might be extended far and wide over the surface of the earth, wherever man shall learn to obey the first law of his nature and live by the sweat of his brow. Further in this connexion, and upon the supposition that a change of climate has taken place which injuriously affects our wheat crops, how is this theory to be reconciled to the fact, that at one and the same time, and of course under the influences of precisely the same climate, abundant wheat crops are now made upon the limed lands of lower Virginia, whilst our crops are failing every year, and getting worse and worse. But we take a more hopeful view of this subject than that which teaches that climate or some uncontrollable or inscrutable agency is the cause of the failure of our crops. We believe that for every evil, moral as well as physical, there is a remedy somewhere in nature; and in the present case, when we shall have discovered the true nature of the evil, and traced it up to its prime causes, then we shall be in the way of finding the true remedy and the mode of applying it. What then is the cause of the failure of our wheat crops? We have just seen that it cannot reasonably be attributed to a change of climate. And we have also seen that when our lands were new, fresh and unexhausted that we had no such failures, but on the contrary, that the wheat crops were then certain and abundant, and that it is only of late years, occurring with the gradual deterioration and impoverishment of our lands, that the wheat crops have gradually fallen off, until now we can scarcely realize a profit upon our very best lands. It has also been shown that this very state of things just described, took place also upon the best lands of the tide water region of Virginia where wheat had ceased to be made to any profit, until of late years these lands have been once more rendered productive by the use of lime as a manure.

Do not these facts *alone* (and many others might be adduced, did the narrow limits of this report allow,) indicate clearly and almost beyond doubt, that the *soil* itself is the medium into which we are to search after the true cause of the failures of our wheat crops? What change then has taken place in our soil sufficient to cause the present failures of our crops? In reply to this inquiry, your Committee are fortunate enough to be able to answer, not in their own language, and upon their own authority—but in the words and upon the authority of the new and celebrated work of Prof. Liebig upon

Organic Chemistry as applied to Agriculture. In his chapter upon the Art of Culture and Fertility of Soils, Professor Liebig says, "The first colonists of Virginia found a country, the soil of which had been exposed for centuries to all the influences which effect the disintegration of rocks, but from which the alkalies had not been removed, and which, therefore, was able to afford the means of nourishment to those vegetables which require alkalies for their growth during many years—but harvests of wheat and tobacco were obtained for a century from one and the same field without the aid of manure, until now whole districts are converted into unfruitful pasture land, which without manure produces neither wheat nor tobacco. From every acre of this land, there were removed in the space of one hundred years 1,200 lbs. of alkalies in leaves, grain and straw; it became unfruitful, therefore, because it was deprived of every particle of alkali, which had been reduced to a soluble state, and because that which was rendered soluble again in the space of one year was not sufficient to satisfy the demands of the plants. Almost all the cultivated land in Europe is in this condition; fallow is the term applied to land left to rest for further disintegration. It is the greatest possible mistake to suppose that the temporary diminution of fertility in a soil is owing to the loss of *humus*,—it is the mere consequence of the exhaustion of the alkalies."

Here, then, is the true solution of the question. The exhaustion of the alkalies of our soils is the cause of the failures of our wheat crops. The alkalies most essential to the wheat crop, and all which are found to exist in the grain and straw are *lime*, potash and magnesia. These, then, are the great and important manures for wheat.

Upon the subject of manure, Professor Liebig says, "In addition to the general conditions, such as heat, light, moisture and the component parts of the atmosphere which are necessary for the growth of plants, certain substances are found to exercise a peculiar influence in the development of peculiar families. *These substances either are already contained in the soil, or are supplied to it in the form of matters known under the general name of manures.* But what does the soil contain, and what are the components of the substances used as manure? Until these points are satisfactorily determined, a rational system of agriculture cannot exist. The power and knowledge of the physiologist, agriculturist and chemist must be united for the complete solution of these questions."

Again, he says, "The rules of a rational system of agriculture should enable us to give to each plant that which it requires for its proper food and development." "But agriculture has hitherto never sought aid from chemical principles, based on the knowledge of those substances which

plants extract from the soil on which they grow, and of those restored to the soil by means of manure." And it is precisely this aid of chemical science which Professor Liebig has attempted, and so ably attempted, to apply to practical agriculture.

Having ascertained, by means of chemical processes and analysis, the constituent elements of all *good soils*, and found by the same means in what elements *inferior soils* are deficient, it becomes manifest what must constitute the true manure for these last. Again, as all plants must derive the elementary substances which enter into their organism solely from *two* sources, the atmosphere, and the soil; and as the constitution of the atmosphere remains nearly uniform and unchanged, we need only have regard to the composition of the soil in our efforts to promote vegetation. But there are certain substances which plants can only obtain from the soil in which they grow: these are generally the salts, earths and alkalis—and if any of these, which are essential elements of the plant itself, are not to be found in the soil, then such plant cannot be matured in such a soil.

Now it has been ascertained by chemical analysis, that the straw and grain of wheat contain combinations of lime, magnesia and potash, besides other substances; and if our soils do not contain those alkalis, as it has already been shown that they do not, then we must add them as manure before we can hope again to see our lands produce wheat crops. Professor Liebig says that "in Flanders the yearly loss of the necessary matters in the soil, by grain cropping, is completely restored by covering the fields with ashes of wood or bones, which may or may not have been lixiviated, and of which the greater part consists of phosphate of lime and magnesia." The great importance of manuring with ashes has been long recognised by agriculturists as the result of experience, and in some countries of Europe it is transported eighteen or twenty miles as a manure. Ashes contain also silicate of potash precisely in the same proportion as it is found in wheat straw, besides the phosphates of lime and magnesia, which are ingredients of the grain of wheat.

Bone dust, chiefly composed of phosphate of lime, is also a powerful manure for wheat, and ought to be used together with lime and ashes. Forty bushels of bone dust to the acre, it is said, will be sufficient to supply the soil with phosphates for three crops of wheat, clover, &c. Nitrogen also in some one of its solid combinations must necessarily exist in every good wheat soil, as this substance is a constituent of the gluten of grain. The use of gypsum together with the excrementitious matters of animals, but principally urine will serve to generate and fix in the soil the sulphate of ammonia, from which substance the vital functions of plants

can separate and assimilate the nitrogen required.

Hence, then, it becomes apparent that we must add to our soils, besides the manures now in general use, all of which will then become doubly useful, lime, ashes, or bone dust, urine and gypsum. In short, we must give to our land all those substances in some form or another, which are now deficient in the soil, but which are known to enter into the organism of grain and straw, and must, therefore, have been derived from the food of the wheat plant existing in the soil. It would lead far beyond the narrow limits of this report to enter into any discussion of the theory and use of *manures*, however intimately connected with the present subject. Your Committee can, therefore, only refer to the *subject of manure*, in the modern and extended acceptance of that term, as elucidated by the science of chemistry and confirmed by experience, as the source from which we are to derive the knowledge necessary to deliver us from the blind guides of habit, prejudice and ignorance which we have so long followed, and to lead us to a knowledge of the true and only means of restoring our worn out lands. And having thus endeavored to show the real cause of the failures of our wheat crops as well as hinted at the remedy, your Committee next proceed to the other questions submitted to their consideration, viz: "the best mode of cultivating the wheat crop?"

This question, like the first, is one of extensive *general* bearing and connection, and if traced back to first principles and followed up through all its relations would be ample theme for a volume—but your Committee are well aware that no such task has been imposed upon them, and that this Society only wants something *concise* and *practical*—the results of experience. In short, the plain practical rules for cultivating wheat to the best advantage in our climate, upon our lands and under the circumstances to to which we are subjected.

It has been attempted to be shown above, and the fact will hardly be denied, that our lands must be improved before we can hope again to cultivate wheat successfully in this part of the country. But a suitable *succession* or *rotation* of crops is acknowledged to be the essential basis of every improving system of agriculture. We must first, then, begin the improvement of our land, and as the foundation of this improvement, we must fix upon and carry into practice a suitable and liberal rotation of crops.

As to the best rotation for general use upon our high lands, there may be differences of opinion, and it might not be advisable here to recommend any particular rotation for universal adoption. Each judicious cultivator must at last determine for himself, adapting his system to the peculiarities of his soil and other particu-

lar circumstances. And it is not at last any *particular rotation* that can be recommended to all—but that all should adopt, and that forthwith, *some system* or other—and the more liberal the system adopted, the more extended the rotation in the beginning and in the present reduced condition of our lands, the greater will be the improvement in the end—and the more sure shall we be of making wheat in a little while.

The mode at present practised by many of cultivating land in corn, then in wheat or oats, and next year in weeds, or grazed, and again in corn, &c. has already killed most of our lands, and in fact, James River low grounds of the richest kind have for a time been impoverished by this very system.

A five field rotation of three grain crops in five years, (one only of corn) and two years in clover seems to be the system now most generally approved, and is no doubt well adapted to our lands and mode of cropping. The rotation might run corn, oats, clover, wheat, clover—or leaving out oats after corn, two fields in wheat each year—the one after corn, the other on clover fallow—and one corn crop every five years and that after clover.

Upon a six field rotation the land would perhaps improve still more rapidly, and this system might be adopted upon plantations when there is land enough to make corn sufficient upon one-sixth of the surface. Here, of course, each field would go into corn only once in six years—two wheat crops each year, or a wheat and oat crop, and three years in clover and pasture, in the six years. As to the particular manner in which the crops are made to succeed each other in each particular rotation although it is a matter of much importance yet it must be influenced and determined by so many accidental circumstances, that no general rule can be given, and each one must determine for himself.

It is taken for granted in the above remarks that clover and plaster are used in the rotations suggested. To these valuable means of improvement ought to be added all the stable and farm-pen and cow-pen manure each year, either upon the field intended for corn, or upon the clover fallow for wheat, or upon both, if possible, to be aided still further by the all-important manures referred to in the first part of this report. Grazing and trampling are deemed highly important by the most successful improvers of land, in every rotation, embracing wheat as one of the crops. Grazing serves to cleanse the land, and the trampling of stock compacts the soil and beats down and prepares the fallow crop, destroys insects, and otherwise acts beneficially as a preparation for the succeeding grain crops. These means of improvement should, therefore, not be neglected in our attempts to cultivate wheat successfully.

The proper time for seeding wheat cannot be

too strongly insisted upon as experience has shown it to be a matter of the greatest importance. In a series of years, the best time for seeding will be found to be between the 10th and 20th of October, and as a general rule, no wheat ought ever to be sown after the 1st of November.

The preparatory ploughing for wheat should always be as deep and thorough as the nature of the soil will admit. The grain should be well covered, and the surface left free of grass, and well pulverized.

No land will produce wheat that is not thoroughly drained. This important process should therefore be well performed.

Where lands have been nearly exhausted, as is generally the case with all our high lands in this country, and it is desired to bring them into cultivation in a rotation preparatory for wheat, it would doubtless be highly beneficial upon our *granite* soils to begin with a naked fallow for one year: that is, break up the land, say in winter, and break it deeply too, if the land has any foundation, say with three horses, and let it lie fallow all summer, being ploughed and re-ploughed in the mean time so as to prevent the growth of grass. This land to be sowed in wheat in the fall, or succeeding spring with oats, and in either case with clover—thence to be followed by the usual rotation. Our soils in this region rest upon, and have been formed by the disintegration and decomposition of granite rock. Granite is composed of quartz, felspar and mica. Felspar contains seventeen per cent. of potash, and mica eight per cent.—both contain traces of lime, besides about thirty per cent. of alumina. By ploughing our lands deep and using the naked fallow, as above suggested, we shall the better promote the decomposition and decay of the rock of the soil, and thus provide a fresh supply of the alkalies so much needed.

