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.*

FRANK: G. RUFFIN, Editor and Proprietor. T. BAILIE, Publisher.

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THE CROPS, PRICES, ETC.

To the Editor of the New York Herald:

I am induced, by your article of the 21st inst., on the crops, prices, &c., and by other articles of the same sort going the rounds of the press, and which I deem of the most mischievous tendency, not only to the agricultural interests but to the whole country, to write again on this subject. You may remember, that in reply to your circular of last year, I addressed you a letter, in which I endeavored to show, by facts and well established principles of political economy, that the general estimate of future prices at that time prevailing, was entirely unfounded. I predicted that prices would rise permanently, and closed the letter with the following caution to the press:

"In conclusion, I have but a word to say: if the efforts of the press to lower prices, now so general, should prove successful, and large quantities of corn and other breadstuffs be exported to foreign countries, we may yet rue our folly, when the pressing necessities of our own country shall demand supplies, which can be had neither at home nor abroad." You will do me the justice to say that my predictions were literally fulfilled, and that the country would have been better off if my caution had been heeded.

I beg leave to call your attention again to the principles embraced in that letter. They are not new, though, unfortunately, they are not familiar to the general mind, yet they are worthy of the profound consideration of the press and of the country.

You estimate the wheat crop just reaped at one hundred and sixty-eight and a half millions of bushels, against one hundred millions of bushels, the crop of 1849, as reported by the census; and the average price of this year at $1 25 a bushel. Now, it is obvious, that these estimates must be merely conjectural. The crop has not been threshed or measured in any one state or neighborhood, and all that is known in regard to it is, that the grain is of good quality, and that the yield from the straw is satisfactory. That the quantity produced is, in many sections, less than usual, is certain, and we shall have great reason to congratulate ourselves if the crop should prove an average one. That the crop in an agricultural country should keep pace with the population in its natural increase, would seem to be almost a matter of course, though, so far as the wheat crop is concerned, it is believed not to be the case in our country. The wheat-producing zone in this country is almost as limited as that of cotton, and in some of the principal wheat producing States the population is rapidly increasing in cities and towns, where wheat is consumed, and diminishing in the country, where it is produced. I incline to the opinion, therefore, that the estimate of the Cincinnati Price Current of one hundred and fourteen millions of bushels, is a much nearer approximation to the truth than your estimate, although it falls below the ratio of the increase of population. Examine the census of your own State, just completed, and you will find this opinion fully justified. The city of New York has a population of over three quarters of a million. Think of a standing army of seven hundred and fifty thousand consumers, to say nothing of the vast number of non-producers in your other cities and towns! I have before me a table showing the quantity of wheat and flour arriving at tide-water through the New York canals during the last season, being (with the wheat turned into flour) equal to 1,954,213 barrels—which, allowing a quarter of wheat to each inhabitant (the English estimate) would be little more than sufficient for twice the population of the city—and this embraced the larger part of the surplus crop of the State of New York and of the