But we cannot reasonably hope to restore our lands entirely, and to carry them to the highest pitch of productiveness in wheat and other grain crops, until we give them lime or potash in some form or other. Let us, then, begin the improvement of our lands, by the adoption of a suitable rotation, accompanied by the liberal use of clover and plaster, and the aid of vegetable and animal manure, combined with a more thorough and neater tillage of the earth itself, and let us add to all this a liming of our lands, and then shall we see our country once more teeming with abundant harvests.

As to "the best kind of wheat for cultivation," there can be but little choice in the present condition of our lands, and with our present mode of cultivation, for with these we shall fail, try what kind we may. In truth, most of the wheats now in use have degenerated in consequence of the soil (as explained above) not being in a condition to produce and mature that grain

to perfection, and the consequence is, that the grain becomes more and more imperfect, and in some measure loses its power of regeneration. If there is any choice of kinds, however, the Turkey wheat would seem to be best for rich and alluvial lands or good tobacco lots, and the red shuck beardless is a hardy wheat for ordinary land. For early seeding, say between the 20th and last of September, the Lawler is perhaps the best wheat, as it appears to resist the attack of the fly better than any other kind. The red May wheat is coming into general use, particularly in the lower country, and is worth trying upon good land.

All of which is respectfully submitted.

#### TOBACCO.

The undersigned, a Committee appointed by the Agricultural Society of Powhatan, to whom was referred the subject, viz: "The best mode of managing Tobacco from the time it is cut in the field until it is carried to market," having had the subject under consideration, beg leave to present the following report as the result of their deliberations:

In adopting a plan of management for this plant, (one of the most remarkable in the vegetable world) it will be necessary to inquire into its character and properties.

The result of the analysis of the most experienced chemists is, that tobacco contains eight hundredths of aqueous and two hundredths of oleaginous and other matters. Its medicinal properties they deem it unnecessary to mention, they being foreign to the subject before them—the plant being cultivated almost exclusively to be used as a luxury. From this analysis it will be seen that only two-tenths of this plant, then, from its character can be made available; the remainder, being aqueous, disappears in the process of curing. A small portion of the two hundredths referred to, being more volatile than the remainder, changes its character, by the application of heat combined with moisture, and as a consequence, changes the character of the plant, and thereby destroys its beauty and quality. It must be evident, then, that the great secret in curing the plant is that, by practising which, you can retain all (if possible) of this two hundredths of oleaginous and resinous matter, and dispel the eight hundredths of aqueous property.

The plant being supposed to be matured and cut in the field, the first operation is the hanging on the sticks. We advise that it should be done with great care—that each plant be placed perpendicularly on the stick, with space sufficient to prevent one plant from coming in contact with another—it being a matter of importance to give each plant a sufficient space for free evaporation. The second operation is "scaffolding." Your

Committee advise that the sticks should be carefully removed to a scaffold, (which should always be near at hand) taking great care that the plant shall not be bruised. The scaffold should be low, so that the tails of the plant may nearly reach the earth,—it being considered highly important to have the radiation of heat arising from the earth at this season of the year to aid in yellowing the plant. After it has remained thus crowded on the scaffold some two or three days, the sticks must be removed from one another at such a distance as to give the plant the benefit of free ventilation. How long it should remain on the scaffold your Committee cannot exactly advise, it being dependant on a variety of circumstances, which they feel at a loss to explain even to an experienced planter. The result of their experience is, that when the pith of the stalk commences to contract, and the stems show a slight degree of contraction, and the margin of the leaves gives evidence of a slight degree of dryness to the touch, that then it is ready to be removed to the house. This mode is advised if it is desired to cure the plant a bright color. If it is desired to cure it a dark color, the same directions should be observed, with this exception, that instead of crowding the sticks upon the scaffold, they should be carefully placed at intervals of about ten inches, the object being obviously to prevent the leaves on one plant coming in contact with those on another, a due regard being had to the size of the plant.

This brings us to the third operation, the "housing," as it is termed. The same particularity and care should be observed in housing as has been advised in the last operation, a departure from which would produce disastrous consequences. By all means avoid crowding, which done, produces "house-burn." By "house-burn" we mean that leaf which presents a red color and dry and lifeless appearance. We believe that it is produced by heat from two causes, crowding and excessive fire. There is a difference of opinion on this subject, and your Committee are well aware of it too, even by experienced planters; but such is our conviction of its truth from close observation that we will almost venture the opinion without the fear of refutation.

The fourth operation is by far the most important branch of the subject before them, "the firing." Your Committee are well aware of the difficulty of removing old and established usages and opinions, and venture on this branch of the subject with great diffidence, as their plan will come in conflict with the usages and opinions of the oldest, most experienced and respectable planters of our State. But the importance of their opinions, (formed from experiment) if true, both as it regards the economy of labor and fuel, (the latter article becoming so scarce in our

part of the State as almost to deter the boldest from the cultivation of the plant,) emboldens them in the stand they have taken, and induces them to recommend the plan to their brother planters. The plan heretofore practised and the general received opinion is, that it requires a great deal of fuel to cure tobacco, and give it that seasoning required to make it stand a voyage to a market. The plan which we recommend, we think, will produce this result with less than one-half of that required by the old plan.

All then that is requisite is to evaporate the water and retain the oil and resinous matters. This accomplished, we should be satisfied—your Committee recommend that the fire should be commenced gradually so that the heat by degrees should be uniformly diffused throughout the house, never in the commencement exceeding the warmth of a summer's sun; a greater degree of heat would prove injurious, seriously affecting the oily and resinous properties of the plant. Keep up this fire until the leaf (not the stem) is cured; then let the fires burn out, (they should not be put out.) It will then be left as dry as tinder; let it remain until it gets in soft order, and then commence the fire again, as before directed, and continue it until the stem is cured, so much as to leave it in a safe condition, taking care never to permit the tobacco to get in too "high order," to correct which, should it occur, apply the fire as before directed. We are of opinion that a greater degree of heat should never be applied than 110 or 120, Fahrenheit thermometer. A greater degree of heat would tend to evaporate the valuable property of the plant, it being borne in mind that all that is required is a sufficiency of heat to evaporate the water, any excess over that quantity must serve to encroach on the oily and resinous property of the plant. One of your Committee, for four years operating on this plan, has uniformly sold his crops for the best prices, and his crops too have uniformly been shipped and no complaint has as yet been heard, (although particular inquiries have been made) that his crops did not stand the voyage. We, therefore, recommend the above plan to our brother planters as making more tobacco with less labor and at least one-half of the fuel ordinarily used.

The tobacco supposed to be thoroughly cured, then comes the process of "striking" or taking from the sticks. We advise that during the month of December all tobacco should be taken down in tolerably soft order, so that striking two plants together to free it from grit will not injure the tails; a bed having been prepared of planks about twelve inches from the floor, place the plants down lapping the tails about twelve inches, and leaving the butts on each side exposed so that they can continue to dry, being careful to leave a space of eighteen inches be-

tween the bulks to admit free circulation and permit a man to pass between them, then cover it over with straw, *without weight*, as it strips easier, a weight causing the leaves to adhere.

The next process is *stripping*. The tobacco is taken from the bulk into a stripping room prepared for the purpose, which should be made close, and with a stove the warmth kept as uniform as possible; your hands must be divided into assorters and tiers up, and each assorter should separate the colors and lengths, and when so separated, they pass to the tiers up, who are required to tie it up in such number of leaves, say from six to eight, so that in packing they may be easily grasped and pressed by the hand, taking care to keep the colors separate and distinct, and also dividing the long and short of each color. The lugs should be bundled up in large bundles, without much regard to nicety.

The next process is the "straightening and boxing." The tobacco is taken to the packing room, which we will suppose is well prepared with boxes, in number according to the amount of tobacco made, which we recommend should cube four feet six inches, with a lever attached to each. This size is thought best to give the packer room sufficient to pack with ease; a larger box would prevent the lever from acting uniformly on a larger surface. The packer takes his position in the box and the bundles, after having passed through three or four hands pressed by each and straightened, or handed to the packer, one bundle at a time, who lays it straight in the box. The box should be packed at least half full before any weight is applied with the lever, and when applied, great care should be observed to avoid bruising by too much weight. Keep the colors and lengths in separate boxes. The lugs will not pay for the trouble of boxing, and we advise that they be packed in the hogshead, and prized as fast as stripped. The tobacco should remain in the boxes until it adheres together well; that period will bring the spring of the year—it should then be taken from the boxes for the purpose of getting in prizing order, and instead of the old plan of tying up with shucks, which is a very tedious operation, and the old plan of hanging on sticks drawn to an edge, which always tended to bend the stems, which, when dry, can never be straightened, we recommend a plan, the invention of one of your Committee, (Wm. Old, Esq.) Two bundles of tobacco should be placed together, and immediately below the tie should be fastened by a string, and two other bundles placed likewise and fastened by the other end of the string, drawing the string tightly, and then laid over a stick from ten to thirteen strings on each stick. The string made of ordinary cotton, sufficiently strong to sustain the weight of four bundles of tobacco, should be twenty-two inches long, the end of each loop made into a running-noose, and



the heads of two bundles caught in each end; they are then hung up in the house with sufficient room between the sticks to prevent their coming in contact; let it remain until it gets thoroughly dry. In the month of March it will get in that order; as soon thereafter as a season offers, strike it down in prizing order, but if you should not be able to strike it in the month of March, and you cannot get a season without the aid of art—then dry it with a moderate fire, such as has been recommended in the curing, until thoroughly dry, and then be careful to strike it down the first season that offers; should you omit it, it will be necessary to dry it again, which should be avoided, as the oftener it is fired and the longer it hangs up, the more loss is sustained in weight. The tobacco should be taken down on the sticks, "cooped" in a bulk, and at convenient seasons thereafter, it should be again boxed in the same manner recommended in the first boxing, taking care to turn the edges of the bundles up (they being flattened by the first boxing) and put on as much weight as you can with the lever. It must remain in the boxes until you are ready to prize. The prizing in the hogsheads after this preparation is one of the simplest operations.

Your Committee present this report with the conviction that they have very imperfectly handled the subject, but they have done the best they could in this brief manner.

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ADDITIONAL.

The undersigned, one of the Committee, agrees with his brother planters and members of the Committee in the general views expressed by them upon the subject submitted for their consideration; but differing with them in one of the most important operations of preparing a crop for market, viz: the curing, he conceives the object of the Society will be best accomplished by stating that difference. He does not know better how to communicate his difference of opinion, than by stating his own plan, which is as follows. He adopts the plan of the Committee in the commencement, and continues it until they stop the fire the first time, at which time he increases his to a high degree, and continues it until the tobacco is cured, or nearly so. By this plan, he has succeeded uniformly in procuring good prices until the last two years, when the objection made by the buyers was, not to the manner of curing, but of prizing. His tobacco has usually held out with the estimate whilst growing.

C. SELDEN.

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For the Southern Planter.

*Mr. Editor.*—Allow me to claim a small space in your valuable paper, merely for the purpose of correcting a slight misapprehension of "A BREEDER" in respect to the color of the sow

from which is descended the beautiful white pig belonging to Mr. Sublett, referred to in his article in your June number. She was truly (as I am informed) the offspring of a white Berkshire boar, but her mother is *not white*, as your correspondent describes her. She is, to use his own descriptive language, "distinguished by a tawny ground, marked with blackish spots"—a brief yet comprehensive compendium of what Low and others have said of the Berkshire breed of swine. Of the genuineness as Berkshires of both parents I entertain not a doubt, but that they are of a different variety from the black Berkshires I am equally confident, not having been subjected to the *Siamese* cross, which constitutes the peculiar and distinctive characteristic of the last mentioned breed. The sow above referred to is now in my possession. She has a litter of pigs by a very fine black Berkshire boar of the best blood, but not one of them is marked after their sire. They are all spotted after the manner of their mother, and partake of her symmetry and beauty in form and appearance. I hold these in just as high estimation as I do my Berkshire pigs of *Siamese* descent, yet I should not think of sending them to a person ordering in the usual terms, "Berkshire pigs," because they are not of that precise variety I should presume to be intended. They are only *China Berkshires*, while the others are *Siamese Berkshires*. Admit these distinctions and all controversy about white and black varieties would be at an end.

Yours, respectfully,

CH. B. WILLIAMS.

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SALT.

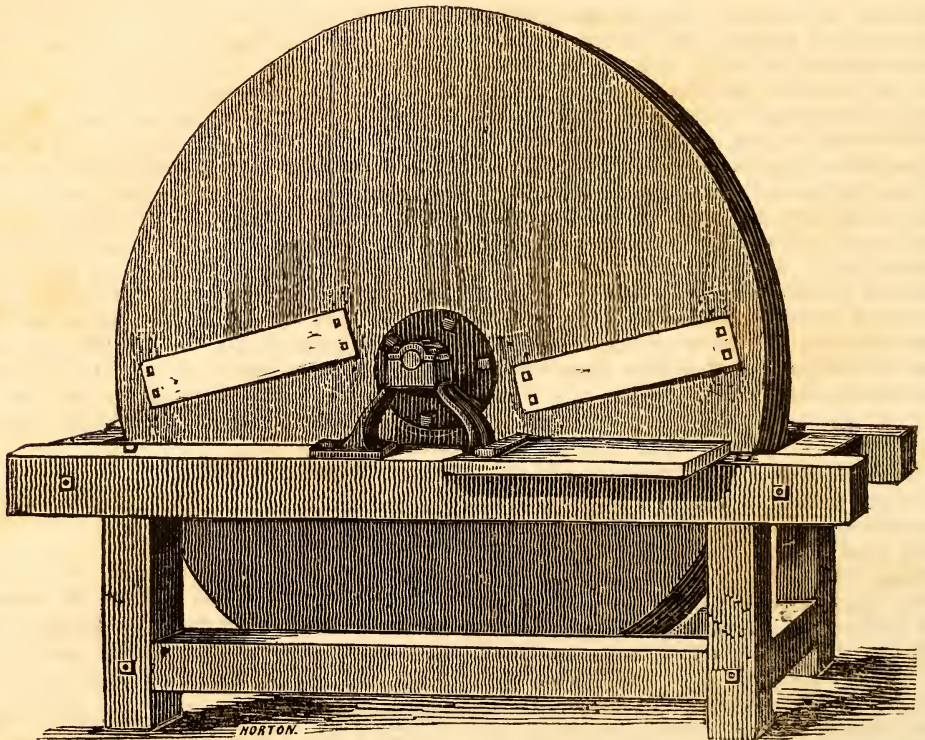
At the request of the Editors, Mr. John C. Mather, of New York, furnishes the Cultivator with the result of his experiments with salt as a manure. In the spring of 1838, he sowed five bushels an acre on land well broken and harrowed, which was much infested with the cut-worm, leaving a strip of half an acre on each side of the field unsalted, to test the experiment. The worms were destroyed, and the corn and potatoes manifestly better on the salted than the fresh land. This superiority has been continued to be manifested in three successive crops since. In time of drought, the salted land has exhibited a continued moisture as manifested in the verdant green of the vegetable growth. Mr. Mather also states that he has sowed salt on his meadows with such satisfactory results as determine him to continue its use.

A great many experiments with salt have been reported from time to time. It is represented as having been sometimes injurious, some-

times beneficial, and frequently inoperative. Its action, which of course varies according to circumstances, has never been clearly and satisfactorily explained. The best opinion seems to be that it operates chiefly by producing or preventing the decay of animal and vegetable matter

in the soil, consequently, the quantity applied should be proportioned to the quantity of these constituents; for it is a well known fact, that a small quantity of salt promotes decay, whilst a larger quantity is universally used to prevent it.

### SHINGLE MACHINE.



This wonderful machine was exhibited in our city a few days since by the ingenious inventor, Mr. J. S. Raymond, of New York. We saw it in operation, and were surprised not less at the quality of the shingles, than at the despatch with which they were discharged from the machine, and the whole accomplished by an apparatus the most simple to be conceived. A wooden wheel, twelve feet in diameter, armed with two knives, is suspended on two journals, and set in rapid motion by a band running on a head on one end of the shaft. At each revolution of the wheel two perfect shingles are discharged from the machine. To facilitate the cutting of the knives, the blocks are all steamed.

The round log is first sawed off into lengths, as may be desirable for the shingles: these round blocks are then rived into flat blocks, the thickness of the width of the shingle: these blocks are then steamed, and whilst hot, laid upon the platform of the frame, and pressed up to the plane of the wooden wheel: each knife in its revolution cuts off a shingle. The knives project further at one end than the other, and consequently, the shingles are thicker at one end than the other; in fact, when they come from the machine they are ready to be laid. Moreover, the knives are so arranged, that the point of one shingle is cut from the end of the block, from which was cut the butt of the one before,

whereby, the block is kept square and true, without any loss of timber.

This machine is so simple and light, that it may be moved any where, and driven by two horses; and yet so efficient is it, that it is said to be capable of discharging ten thousand shingles an hour. Mr. Raymond carries with him the most numerous certificate of the simplicity, durability, and efficiency of them achine. We should think it would prove invaluable in some of our cypress swamps, and hardly less so where shingle timber is scarce, for it converts timber into most excellent shingles, that would be wholly unmanageable by hand. The steaming process is the most troublesome, though not expensive, for the inventor offers to carry the machine any where that a large job will be furnished, and from the logs delivered him, to return shingles at the rate of fifty cents a thousand. The cost of the machine, alone, is from one hundred to one hundred and fifty dollars, according to size, the largest cutting twenty-eight inches in length, and being intended for cutting barrel staves as well as shingles. Individual or county rights may be had on moderate terms.

Any further information that may be desired can be had by application, post paid, to the Editors of the Planter.

For the Southern Planter.

*Red Hills, Albemarle, May 26, 1842.*

Sirs,—The enclosed sheet contains the Constitution of "*The Albemarle Hole and Corner Club, No. 1,*" which, by order of the Club, I enclose to you for publication in the "*Southern Planter.*" Its provisions will fully disclose the objects of the Association; and we are persuaded that, if pursued in the proper spirit and with a zeal which the great importance of the subject will justify, the cause of agriculture will derive greater benefits than from any other method of advancing its great interests. It is this persuasion that makes us desire the publication of our organic rules; and it is in the hope that similar clubs will multiply that we have designated ours as No. 1. Our name is taken from that of similar clubs organized in Scotland about the year 1784, and from which arose that celebrated association, the "*Highland Agricultural Society,*" which has changed the face of that country, and which in spite of the unpropitious influences of its stern climate converted its barren heaths, and reluctant soil in one of the best cultivated and most productive portions of Europe. Such is the origin of our name. It will excuse its quaintness.

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The few meetings which our club has already held have been distinguished by a fine earnest spirit, and a vigorous zeal. Various experiments on subjects of high interest, have already been indicated, and when our conclusions shall have sufficiently ripened for such a purpose, we may hope to communicate observations which will add an interest even to the pages of the *Southern Planter.*

FRANK CARR, *Cor. Sec'y*  
To "*The Albemarle Hole and Corner Club, No. 1.*"

#### CONSTITUTION OF "THE ALBEMARLE HOLE AND CORNER CLUB, NO. 1."

Among the causes which seem now to retard, in this section of country, the improvement of agriculture, both as a science and as a source of profit, and which tend to render farming an irksome, instead of a pleasant occupation, we note the following as the chief: 1. Careless and inaccurate experiments, of which the results are either altogether unsatisfactory or lead to erroneous opinions. 2. A slovenly and incomplete execution of farming operations, whereby fields, half ploughed and crops half tilled, fail to realize our hopes. 3. Insufficient and immethodical attention to beasts of the plough, and stock of all kinds. 4. A want of careful attention and accurate observation, whereby wrong and hasty opinions are often formed. 5. The absence of combined exertion to improve our profession. 6. The want of sufficiently free and social interchange of individual views and experience among farmers.

Wishing to remove these and all other obstacles to the improvement of our profession as far as we can, we have determined to associate ourselves into a neighborhood club for the purpose of testing the theoretic branches of husbandry, by more thorough and accurate experiments and observations; with a view of exciting a desire for, and determination to have better preparation, tillage and general culture, by frequent neighborly visits and inspections of the condition of each others farms, and with the hope, by a free and unrestrained exchange of our different views and opinions of eliciting the truth, deriving mutual knowledge and improvement and promoting social feelings and happiness. And as it seems meet and necessary, when men unite for the attainment of a common object, that they adopt organic rules for the direction and government of their combined efforts, we do agree to adopt the following as the basis of our organization:

1. We will call our association, "*The Albemarle Hole and Corner Club, No. 1.*"
2. The officers of the Club shall consist of a President, Vice-President, Recording Secretary, Corresponding Secretary and Treasurer.
3. It shall be the duty of the President, and in his absence, of the Vice-President, to preside

at all the meetings of the Club, to preserve order, to appoint all committees, and to call meetings of the Club whenever he may deem its interests require it.

4. The duty of the Recording Secretary shall be to keep a full and regular record in a bound book, of the proceedings of the Club, subject to the inspection of any member, and he shall, at every meeting read the minutes of the preceding meeting, with a view to the correction of the same and for the information of the members.

5. It shall be the duty of the Corresponding Secretary to conduct all the correspondence of the Club; to prepare for publication all parts of proceedings, reports of committees, &c. which the Club may order to be published—and he shall lay his correspondence before the Club when required to do so.

6. It shall be the duty of the Treasurer to receive and keep all the funds of the Club—to pay all expenses which shall be ordered by it, and to keep a separate account, and make report and exhibit of the same at the end of his office.

7. The officers of the Club shall be elected at the present meeting, and continue in office one year from the date of their election, or until others are elected in their places. All elections shall be *viva voce*.

8. The limits of this Club shall not embrace more than twelve farms, and the owners and representatives of these farms shall be the members of the Club; and no farm situated more than twelve miles from the forks of the Rivanna River shall be embraced in the limits of the Club.

9. The Club may elect honorary members of the most distinguished agriculturists or scientific men of the vicinity, whose privilege it shall be to attend any of the meetings of the Club, and assist in their deliberations, and interchange views and opinions on all subjects connected with the great interests of agriculture.