West. The consumption of wheat in our country has increased immensely. It has become the bread of the masses. For three years of my boyhood, when at school in New Jersey, I do not remember to have seen wheat bread. Rye was the only bread that was used, by the boys at least. Now, it would excite a rebellion. And I well remember when in most Southern families wheat bread was only an occasional luxury; now it is consumed universally by the whites, and to a considerable extent by the negroes. Strange as it may seem, I think it not improbable that the surplus of wheat and flour for exportation will be found in future to decrease with the increase of population. The effective demand for home consumption is rapidly increasing with the rise of wages, and the fall of money. It is obvious that a laborer getting $1 50 a day, can better afford 10 cts. for his daily bread than he could 5 cts. if his wages were 75 cts. Clothing and most of the other necessaries and comforts of life are cheapened by continual improvements in machinery and the extensive use of steam power, so that the fall in the value of money, is, in regard to most of the neeessaries of life, counteracted, leaving the ability of the laborer to consume wheat bread and meat, though at high prices, much greater than it was before this rise of wages and fall of money. The earth has never produced, and probably never will produce, half enough wheat for all its inhabitants, and the demand daily becoming more effective, is continually increasing throughout the world. Even in our own country, conceding that the crop is one hundred and twenty millions of bushels over and above seed, which is a most liberal estimate, we should have less than five bushels to each inhabitant, if we were not to export a bushel. But for Indian corn and wheat grown by slave labor, we should be more liable to famine here than in the old countries of Europe. In the non-slaveholding States there is no class of agricultural laborers, no cottagers, or serfs *adscripti glebæ*. All are striving to elevate their condition; the laborer of to-day becomes a proprietor tomorrow, and where all think they may live by their wits, few are willing to labor with their hands. Hence the difficulty of procuring a continuous supply of labor has rendered farming in the West an exceedingly irksome and precarious business. Agriculture in this country can only be successfully prosecuted on the patriarchal system, either by slave labor or by families of whites. There can be no greater delusion than to suppose it possible for the existing agricultural population materially to increase the production of wheat by extending the surface under cultivation. It is one of those errors so extensively prevailing that it deserves to be included in a new edition of Bentham's "book of fallacies." Every practical farmer will tell you that we cultivate in this country too much land, and that we would make more if we cultivated less with the same force. The truth is, the farmers for years have been under a continual strain to produce as much as possible, and the effort is already overdone, and no rise of prices without bringing more labor and capital into the business, can permanently increase the crops A farmer may "rip the goose that lays the golden egg" and by breaking up his rotation and cultivating all the richest spots of his farm, increase his crop for one year, but his future loss will be greater than his present gain. Our farmers are now too enlightened to adopt this suicidal policy. If making wheat was so much more profitable than other occupations, do you not suppose that more capital and labor would at once be devoted to it? What indications have we that such is the fact? The census of New York demonstrates the reverse, so I have no doubt would that of Pennsylvania and probably that of Ohio if now taken. It is true that in Virginia and other slaveholding grain producing States, emigration has ceased, and the natural increase of the population is devoted principally to producing grain, and here proprietors who inherited their property or purchased it years ago are realising large profits on their capitals as formerly estimated. But let any one start a new enterprise, purchasing land, slaves, mules, &c., at present prices, and he will soon find that at less than $2.00 a bushel for wheat he cannot realize the ordinary rate of profit on his capital and labor.

Two dollars for wheat in the present state of the world is *a very low price*, and notwithstanding your prediction, I entertain no doubt that the average price of wheat in New York will be from this time to the next harvest over $2 a bushel and very probably over $2,50 Please take a note of this and test it by the result.

This opinion is not expressed rashly or at random, but is founded on a deliberate consideration of all the circumstances of the case To some of these circumstances I have alluded in this paper. I proceed to notice more particularly others of which mention was made in my former letter.

1st. The increase in the cost of production or in other words the fall in the value

money. This subject is very clearly illustrated in McCulloch's political economy, to which I beg leave to refer you. He asks why a pound of gold is worth fifteen times as much as a pound of silver, and answers, because it takes about fifteen times as much labor to get a pound of gold as one of silver; but if a new gold mine were discovered from which a pound of gold could be procured with as little labor as is now a pound of silver, in a short time gold would be worth no more than silver. This state of things seemed about to be realized by the discovery of the mines of California and Australia, so that Congress had to debase our silver coins to keep them in the country. The silver mines are now yielding so largely as probably to restore, in a short time, the equilibrium between the metals which tends still further to disturb other exchangeable values. The precise amount of the depreciation of the precious metals since the opening of the gold mines of California and Australia it is difficult to estimate; but that it has been very great none can doubt and is probably little short of one half the estimated values of those metals. It is a matter of history that at the end of a century from the discovery of the Spanish mines in America prices had advanced permanently four hundred per cent—or, in other words, the precious metals had declined in value to that extent. If such was the effect of those mines, so comparatively unimportant, what must be the effect, at no distant day, of the mines of the precious metals now in operation in the world? Even in Adam Smith's time so great had been the fall of money that the question was gravely discussed whether some other measure of value than the precious metals should not be adopted. At that time the annual product of the mines of the world was estimated at ten millions of pounds sterling, (vide Edinburgh Encyclopedia, art. Bullion,) now the annual product is estimated at two hundred millions of dollars, and making the most liberal allowance of what is consumed in the arts, we have much more than a hundred millions of dollars added to the coin of the world annually. Besides this money facilities are wonderfully increased by banks and bills of exchange, railroads, expresses, telegraphs, &c. What is to be the permanently progressive effect of all these agencies on prices time only can determine. The most superficial must be satisfied that this effect will be very great.

I am not discussing this as a question involving desirable results, but merely as one of political economy, having just now a very important bearing on the interest of agriculture.

The evils arising from the fall in the value of salaries, annuities, government securities, and all fixed incomes are much to be deplored, but these it is not my province to discuss.