10. Membership shall be constituted by subscription to the rules of the Club; and may be dissolved by voluntary withdrawal, or by failing to attend three successive meetings, unless excused by sickness or absence from the neighborhood.

11. New members and honorary members shall be elected only by unanimous vote; but all other questions shall be decided by a majority; except so far as may effect the rules by which the Club is organized, to alter or amend which a vote of two-thirds of the members present shall be required.

12. The Club shall meet on Saturday at one of the Club farms in regular succession once in every three weeks, beginning on the second Saturday in March and ending on some Saturday in November, except that one meeting shall be held in January; and each meeting shall designate the farm on which the next shall be held.

13. The Club shall meet on the day and farm appointed, at 10, A. M. and proceed to examine into and inspect all the operations in execution at the time, the condition of the farm, stock, horses, &c. the general mode of culture, rotation of crops, the subject of manures, and all other branches of husbandry—making such inquiries as may occur to them, and suggesting such improvements as they may think proper.

14. The Club shall dine with the owner of the farm at which the meeting is held; and after dinner shall discuss, in an orderly and temperate manner by conversation and not by speeches, such agricultural subjects as may have been selected for discussion, or as shall occur to them, if none have been selected. No subject shall be introduced into the conversations of the Club unless it be of kin to agriculture; and politics shall especially be excluded.

15. If the day appointed for the meeting of the Club be such as to prevent it, the meeting shall be held on the farm appointed on the Saturday next succeeding.

16. At each meeting a subject shall be selected for discussion at the next meeting, and when the discussion shall be finished, any two members may call for a decision of it by the vote of the Club; in which case, each member shall concisely give his opinion and the reasons therefor in the order called on by the President, an abstract of which shall be recorded by the Secretary.

17. Any subject selected for experiment by the Club shall be tested by a committee of three members, who shall make it in a fair and impartial manner, and shall report separately all the facts and circumstances which may attend it. Any member may suggest a subject for experiment; and as often as the Club may deem it expedient, a committee of three shall be appointed to suggest experiments.

This being the most important object of the Club, it shall be imperative on the members appointed, to make an experiment, to do so with care and attention, and to embrace in their reports all the circumstances and important features of the experiment, and all such facts developed in its progress as may conduce to accurate conclusions.

We were so much struck with the utility of the plan recommended, that we handed the communication to our old friend, the Rev. Jesse H. Turner, who happened to be sitting with us when it was received. He has been pleased to accompany it with the following remarks:

"A short time since, happening at the office of the Southern Planter, the Editor showed me a manuscript, which he had just received from Albemarle, giving an account of a farmers' club which had just been formed in that county.

To clubs of this kind, I give my most hearty and unqualified approbation. I have no hesitation in saying, that when properly conducted (and it is not an easy thing to conduct them otherwise) they are uniformly the means of doing great good. Nor do I say this from mere theory alone.

"Some time ago, a few of my neighbors with myself, were in the habit of meeting together at each other's houses for the purposes of social intercourse and mutual improvement. We always dined together at the house where the meeting happened to be. On these occasions, we had no President nor other officer; nor were we tied down to any set rules of formality. No subject had been previously agreed upon for discussion; but as farmers we naturally dwelt upon those topics in which we felt the deepest interest and which were most congenial to our taste. One and then another told the projects in which he was engaged—his plan of accomplishing them, and the benefit he expected to result therefrom. In this way each one detailed his mode of manuring, of cropping, of gathering in and disposing of the fruits of the earth. It was at one of these meetings that the plan of our Agricultural Society was formed; and it was at a subsequent one, that it was carried into effect.

"Now I would respectfully propose, that our good old habit be revived in my neighborhood, and that similar meetings take place in every neighborhood throughout the limits of our Society. One day spent in this way, will diffuse an amount of information, and enkindle an amount of zeal, of which we can form no conception at present.

J. H. TURNER.

#### HENRICO AGRICULTURAL FAIR.

The fair and show of the Henrico Agricultural Society was held on the 25th of May, whilst we were in press, and consequently too late for a notice in our last. We were pleased to see that there was no flagging in the zeal heretofore manifested by the good people of the city in the success of their agricultural friends. Indeed, the advantages derived to themselves personally from the improved agriculture of the surrounding country, and the consequently increased supplies of the city, are too manifest to permit them to be indifferent to the fate of this Society.

About two thousand of our most respectable citizens are estimated to have been on the ground, all exhibiting the highest gratification at what they saw and heard. A most sensible and eloquent address was delivered by Mr. James M. Garnett, which was listened to with the most profound attention by the assembled multitude.

Nothing in the exhibition attracted more attention than the extraordinary display of hogs. Time was, when men turned away in disgust from the sight of this rude friend of the human race, (unless, indeed, he made his appearance in the more refined form of a good ham) but such is the improvement in the form and bearing of the modern Berkshire, that we observed many of the gentler sex, who did not disdain to visit some of the noble specimens exhibited at our fair. There was especially a beautiful sow exhibited by Dr. Garnett, a cross of the Berkshire and Byfield, that attracted universal attention, and Parson Turner's sow, VIRGINIA, with her interesting little family, was surrounded by a crowd during the day.

At three o'clock, a large company sat down to a plain but excellent farmer's dinner, where decent mirth and sober hilarity reigned for the balance of the evening. After the withdrawal of the President at an early hour, Mr. Ritchie was called to the head of the table, where, by the exercise of the most gentlemanly urbanity, accompanied with an incessant flow of the most polished wit, he proved that his well known editorial abilities are the least of his accomplishments, and, as was well said on a former occasion, if any doubt his being the NAPOLEON of the press, none can deny him the title of the CHESTERFIELD of the dinner table.

For the Southern Planter.

Jaynesville, Miss., May 27, 1842.

MR. C. T. BOTTS:

Sir,—I am at present a subscriber to no agricultural paper but the Southern Planter, published in Richmond, Virginia, and I consider it worth ten times the price paid for it, and I would urge upon every farmer, whether wealthy or not, the advantage of subscribing to it, and particularly every farmer in Mississippi. But to the subject on which I commenced writing.

In one or two numbers of the Planter you published some experiments on early cutting of wheat. Having some wheat myself, I determined to try the experiment, which I did, cutting it in that state described by Mr. Hannam, in the raw state. But before I give the result of cutting my wheat early, permit me to give the whole process, 1st, of preparing the ground; 2d, preparing the seed, and lastly, that of cutting.

1st. I ploughed my ground intended for planting about the first of September, 1841, with two horses, turning it completely over, then let it stand until the 13th day of October; at this time, I laid it off in lands six and seven feet

wide, the lands being thirty poles, or one hundred and sixty-five yards long, on which I threw a bushel and a half of cotton seed to the land, broadcast, (I am particular in giving the quantity of cotton seed put on the ground, as too much would make it unfit for wheat.)

2d. Preparation of the seed. I dissolved salt in water until it was of sufficient strength to bear an egg; I soaked the wheat in this solution of salt and water, and all the light grains that would float, were taken off; then, while wet, the wheat was sowed at the rate of one bushel to the acre, the wheat and cotton seed ploughed in together with a small shovel, ploughing it very close.

Lastly. Early cutting. I commenced cutting when it was, as near as I could judge, in that state described by Mr. Hannam—that is, the straw, though appearing at a distance green, when examined closely was of a hue fast approximating to yellow, while for a foot upwards from the ground it was quite yellow. I cut my wheat while in its raw state, then tied it in small bundles with single bands—set it up in stooks of eight bundles on the ground, with the butts as far apart as possible, with two bundles put on top for protection. In this way I let it remain a week or ten days. The berry is fine and heavy, weighing from sixty to sixty-six pounds to the bushel.

I am thus particular in giving the result of the above experiment, as I am in hopes that the farmers of South Mississippi may be enabled, by some means, to raise a sufficient quantity of wheat for their own consumption; as yet they have found it to be a very uncertain crop.

I am, sir,

Your obedient servant, &c.

J. C. McLAURIN.

For the Southern Planter.

#### FISH.

*Mr. Editor*.—I have been long an attentive reader of the Planter, and have often thought of endeavoring to contribute something amusing or useful to your numerous readers and correspondents, in return for the many useful and amusing pieces which I have received from them. Your paper abounds with essays upon the best mode of raising horses, cows, sheep and hogs, but no one, I believe, has yet thought of saying a word about raising fish. For the present, I will content myself with relating an experiment upon this subject, which may be amusing if not useful to your readers. In the winter of 1840 and 1841, I had occasion to make an ice pond just below a spring and very near my house, in hopes of using it during the winter; but it was so late before I finished it, that it proved of little avail for that purpose; I then thought of using it as a fish pond, and made it a little deeper and

put ditches all around it, so that it should be fed by none but spring water, that it might be pure, and that it might keep the great floods of water above the spring from coming down in heavy rains to break my dam, which was of dirt. In the spring of the year following, I put a number of roaches and other small fish in the pond as breeders, the former to breed small fish for food for the larger ones, which I intended afterwards to put in—the latter to breed for use; among which were many sun perch and little swamp chubs or horn fish, as some call them. In breeding the roaches and sun perch, I had succeeded most wonderfully before the end of the summer. About the last of August I could bring thousands of those to any part of the pond by throwing in a few crumbs of bread or a little fat bacon. In September or October following I put in the pond seven Carolina chub and two pike, some of them twelve or fourteen inches long, others much smaller, and never saw any thing more of them till the first warm weather this spring. I then had the curiosity to examine the pond, when I saw the two pike and four or five of the chub, all apparently much increased in size. I saw at the same time many small fish about four or five inches long, which I took to be young chub, but they might have been sun perch, of which I have discovered a great many in the pond since. Some time after this, I invited a neighbor and his son (from whose pond I obtained the chub) to come over and see his old subjects. He did so, and we were fortunate enough to see one of the largest of the old chubs and many young ones, as he and his son both thought. In this, however, we might have been mistaken—they may have been sun perch; but I see no reason why the chub may not have multiplied as fast as the sun perch, which are now very numerous, and big enough for the pan. At almost any hour of the day, when a warm spell of weather immediately follows a cold one, the chub may be seen traversing the pond nearly upon the top of the water, causing the small fry to dart for it in every direction, recollecting no doubt the sad havoc which had been made upon them on former occasions; the sun perch, however, if of any size, seems not to regard this little monster of our deep; but holds his place, disregarding and disregarded, by his dangerous neighbor. These sun perch will take a position in the pond near the shore, and remain there for days, and sometimes for weeks, without changing it, or seeming to seek any food, or to eat any thing except it be a small fish-worm, and that only when it is thrown in contact with its mouth. The chub sometimes will take a similar position, and remain for hours at it; but is much more easily frightened away. The sun perch, if you scare him away, will come again in very quick time, but the chub will not return so soon, and will

not stay so long when he does come. I attend my pond every morning, when I am at home, with cups of bread about half as big as my hand. With this I feed the little fish and it seems amply sufficient to keep an abundant supply of them as food for the large ones. The chub may eat bread, and it is said they have been caught with it on a hook; but it is my opinion, they will only eat bread, when they are half starved for fish. At any rate, I have never seen them notice bread; though I have frequently seen them when it was laying at the bottom of the pond plain in their view.

I have frequently heard of whistling up fish from the deep, and leading them up and down the pond by certain calls; but I was always inclined to believe these tales fabulous. I however am now inclined to think from my late experience that the thing is practicable; though I do not pretend to say that I have trained mine to any such whistles or calls yet. If any one of your readers have turned his attention to this subject, a few lines from them, would, I think, be read with pleasure and profit. A fresh dish of fish is a great delicacy, when they are caught in great abundance every day; how much more highly would they be valued, when they can be only had in nearly a putrid condition.

I may be too sanguine, Mr. Editor, but it is clearly my opinion that it will cost no more to raise fish than it does to raise chickens; and that the time is not distant, when I shall be able to get a mess of fresh fish with as little, or perhaps less labor, than those who live on the tide water banks of the James and Potomac rivers.

CHAS. S. JONES.

At the paper mill in this city, they require a constant supply of pure water, which is obtained from a pond supplied by a spring branch. The intelligent manager of the establishment, Mr. Richards, some months since, called our attention to the myriads of fish that swarmed in this pond, and informed us that they were the product of a few that he had placed in it a year or two ago, by way of experiment. He had procured a general assortment of the fish common to our waters, and had found them all to increase and multiply exceedingly. He expressed the conviction that every country gentleman could, with a little expense and less trouble, keep his table constantly supplied with the finest fish, nothing is more common in England than these artificial fish ponds, and we have no doubt they would prove as profitable as convenient.

To any of our friends who desire to try the experiment we would recommend the Potomac white perch, which is different from, and superior to, any other pan fish we ever saw.

For the Southern Planter.

*Mr. Botts*,—I have, for some time past, intended to write a few lines for your paper, in relation to two implements I have used for several years, as I think, with great advantage, in the business of securing hay:—A revolving rake, drawn by a horse, for gathering the hay when ready for shocking, and a very simple contrivance which I will call a slide, for moving the shocks to the place of stacking; and as the season for hay-making is now at hand, possibly some of the readers of your paper may profit by one or both. In the use of these implements there is great saving of time and labor, but in the hay crop a saving of time is the most important, as the gain of even a single day, sometimes might enable the farmer to get his crop in stacks, and thus avoid the loss and injury from exposure to a long rain whilst in shocks.

I shall not undertake to describe the construction of the rake, as I should probably not succeed, and as I hope by the time this reaches you, a friend, to whom I loaned a model with particular directions, as to the dimensions of all the parts, will have sent them to your office as I requested him.\*

I will merely say that the rake head is about ten feet long, with teeth about twenty inches long, nearly two inches square, projecting on each side of the head, or in other words, the teeth are made by pieces of the above size, something more than three feet long, morticed through the head, and flattened like a wedge at the end. It is so constructed, that when one side gets full, you can direct the points of the teeth, so as to strike the ground, cause the rake to turn over, and leave the hay that has been gathered: the teeth on the other side are then ready to operate. You drag across your meadow backwards and forwards, turning over the rake always in the same line of the first turning; and thus you have your hay drawn up in straight rows, by one horse, as soon, I think, as six or eight hands could do it with pitchforks, and if your meadow is tolerably level, as clean as hand rakes would do it.

I am indebted to my friend, Major Hunton, of Fauquier, for the model, and have fully realized the advantages he promised. This rake, I understand, is generally used in his county. I have found it very useful in gleaming a wheat-field.

The slide is a very simple contrivance, being a white-oak sapling, twelve or fourteen feet long, square at the but-end for receiving a clivy, and flattened to the other end, so that it will keep one position in dragging, and thin enough at the end to shove under a shock. Bore an auger

\* We have not yet received the model, but will furnish an engraving of it as soon as it comes to hand. Will Mr. Fontaine be so good as to look to it.—Ed.

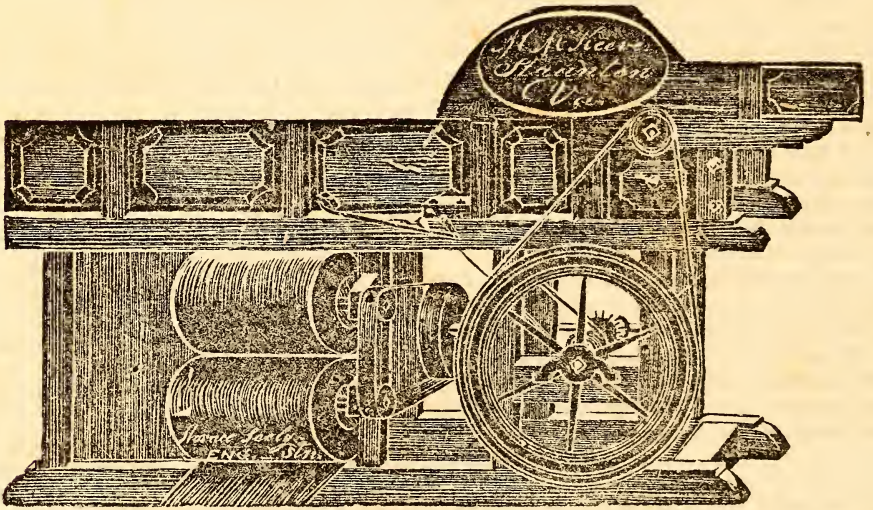
hole through this pole eighteen inches from the clivy, through which you pass a chain with a key to the end. To move a shock of hay run the pole or slide under the middle of the shock; the chain must be drawn over the top of the shock—hooked around the small end of the slide, binding it together top and bottom, and if you do not leave some hay between the pole and the ground, the horse will carry it all away, any where you please. The advantage of this mode

of moving hay is that you get it to the place of stacking, without being loosened or stirred up, and taking it up in compressed flakes, you stack faster and better. I move my straw from my wheat machine to the place of stacking, unless I stack at the spot, in the same way—laying down the slide and building shocks on it, or shocking and running under as with the hay.

E. FONTAINE.

*Beaverdam, Hanover, June 10, 1842.*

### M'KEEVER'S THRESHING MACHINE.



Mr. M. M'Keever, from Staunton, Virginia, is now in our City with a machine for threshing and cleaning wheat and other grain, which comes highly recommended by some of the best farmers in the agricultural county of Augusta.

There is nothing very peculiar about this machine, except the combination of the Fan with the Thresher; a combination, which we have long thought extremely desirable.

The wheat in the straw is fed to the thresher in the usual way, and the wheat and straw are delivered together into a long trough, the bottom of which is an inclined riddle. This riddle is shaken to and fro by the machinery, which serves the double purpose of dropping the grain through the riddle, and passing the straw on down the trough; the grain falls into the riddle of a common fan, where it is again sifted and fanned, and then passed into another fan, where it goes through a similar process. It is finally delivered, as stated, clean and ready for market.

This arrangement undoubtedly saves much handling, as well as the raking necessary to separate the straw from the grain. The machine is by no means complicated, although the two operations being combined, it of course requires a few more bands and wheels than are used in the thresher alone. The additional power required to drive it, we are informed, is hardly perceptible.

The principle of the threshing part of the machine is exactly the same with that of Parker's and numerous others now in use, and the detail is, we think, equal to any of them.

The horse power furnished by Mr. M'Keever differs from a hundred others only in being, apparently, very substantially and neatly made, which, by the bye, may be said of the whole machine.

We expect to see it in operation in a day or two, after which we will be better qualified to speak of its merits.



## PAGE'S SAW-MILL.

At the earnest request of several subscribers we went to examine one of Page's circular saws, that we might the better express our individual opinion of its merits. It has long been a great desideratum to apply the circular saw to cutting large logs. The difference between the friction of the circular and the up and down saw was so apparent as to induce many attempts to substitute the one for the other. Although several of them obtained a short lived reputation, difficulties presented themselves which caused them all to be eventually abandoned, and the general conclusion was, that the object could not be effected. One great difficulty was the supposition, that obtained at that day, that velocity was necessary to the action of a circular saw; this opinion was probably derived from the well-known fact that a circular serrated plate of softer metal, revolving rapidly, will cut a harder one in a state of rest; but this circumstance is now referred to a principle entirely distinct from any connected with the application of a circular saw to timber. This supposed necessary velocity caused the saw to heat and expand in the centre, or *buckle*, as it is technically termed. It was left for the genius of Mr. Page to overcome this difficulty. He effects his object by two means. He runs his saw 300, instead of 1,200, revolutions a minute, and he also relieves it by giving the shaft, upon which it is placed, a horizontal play of an eighth of an inch in the journals. In this simple manner, he avoids all heat and effects the great object of rendering the circular saw subservient to the lumber business. The carriage and apparatus for setting out are very ingenious, and do great credit to Mr. Page's mechanical skill; but we presume the claim to a patent is founded upon the horizontal play of the shaft, upon which alone we imagine it can be sustained.

The saw we examined was driven by steam power, and was capable, we were informed, of cutting ten thousand feet of inch plank a day. We saw no reason to doubt the statement. The quality of the work was equal, if not superior, to any we ever saw.

Over and above the power derived from inferior friction, this saw affords the greatest advantage in the facility with which it may be moved from place to place. As it was much easier to carry Mahomet to the mountain, than to bring the mountain to Mahomet, so is it much easier

to carry this saw to the timber than to bring the timber to the saw. Of all the expenses and trouble in the heavy business of lumber getting, none is so great as the labor of hauling heavy logs to the mill. Nothing, therefore, is more to be desired by the lumberer than a mill that can readily be transported from one lot of logs to another. Mr. Page's can be moved with a team and six hands a mile or two in five or six hours. The heavy timbers and firm bedding required, render such a movement with the old mill impossible. Indeed, it would be hard to foresee or enumerate all the advantages that may flow from this successful attempt to introduce the circular saw in the lumber business.

We have been frequently asked by our agricultural subscribers, if we would advise them to purchase one of these saws, to be driven by horse power, for their own and neighborhood use.

In the first place, we do not hesitate to say, that it requires a good deal of mechanical skill to keep a circular saw in order, and that no man ought to have one of these saws, who would not have work for it sufficient to justify the employment of a mechanic at good wages. It is true, indeed, that any saw will cut much better when well attended, but we think the farmer will get along better with the old negro sawyer and the up and down saw, cutting five or six hundred feet a day, than with the circular saw in the hands of the same individual.

With respect to horse power, we believe that six horses will be required to cut two thousand feet a day with Page's mill, and we know that, for such an extent, horses are the dearest and most indifferent kind of power, in the general. To be sure, it possesses the great advantage we spoke of a little while ago in a superior degree, the facility of being moved; and it may be, that a farmer has horses frequently idle, that might be profitably applied to sawing; but, upon the whole, we imagine, that this mill is chiefly adapted to, and will prove most profitable, when in the hands of a good mechanic, driven by a small moveable steam engine, it is applied to lumber getting as a business.

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For the Southern Planter.

## IMPORTED HOGS.

*Messrs. Editors*,—I wish to record in the Planter the importation of three fine hogs from England. Two of them are a pair of the Sus-

sex breed, selected upon the recommendation of farmers in that country. They are black hogs of good breadth and length—the limbs and head small. They appear too to be very active and capable of *rooting* a little for their living.

The third is a Berkshire—the survivor of a pair purchased at Reading, in the county of Berkshire. The boar of this pair unfortunately died on the passage from England. Since their arrival at my farm, on the Chickahominy, their health has not been very good, which prevented my exhibiting them at the Henrico Agricultural meeting on the 25th instant. Their condition, I am pleased to say, is now improving.