2d. The war in Europe. In the very paper in which you estimated the average price of wheat during the year at $1.25 a bushel, you published the address of the Emperor of France to the Legislative Assembly and other intelligence from Europe, that gives the assurance that there are not only no hopes of peace but that the war was about to spread over the continent. In view of all these things can you be in earnest in making so low an estimate of the price of wheat during the year? I need not enlarge on the necessary effects of the war in disturbing the labors of agriculture in the great grain producing portion of Europe; the interruption of commerce in the Baltic and the Euxine, the enormous consumption by large standing armies, and the wanton wastes and ravages of war. These considerations are obvious to the commonest comprehension. But it seems strange that they have not only been overlooked but that no weight has been given to facts of past history in a journal usually distinguished for learning and ability. I have before me the annual average prices of wheat in Great Britain, according to the Parliamentary returns, from 1800 to 1830, and it will be found that the average for the first sixteen years was more than equal to the present price of wheat in Liverpool. During this time the ports were open to all the world, the precious metals were not in over supply, and, although the Bank of England had suspended cash payments, the notes did not for some years depreciate more than three per cent., and in the two first years of the series the price of wheat was 110 shillings and 5 pence and 115 shillings 11 pence, respectively, and in 1812 was as high as 122 shillings and 8 pence a quarter. The war in Europe was the chief cause of the high prices, for, during that period, though the crops were occasionally short they were frequently good. Why should not the present war, taken in connection with the fall of money, have now a still greater effect? Yet we are told by the Herald that the average price of the year is to be less than 50 shillings a quarter!

The course of the press, if it may have any effect at all must produce nothing but mischief to every interest in our country. Consumers in the cities cannot be permanently benefitted. Wheat may fall under a temporary glut, to the great injury of some farmers, but flour will not be affected, or if it should decline

temporarily our crops will go abroad at comparatively low prices to feed the belligerents, and when our own stocks are reduced we shall be patriotic enough to purchase Canadian flour in the Spring, under the reciproeity treaty, at almost famine priees to feed our own population. Such is the praetical wisdom of a sensible people.

To the farmers I would say, be firm; you have the matter in your own hands. There are two parties to every contract of sale—the seller as well as the buyer. Above all things keep clear of the Baltimore Corn Exehange until after the close of September.

Yours, very respectfully,

WILLOUGHBY NEWTON.

Westmoreland Co., Va., July 28th, '55.

From the Michigan Farmer.

COLIC IN HORSES.

The eauses of colic in horses appear to be quite numerous. The drinking of cold water when the horse is warm—especially hard water; exposure to cold after severe labor, full feeding on green forage after being aceustomed to dry food. Indigestion, Dr. Dadd eonsiders the principal cause; but the above eauses will produce impaired digestion, and it is in this indireet way, it may be, that colic is produced. We have known horses which would be sure to have an attaek of this disease upon every slight change in feed.

The symptoms are pretty well known: The horse if in the stable, quickly lies down and gets up again; paws the ground violently with his fore feet; lies down, rolls, starts up as if frightened and looks wistfully at his flanks. Perspiration is exeessive as the violenee of the spasms increase, all these symptoms are aggravated; the animal beeomes regardless of your presence and any attempt to approach him is dangerous. He seems invested with greatly increased strength. We once knew a large, powerful mare to be attacked with colie during a cold winter's night, and when discovered, toward morning, was found in the granary adjoining the stable, having stoven a solid 4 by 4 inch studded partition, boarded on each side, completely to pieces, during the violence of the paroxisms, rolling and groaning among the ruins. The distention of gas was so great, that probably a rupture of the eolon or cœcum was produced, as she died suddenly after assistance came. It was ignorantly supposed that the animal had "*bots.*"

Inflammation of the Bowels.—The symptoms of this disease are somewhat analogous. Indeed, colic has often produeed inflammation of the bowels, (*Enteritis.*) As this is a very fatal disease it is important to know its early symptoms, and wherein they differ from those of colic. Youatt has pointed them out so clearly that we transcribe his diagram:

COLIC.	INFLAMMATION OF THE BOWELS.
Sudden in its attack.	Gradual in its approach, with indications of fever.
Pulse rarely much quickened in the early period of the disease, and during the intervals of ease; but evidently fuller.	Pulse very much quickened, but small and often scarcely to be felt.
Legs and ears of the natural temperature.	Legs and ears eold.
Relief obtained from rubbing the belly.	Belly exceedingly tender and painful to the touch.
Relief obtained from motion.	Motion evidently increasing the pain.
Intervals of rest.	Constant pain.
Strength scarcely affected.	Rapid and great weakness.