The Sussex sow was imported in pig by a fine boar of the same breed in England, and she has since her arrival at my farm produced a litter of seven pigs—five of which appear to be good ones, and two are inferior, which I will kill. Of the five good ones, I am willing to sell the boar pigs at six dollars each—the sow pigs I prefer to retain, but will dispose of them at the same price to any one particularly anxious to have them; they are now about sixteen weeks old.

Very respectfully,

R. B. HAXALL.

May 28, 1842.

NEW YORK STATE AGRICULTURAL SOCIETY.

We are much indebted to the politeness of Mr. Luther Tucker for a copy of the "Transactions of the New York State Agricultural Society for 1841." The principal portion of the volume consists of essays upon agricultural subjects from eminent agriculturists, both at home and abroad, constituting a fund of information invaluable to the farmer. We shall prove the sincerity of our opinion of the merits of the work by the copious use we shall make of its pages.

For the Southern Planter.

*Pharsalia, Nelson County, June 2, 1842.*

Messrs. Editors,—In the month of May, 1840, the rye crops in this and the adjoining counties, exhibited (for the first time within my recollection) a yellow rust on the blades, that soon invaded the stalk and arrested the filling; some ten days thereafter, the wheat crop followed suit, and proved well nigh a total failure. In June, 1841, the same disease appeared in my wheat crop, and lessened it seventy-five per cent. in quantity and quality. The rye also participated in some degree, but not so extensively, as the year preceding. My oats suffered likewise from the same malady, and my timothy was by no means exempt. Some two or three weeks ago,

I discovered the same scourge on the brier leaves, and within a few days past on my rye blades, from which I have strong fears it will extend to the wheat. Should it be so, all the bright anticipations of relief from that source, will be blasted, at least should that disease generally exist. It is, in my opinion, entirely different from the old fashioned red or black rust, and although its ultimate effects are the same, it is more generally destructive, in so much as it has no respect for localities—invading all kinds of soil, culture and grain, nearly alike. I enclose you several brier leaves, to show the character of the disease. It may, however, be no new thing to yourself or readers.

While on the subject of briars, I have to say that I would be greatly obliged if any of your numerous readers can devise a plan for their destruction. The best and deepest culture with me seems only to invigorate their growth. I am compelled regularly to mow my fields before following them. The August mowing, followed by an immediate deep ploughing, seems to cripple them most, but nothing that I have done has proved effectual. Rest and the use of plaster have made a perfect wilderness of my fields, and constant culture would make them barren.

My soil, (situated immediately at the foot of the Blue Ridge) while very productive, is a spongy, puffy loam, on a stiff adhesive red clay, and more inclined to put forth brier bushes, &c. than any other I have seen, except that of similar character, in the same range of country.

In haste, very truly yours,

WILLIAM MASSIE.

We have exhibited the brier leaves, sent by Mr. Massie, to several of our visitors, who had never noticed the appearance which they present; but Dr. Morriss, of Louisa, informed us that nothing was more common than to see the leaves of the brier about his plantation covered with this species of rust, which he had no doubt was a vegetable fungus, arising from the same causes that produced the rust in wheat, though he had never observed any connexion between the two, except that the same weather produced both.

For the Southern Planter.

AN EXPERIMENT ON STONE FRUIT.

You know, sir, how difficult it is to ripen the nectarine. Being a smooth-skinned fruit, free from the furze, the curculio is fonder of attacking it than the peach, and it is generally eaten up by its worm. As the immature fruit falls, the worm retires into the earth, only to rise again the next spring and renew its ravages upon the young nectarines. I had been so often tanta-

lized in the growth of this beautiful fruit—none of my three trees bringing in many years a single specimen to maturity on my little farm, that I determined to remove one of them to my back yard in the city, which is well paved with brick. The result corresponded to my hopes. In the second spring the tree produced as beautiful nectarines as could be desired. My apricots always succeed in the same situation—and a worm is never seen in them (for ten years)—among them is the *black apricot*, a sound, very pretty and racy fruit, partaking of the character of the plum and the nectarine.

My attention has been drawn to this matter by an article in the last "Farmers' Register," 207, on "The Fruit Curculio," from Hillsboro', North Carolina, April 8th, which states that "a few years since, while at the house of a very intelligent farmer of Lincoln county, I was forcibly struck with the lively and *clean* appearance of his plum trees, which were then loaded with fruit. On inquiring his mode of treatment, he remarked, that the only secret in the case was to set them out by the *road-side*, (as his were) or along some path where the ground *would be trodden down as hard as possible*. It would appear, therefore, that the rationale of the thing is not to be sought in the shell marl or in the clay, but in having such a hard pan of earth around and under the trees, that the insects, which infest them, cannot get a lodging place in the soil."

Yours, with the best wishes for the success of your Planter,  
T. RITCHIE.  
Richmond, June 1, 1842.

P. S.—If your friends desire any cuttings of the black apricot, they are welcome to them. I will send you a specimen of the fruit when it is ripe. The tree grows in my back yard. My nectarine tree was an old tree, much injured by the worm before I removed it—and was stripped down by the wind the fourth year after it was transplanted.  
T. R.

There is no man in this country, who understands, better than Mr. Ritchie, the proper mode of demonstrating to an *editor* the truth of a proposition: we have received a plate of the fruit, rare as it is delicious, the black apricot, to which he refers. In the name of our friends, we return thanks to Mr. Ritchie for his polite offer with respect to the cuttings.

That the fruit is saved from the curculio, if the passage of the worm from the fallen fruit to the ground can be intercepted, is confirmed by the testimony of Mr. John Carter, the celebrated nurseryman in this vicinity. Instead of the trampling or pavement, Mr. Carter subjects them to the devouring jaws of his swine, which have a regular run in his peach orchard.

For the Southern Planter.

## HOGS.

Manchester Va., April 28, 1842.

Mr. Botts,—I did not receive your April number until last night, and I have as yet read but two or three of the pieces in it. The first thing I always read in every paper of the kind, coming into my hands, is the articles on hogs, if it contains any such. I of course greedily devoured Gen. Richardson's communication, and in reply, I have to say, that I and my father have been breeding Berkshire pigs for sale for two years; my stock is now large, and some of them very superior of their kind. It has been my decided conviction, ever since I commenced with the Berkshire, that it was the most beautiful hog in the world; they are certainly the best and most prolific breeders; some of mine having produced me twelve pigs at one year old (too many) and such is the capacity of the sow for giving milk, that she can raise any number of pigs well if she has a *teat* for each; but unless there is one for each, the superfluous number should be taken away, and either destroyed immediately, or put with another sow. I believe that full blood Berkshires can be made to equal any hog at nine and ten months old; but, sir, I am, if I know myself, an honest inquirer after truth; and if we have a better hog among us, the owner need only to convince me of the fact, and I will be his customer; this can only be ascertained by actual experiment. I am anxious that it should be done. I will, therefore, do what my immediate interest would *not* prompt me to do, did I consult it alone,—I will, instead of selling three or four of my best pigs, now two weeks old, agree to feed them until they are ten months old, and then exhibit them at your office, against pigs of the same age of any other breed—the pigs to be named and marked by some judge at the Fair, 25th of May next. If on that day I am beaten by a hog that is handsomer, larger, more thrifty, a smaller consumer, and its family a good breeding family, and it giving evidence that they will breed all the pigs of a litter alike, and of good quality, as do my Berkshires, then will I confess, that it is a superior hog, and pledge myself to breed them exclusively, if the quality of meat equals the Berkshire.

I have written this in great haste on the spur of the moment, as gentlemen are waiting for me to mount and ride to the election; and as I am afraid that if I wait until to-morrow I shall be too late for your May number.

Your friend,  
L. M. BURFOOT.

The above was mislaid and is now inserted at the request of the writer, who is still desirous to test the merits of different breeds by actual experiment.

## VELVET GRASS.

From Captain Meriwether, of Albemarle, we have received a specimen of grass which we understand he values very highly. The species is not uncommon in this neighborhood, and has been known for several years. It was at one time a great favorite, and is still esteemed by many. Nothing can be finer than the appearance it presents; its rich soft surface having procured for it, we presume, the name by which it is known in this region, velvet grass; but it is generally esteemed light and chaffy, and is rarely found now in our meadows, except as a volunteer. We have received a specimen of the same grass from Elizabeth City.

For the Southern Planter.

## THE RUST.

*Big Lick, Roanoke, June 22, 1842.*

Messrs. Editors,—The rust has appeared upon our wheat in this quarter. Up to the period of its appearance, within the last ten days, we were elated with the prospect of an abundant harvest, but the rapid diffusion of this disease over high lands and low grounds, upon rich lands and poor lands, upon thick wheat and thin, and upon that growing upon cloverleys as well as that upon corn lands, has destroyed all hopes of a *full* harvest, and excited serious apprehensions of a disastrous failure.

Is this a disease which care and good management may guard against, or is it the result of causes beyond human control? If rust is, as many learned and scientific men have contended, a species of parasitic fungus, which lives through all seasons on the barbary shrub, willow, coltsfoot, corn marigold, brambles, &c. &c. and which, in warm, humid weather, is excited into active life and flourishes with such astonishing luxuriance that it affects thousands of acres in a few days, it may be guarded against by the careful extirpation of the trees and weeds, which nourish and shelter it.

If it is, as others suppose, a disease peculiarly incident to light lands, and produced by the roots penetrating to a poor subsoil, affording meagre nourishment to the plants, and thus receiving a check, which when followed suddenly by warm, humid weather creates the disease, the evil may be mitigated, if not entirely corrected, by treading or otherwise giving compactness to the soil when the crop is sown. Experiments upon an extensive scale in Scotland and England have favored this theory, and many of the farmers of those countries have adopted a system of trampling with cattle, under a conviction that it is an effectual preventive of this mildew.

If, as others suggest, the disease proceeds from

minute fungi attached to the grain sown, and which being absorbed by its roots whilst germinating, is propelled like the *uredo fetida* by the circulating sap, throughout the plant, and affects the maturation of the grain, according as circumstances are favorable or otherwise to the growth and extension of the fungi, we may avoid the disease probably by steeping the seed in lime-water, as is recommended for smut (*uredo sigetum*.)

But if, on the contrary, it results from plethora, induced by excessive vegetation, then I am fearful it is an evil beyond remedy.

That the last is the true character of the disease I am convinced, though I express the opinion with some diffidence, as I know it is opposed to the views of many agricultural writers of distinguished reputation.

Rust never appears until the wheat has attained its full growth, and when there is nothing left for the leaves and stem to perform, but the elaboration of the juices for perfecting the seed. When plants have reached this point every physiologist knows that they require no further extraneous aid in the formation of their seed. The ovary has performed its office, fructification has taken place, and the gradual concentration of the juices of the leaves, stem and roots in the seed, producing the death of the former, is all that is required. Before attaining this state, excessive vegetation only produces excessive growth; but when the plant is fully developed and nothing more required for the maturation of the seed but a slow, gradual and regular supply of dully elaborated sap, if there should then happen a warm, damp spell of weather, a succession of sun and showers, an inordinate flow of sap is at once produced, which destroys the consistency which is then so necessary to the grain, and you distend the vessels to such a degree, that they burst of their repletion and exude upon the surface. Should this occur when the grain is in the milk state it is destructive of the grain, which perishes for the want of proper nourishment. When the wheat is thus struck early, and the grain destroyed, it is usually attributed to the *black* in contra distinction to *red rust*, by inaccurate observers, who are not aware, that all rust is the same, resulting from the same causes, and that what is called black rust was at first *white*, then *red*, *brown*, and finally *black*, from the action of causes familiar to every chymist. When the grain has reached the dough state, before the disease appears, the crop is oftentimes very slightly affected, and the *rust*, when the wheat is cut, from not having been so long exposed to solar and atmospheric influences, is *red*. Hence the popular remark, that "red rust doesn't injure wheat like black rust."

I have heretofore supposed that the exudation proceeded from the bursting of the minute surface vessels, whose rupture not being visible to

the naked eye, had discredited the theory, which taught the existence of what couldn't be seen. But in conversation a few days since with a sensible and observing farmer of a neighboring county, he told me that the ruptures were distinctly visible, when the rust was removed with care. On the same day he illustrated the correctness of his statement by producing several stalks of rusted wheat, upon which longitudinal ruptures were very distinct under every blotch of rust examined. This fact corroborates the theory here maintained, so conclusively, as scarce to leave a loop to hang a doubt on. It is possible, however, that there may be some mode of resolving what seems to me to settle this long mooted controversy. In confirmation I will add that wheat rarely, if ever, rusts when growing under a tree. The draught upon the soil, which is made by the tree, prevents that excess of nutriment, which would otherwise be given to the plants. Can this be satisfactorily accounted for upon any other hypothesis?

If, then, I am right, is it not an evil without remedy—dependent upon the seasons, and of course, beyond human control? Some have suggested as a mode of avoiding the damp, sultry weather of June and July, which all admit have an important agency in developing the disease, to sow early, or substitute the May wheat, which matures much sooner than the kinds in general use. But I think it is better "we should patiently bear the ills we have than fly to others we know not of." If we sow early we are almost certain of suffering by the ravages of the Hessian fly, and if we substitute the May wheat, we at once sacrifice a prolific wheat for one which yields indifferently, and besides we incur the hazard of having our crop killed by frost.

Such, Mr. Editor, are the views which I entertain upon this subject, more condensed, perhaps than is consistent with perspicuity, but "deformed, half formed and unfinished," as it may be, I confide it to your discretion to be ushered into the world or not as to you may seem fit. It is the first time the current of my inkpot has been directed to your little reservoir and I should prefer your diverting it, unless you find it clear and healthful.

With the best wishes for your success,  
W. M. PEYTON.

We hope that the fountain of our correspondent's inkpot will prove a constant and steady feeder to the reservoir of the Planter. We know of no stream whose course we should be more proud to divert into our channel.

For the Southern Planter.

*Mr. Editor*,—The question has very frequently been asked, since the arrival of the

June number of the Southern Planter, why it came out without an index as formerly. Please solve the difficulty.

And also, respecting Mr. H. Milton Hart's remedy for stopping the effusion of blood, on page 136, June number. We beg to be informed by what means cobweb can be bound to the roof of a horse's mouth?

Being friendly to the Planter and having exerted myself much to promote its interest,

I am your obedient servant,

A SUBSCRIBER.

Gloucester County, June 5, 1842.

The press of original agricultural matter coming in late in the month, excluded the miscellany, the markets and table of contents.

We published the cobweb recipe as an extract, without knowing any thing of its virtues. We see no difficulty in its application to the mouth of a horse. The simple application may cause the blood to coagulate and it may adhere without a bandage, although if one is necessary, there would be no difficulty in applying it by passing it through the mouth and securing it on the top of the nose; for in bleeding a horse in the mouth, care must always be taken to make the incision in one of the bars below the corner of the mouth. Of course, a wad would be placed between the cobweb and the bandage at least as thick as the length of the teeth. We have, by the exercise of a little ingenuity, applied many more difficult bandages than this.

For the Southern Planter.

SASSAFRAS.

*Mr. Editor*,—In looking over some of the volumes of the Farmers' Register, I saw in the seventh number, first volume, a communication from Skriniesky, of Buckingham, stating that his plan for destroying sassafras bushes (that abominable pest to many farmers) was simply to cut down or grub up the sassafras in the winter, and turn in a flock of sheep on the land in the spring and keep them there during the spring and summer of that and the ensuing year.

One of my fields is rendered almost useless for small grain in many parts, owing to the sassafras. The same field is thickly set in clover; that being an early growth in the spring, will not the sheep neglect to browse the sassafras, and destroy the clover, and thus the much desired effect be defeated? Will Skriniesky, or any other gentleman, be so good as to give the desired information through the Southern Planter?

AN INQUIRER.

Powhatan Co. June 25, 1842.

## RECIPES

We are anxious to make the Planter a record of valuable household recipes, conceiving that there would be no department of the paper more useful than this, if well conducted, and believing that no part of America affords a better source for such a collection, than might be obtained from the housewives of Virginia. We frequently extract from other papers recipes of which we know nothing; but for any that appears in editorial form, we are ready to vouch. Since the publication of the recipe for PICKLE VINEGAR, p. 124, we have had an opportunity of testing its value by an experiment made upon the pickle itself, and if our readers can place any confidence in our taste, we advise them not to omit a trial of this mode of making pickles. From the same source we also obtained the following unrivalled recipe for making

## PLUM PUDDING.

Beat eight eggs very light, add one pint of milk, one quart of flour, and three quarters of a pound of butter after it has creamed; cut and stone your raisins, rub them in flour and mix them in the batter with half a nutmeg, wet your cloth, flour it, tie it up tight, and shake it frequently to prevent the plums from settling at the bottom; put your pudding in when the water is boiling; have a plenty of water; two hours will boil it well. The sauce used is made of sugar, wine and nutmeg.

## BARLEY.

Loudoun Co., Va., June 27, 1842.

To the Editor of the Southern Planter:

Dear Sir,—Propositions have been made to some of the Loudoun farmers to undertake the growing of *barley* upon our well improved lands, and we would cheerfully do so if we knew any thing about its management, but not being acquainted with the proper treatment of the crop, we are compelled to ask information upon the subject, and most earnestly request that some correspondent of your valuable paper (unless an *editorial* will do as well) will furnish through your columns a statement showing the kind of soil best suited to its growth—the preparation necessary—the time of sowing—the quantity to be sown to the acre—the time and mode of securing the crop—the manner in which it can best be separated from the straw—to what useful purpose the *straw* can be applied after the separation, and the comparative value of the *wheat* and *barley* crop to the grower—in short, a concise treatise upon the

cultivation and advantages of a *barley* crop is urgently desired by many Loudoun farmers, and particularly by a

LOUDOUN SUBSCRIBER.

P. S.—I am sorry to inform you that the *rust* is playing the mischief with our wheat.

We will try and furnish the information desired in the August number, and will be much obliged to any of our readers for their assistance.

For the Southern Planter.

MAY WHEAT.

Dear Sir,—Having heard that the early May wheat was successfully cultivated upon the low lands on James River, and wishing to know why it is preferred to other wheat upon such lands, I write to ask the favor of you to make the inquiry through the July number of the Planter, so that we who have such lands may avail ourselves of it; likewise my thanks will be due to any one who will be so good as to give the information asked for.

Respectfully, yours,

QUINTUS BARBOUR.

June, 1842.

## OKRA COTTON.

We are indebted to that devoted friend of agriculture, Mr. James M. Garnett, for a beautiful specimen of Okra cotton. We see this species is much lauded at the South for its great growth, early maturity, and fine staple. Mr. Garnett also left with us a parcel of seed for general distribution, a few of which still remain on hand.

## PLASTER.

The following is an extract from a letter from a subscriber:

“Will you have the kindness to inform me, through the Planter, whether burning may be substituted for grinding in preparing plaster to sow? If so, what quantity of burned plaster should be sown to the acre? and oblige  
J. L. J.”

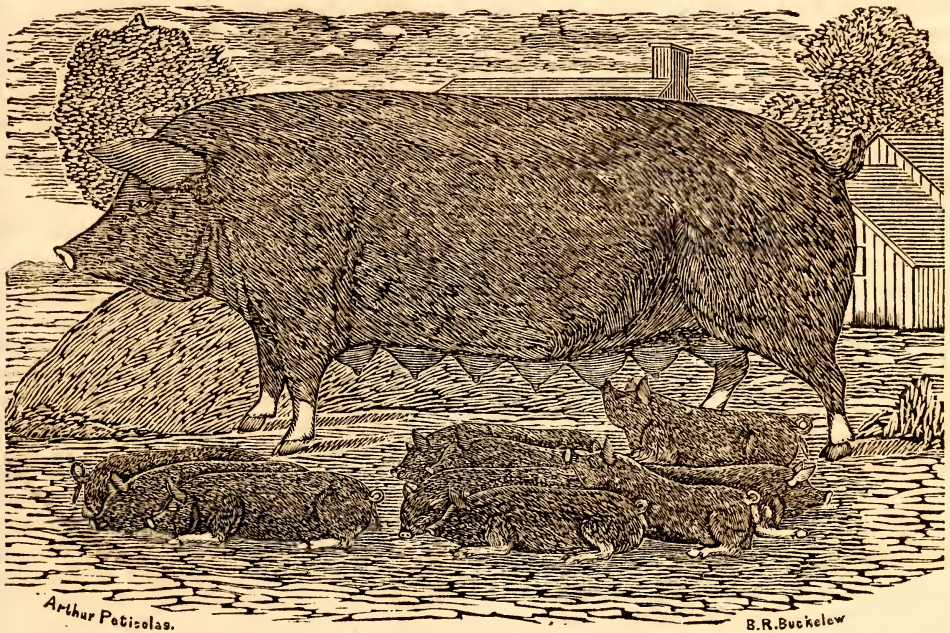
Plaster of Paris is in chemical language a hydrate, that is, it has a peculiar attraction for water, with which it forms a chemical combination. When subjected to a strong heat, this combination is dissolved, the water first boils, and is finally driven off in the form of vapor, and the sulphate of lime falls into an impalpable powder. In this state it is called *boiled plaster*, and is used in the arts, especially by the moulder of busts and figures. The affinity for water

continues so great, that the plaster, like lime, combines with it, or *sets*, as it is termed, whenever it is exposed to moisture, and so again becomes a hydrate. The minute division of the particles thus obtained in the impalpable pow-

der, would no doubt render the plaster very fit for agricultural purposes, were it not, that the first rain would run it together in a substantial mortar.

For the Southern Planter.

### BERKSHIRE SOW VIRGINIA.



The main figure in the above engraving, is my Berkshire sow, Virginia, which took the first premium "for the best improved sow and pigs" at the late exhibition of our Agricultural Society. Virginia was purchased from Mr. A. B. Allen, a celebrated breeder of hogs and cattle at Buffalo, N. Y. She was sired by the famous imported boar, Reading, and out of one of Mr. Allen's "best Shaker sows." She was what the northern breeders call a "reserved pig"—that is, one which they intend to keep for their own use, and on which they set an extra price. An unusually high value, it seems, was placed on Virginia; for to get *her*, my nephew who bought her for me, had to pay one hundred dollars *there*, whereas he got another male hog, nearly her size for thirty. *T*'s sum, together with the additional expenses of transportation, made her cost me, when delivered, not far short of one hundred and twenty dollars.

This may seem at first sight, a high price for

any one hog. But let us see how the matter stands. I received her on the 22d May, 1841, then (as I suppose) about eight months old. On the 22d July ensuing, she produced five pigs, four boars and one sow. Three of the boars I readily sold when eight weeks old, at ten dollars apiece. One boar and the sow I kept for my own use. I afterwards sold the boar when eight months old for fifty-five dollars, refusing at the same time fifty dollars, for the sow.

On the first day of March last, Virginia produced her second litter of pigs, ten in number, as represented in the engraving. Four of these I sold, when eight weeks old, at ten dollars apiece; and the balance, I could have sold ten times over at the same price, but chose to keep them.

The reader has now been introduced to Madame Virginia, but as I wish him also to become acquainted with her whole family, as far as they remain with me, I will now inform him,

that one of her first progeny, which does not appear in the engraving, but actually appears at my piggery, is called Sultana, a name *feminised* from her worthy *English* sire, Sultan. I am not fond, it is true of giving names from *living* characters; yet the name of Henry Clay, of Kentucky, has become so illustrious (no politics) that I have ventured to give his name to the fine pig which appears to the left; and I hope and confidently believe, that this great man will never disgrace my pig, and judging from present appearances, the pig will never disgrace him. The next, to the right, is another remarkably fine pig, which from her great beauty, I call Kate Nickleby—then in succession, appear three other fine pigs, called respectively Flora McIver, Rose Bradwardine and Jennie Deans, (of these, my wife has chosen Jennie for her pig) and the little one trying to get his breakfast, is the runt, which from his diminutive size, I call Tom Thumb. Tom however, is steadily and constantly gaining on the others, so that in the end, I shall not be surprised if he becomes the biggest hog. In that event I shall change his name to something else indicating his great and rapid growth. The other four pigs, are gone to their respective homes, and I hope and request that their proprietors will give them names worthy of them.

In view of the above, then the case as to Virginia stands thus. She cost me say \$120. But she has brought me, in the short space of less than twelve months, for four of her first litter, \$85, and for four of her second litter \$40, amounting to \$125, and if I had taken the sum offered for Sultana, it would have been \$175. But I have actually pocketed \$125 and have Virginia, Sultana, Henry Clay, Kate Nickleby, Flora McIver, Rose Bradwardine and Tom Thumb, as so much stock in trade. In addition to this, I will state, that poor Sultana has transgressed just as poor frail Effic Deans did, so that in two or three weeks I expect she will "increase her family," and if all things then turn out well I shall again have other Berkshires to give fanciful names to.

Now I state the above, not as an advertisement, (for except Henry Clay) I would not sell a pig that I own. Five gentlemen have also already requested me to record their names as applicants each for one pig of Virginia's next litter. But I do state (as an advertisement if you chose) that next spring, I expect to have thirty or forty for sale, some of which I hope will be very fine.

J. H. TURNER.

P. S.—Since writing the above, I understand that one of the pigs sold, has the name of Prince Albert—a very good name, except it smacks too much of royalty, for a plain republican like me.

J. H. T.

#### EDGE TOOLS.

Nothing pleased us more at the late exhibition of the Henrico Agricultural Society than the display of edge tools from the Factory of the Messrs. Barns, of this city. They were of every variety, and would have done credit to any establishment in America. We have had occasion before to allude to a similar exhibition on the part of Mr. Hitchcock. With two such establishments in our native State, will her citizens hereafter go out of it for an axe, a chisel, or an auger? Whatever may be thought of the policy of governmental interference, we would venture to suggest to the friends of domestic industry the propriety of giving the preference always to the *home* product, especially, when it is offered as cheap as the foreign article.

#### HARVESTING.

To the Editor of the Southern Planter.

*My Dear Sir,*—Has it ever occurred to you to examine accurately what proportion of wheat grown upon an acre of land is actually delivered in the market? I had been induced to think the waste was much greater than was generally supposed, and to satisfy myself I selected a yard square in four forty acre lots; I took especial care that the part selected should not be more than an average, and I then carefully cut with my penknife every stalk upon the yard square. The grain was all gotten out by hand, and carefully measured. The produce of each lot, from which the wheat was harvested in the usual manner, was sold separately, and I delivered in market just about one-third of what should have been the product, reckoning from the product of the square yard. Now is it possible that we lost two-thirds of our wheat crop? These experiments were conducted with great care and accuracy, and I myself was astonished at the result. Will some of your readers repeat them and report the result? I am sure they will not make the loss less than I think I have ascertained it to be. If it can be ascertained to be so great as I imagine it, the next thing will be to consider wherein it can be remedied; for it is certain that to save two-thirds of our crop would justify a very great increase of expense in harvesting.

Your obedient servant,

AN OBSERVER.

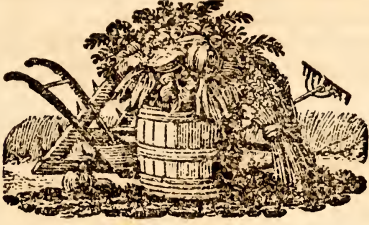
#### HOW TO KEEP ICE.

We take, at sunrise, from the ice-house, as much ice as will probably be wanted through the day, and cover it up in some saw-dust placed in a barrel, which sits in the dairy-house.



At night, the size of any given lump is scarce perceptibly diminished. It is a perfect charm. Away with your half ton of lumber, charcoal and zinc, with which you are humbugged, under the name of "refrigerator."

*Kentucky Farmer.*



We are happy in being enabled to announce to the friends of the **PLANTER**, that we have effected an arrangement, whereby Mr. L. M. BURFOOT, of Chesterfield, becomes joint owner and Editor of this paper. Mr. Burfoot is a gentleman of fine abilities, devoted to agriculture, to which he has been trained from his youth, and is thoroughly versed in its principles. The fact that he is, and will continue to be, engaged in the practical operation of farming and experimenting, whereby new theories will constantly be tested, is calculated to add much interest to the columns of the **Planter**.

The Editors are determined, that, as far as their exertions can effect it, the **PLANTER** shall have no superior. To further this object, they propose to occupy the month of September in an agricultural tour to the North, where extensive arrangements will be made to improve even the present superior mechanical execution of the work. Neither pains nor expense will be spared to render the paper such an one as the South is entitled to have, and, as they feel assured, she will continue to support.

In the course of their travels, they will have the best possible opportunities of seeing and comparing all varieties of stock, agricultural implements, &c.; they, therefore, offer their services to their friends of the South in attending to any orders, for the purchase of such articles, that they may choose to forward them before they start.

✍ We have taken the liberty of enclosing to each of our subscribers a form of subscription list, in the confident expectation that there is not one from whom we shall not receive some return. All that we ask is, that he will hand

the list around in his neighborhood, and enclose it to us when he has obtained as many names as he can procure. The subscribers can afterwards, at any time within sixty days, enclose us the price of subscription, which any post-master will frank.

Will not the great agricultural State of Virginia sustain a paper devoted to its interests? New York, ever alive to her great interest, supports four, giving to each four times the number of subscribers that we require.

We have before intimated that the present income of the paper barely paid its expenses: we are happy to say, that, since that announcement, our subscription list has been considerably extended; but we are receiving *tens* where we ought to have *hundreds*, and where we believe thousands may be obtained by a little exertion. With the most disinterested sincerity, we declare our solemn conviction, that the prosperity of Virginia is intimately connected with the existence of a cheap agricultural paper, within her limits. We hope, therefore, not only for our own sakes, but for the sake of the "Old Dominion," that our subscribers, one and all, will take a little pride and pleasure in returning our lists well filled. We assure them that their own interests will be advanced by their exertions, for an increased patronage will enable us greatly to improve the paper.

P. S.—At the earnest request of many we have determined to permit a subscription to begin either with the January or the July number, at the option of the subscriber. Where no particular direction is given, we shall presume that it is intended that the subscription shall commence with the second volume, and the back numbers, beginning with January, 1842, will be sent.

Can any one inform us of the whereabouts of a certain Mr. H. F. Hurlbert, who has been collecting subscriptions for the **Planter**, which he has failed to pay over. We are afraid some *accident* has happened to the young man.

#### EDITORIAL NOTICES.

Although very grateful, it is seldom that we have room to return our thanks for the many flattering notices of the **Planter** in our exchanges—but the last "State Register" from Port Tobacco, Maryland, brought with it so complimentary a review of the June number, coupled

with so kind an offer of an agency for us, that we would be wanting in common politeness if we failed to express our obligations for the kindness of the Editor.

Will our exchanges do us the favor to notice the addition to our editorial department, and the change of terms, by which a subscriber is permitted to commence with the January or July number, at his option.

#### Richmond Markets, June 30, 1842.

Sales yesterday at the Exchange of \$2,000 of six per cent. stock of the State of Virginia, at \$90 per hundred.

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

**COTTON**—8 a 9 cents per lb.

**CATTLE**—For cattle on the hoof, from \$5 to \$6, are the general prices. Mutton—There is great variation in the quality; indifferent sheep bring only from \$1,25 to \$1,50, while the finer qualities bring from that to \$3 per head.

**FEATHERS**—38 a 40 cents per lb. for live geese.

**CORN**—55 a 60 cents, and very little coming to market.

**WHEAT**—No sales, and none received. Crops in some sections represented as much injured by rust, in others very little.

**HIDES**—Green 5 cents per lb.; Spanish 13 a 16.

**IRON**—Pig, \$25 to \$35, Swedes, \$100 per ton; English, \$85 to 90; Tredegar, (Richmond manufactory,) \$90; Up Country bar, \$75 to \$80 per ton.

**LUMBER**—Clear white pine \$33; refuse clear \$25; merchantable \$15; refuse last sale at \$11 a \$12 per M.

**LIME**—Thomaston selling from wharf at \$1 to \$1 12 1-2—none arriving. Washington City \$1.

**MEAL**—70 cents per bushel.

**PROVISION**—Bacon—Smithfield and city cured 6 cts.; extra hams 8 a 9 cts.; Western sides 4 a 4 1-2 cts.; shoulders 3 a 3 1-2 cents. Lard is scarce and inactive at 7 a 7 1-2 cents.

**PLASTER**—On the Basin bank \$4 50; at the wharf \$3, by the cargo.

**TOBACCO**—On receipt of advices per steamer Britannia, the market opened rather heavily at a small decline on previous rates, but at the close of the day's sales, we thought prices about the same. We, therefore, continue our quotations: \$2 50 a \$3 for common lugs; good refused and common leaf \$3 25 to \$4; middling leaf \$4 50 to \$5; good \$5 50 to \$6; fine leaf from \$6 to \$7 50, occasionally a fine manufacturing hoghead sells from \$8 to \$9.

#### FREIGHTS.

**NEW YORK**—Flour, per bbl. 20 cts.—very little going. Coal, 5 cents per bushel. Tobacco, \$2 25 per hhd.; boxes 20 cts.; kegs 25 cts.

**PHILADELPHIA**—Flour, none going. Tobacco, \$2 25 per hhd.; 20 cts. for boxes; 25 cts. for kegs, none going. Coal, 6 cents per bushel, Richmond measure.

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

#### EXCHANGE.

**FOREIGN**—On London, last sale at 9 a 9 1-2 per cent. premium.

**DOMESTIC**—New York Checks, 2 1-2 a 3 prem.

Philadelphia, 2 1-2 a 3 premium.

Baltimore, 2 1-2 a 3 premium.

North Carolina Bank Notes, par.

South Carolina, 1 premium.

Savannah, 1 discount.

Augusta, 1 discount.

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