The treatment of these diseases formerly, may be justly characterized as abominable. Turpentine, opium, aloes and bleeding, were the favorite remedies. Youatt eondemns the use of gin and pepper, for fear of a tendency to inflammation within the stomach; but strongly recommends turpentine, one of the most penetrating and pungent irritants in common use. As there is always a tendeney to inflammation of the stomach and intestines in cases of colic, the only safe way is to avoid all irritants if possible, and resort to simple sanative remedies. A strong dose of peppermint tea will generally relieve ordinary cases of colie. Mr. Dadd says: "If the gas is supposed to exist in the stomach, the following is the best preparation:—Carbonate of ammonia, 1 drachm,* tineture of ginger, 1 oz., water, 1 pint; mix, and drench the horse.

"If the acid or gas exist in the bowels, substitute lime-water for ammonia, and add half an ounce of tincture of gentian."

For inflamation of the bowels the same excellent author gives the following:—Linseed oil, 8 ounces, Lime-water, 2 ounees. Another:—Epsom salts, 8 ounces, thin gruel, 1 quart. Another:—Common salt, 6 ounces, warm water, 1 pint."

"Frequent injections are to be given until the bowels respond; and if after a reasonable

*About a tea-spoonful. A tea-cup will hold about 4 fluid ounces of water.

time they should not do so, one of the above prescriptions, in about half the proportion, may be ventured on; yet it is best not to be too hasty, for supurgation, induced by active cathartics, would be equivalent to a sentence of death.

A handful of common salt to three quarts of warm water forms a very good injection."

He further advises to give the horse diluting drinks, to dissolve the hardened mass within and cause it to pass off. Warm water is as good as anything in easy reach. The diet must be very light, and the drink water in which slippery elm bark has been thrown.

By a little care in procuring the above materials, and keeping them on hand, the lives of many valuable horses may be saved, and the owners from heavy losses.

PRINCIPLES OF AGRICULTURE.

A paper was recently read before the Farmers' Club of New York, by Dr. R. L. Waterbury, which seems to have conflicted with the views of Messrs. Mapes, Warring & Co., who undertook to answer it. On reading the report of their remarks, Dr. W. found it necessary to disclaim the views attributed to him, and in doing so, gives the purport of the paper read by him as follows:

That, without the use of any foreign fertilizer, produce enough may be sold off from a farm, in most portions of the Union, to pay the expense of conducting it; and yet, by judicious management, the soil may be annually improving in condition;

That this can be effected the easiest in those portions of the Union where the value of land is the least, and where, consequently, the farms are largest, and the longest rotation of crops can be profitably resorted to;

That no system of farming is deserving of our attention that does not recognize the necessity of farm exports;

That a State may, to some extent, export agricultural products, without diminishing its capability to produce them;

That an inspection of the census returns of the United States and of the State of N. York shows that the amount of crops of this State has increased for the last ten years much faster than the area of improved lands in the State, and that, consequently, the lands cannot be "running out;"

That the processes of Nature, to which we owe the present alluvial condition of the surface of the earth, are still at work, and that land left entirely to itself will, by the action of water and vegetation, improve in fertility;

That the process of tillage alone may be made to accelerate this improvement, and help to provide for the necessary waste of marketing;

That rain penetrates the porous parts of the earth's surface, and percolates through them until it comes to impervious strata, and that it runs along this impervious strata until it finds egress as springs, and that spring water is impregnated, more or less, with saline substances;

That the evaporation which is continually going on of the water from the surface of the earth, leaves the saline matter in the surface, as but a small part of the water that falls as rain ever reaches the sea;

That the Mineral Springs of Saratoga, and other localities are exaggerated illustrations of this process, and the more fertile condition of valleys is to be, in part, referred to the same cause;

That, in the present thinly populated condition of our Continent, the true purpose of American agriculture, at this time, is to wisely direct these natural forces, rather than apply pinches of guano, and tea-spoonfuls of superphosphates to individual plants, although such applications may pay on some farms, and probably do pay well all *marketing gardening* operations.

The objection to soil analysis is this:

The difference between the early soil of Virginia and the same soil in its present condition has been made by the loss of 1,200 pounds of alkalies to the acre. But this 1,200 pounds forms not quite three ten-thousandths (000.27) of the soil to the depth of a foot.

The idea that any amount of variation, within such infinitesimal limits, can be measured and defined by quantitative analysis, is absurd. Top dressing of the same amount would, in the same way, fail of being detected.

That directions given by agricultural chemists have led to successful results is undoubtedly true; but these directions have been founded rather upon experience and observation than upon chemical analysis.—*Country Gentleman.*

For the Southern Planter.

WATERFORD, Loudoun July 17th, 1854.

The joint worm will promote one good thing for the farmer; the cry is coming up from all quarters that a new and almost invisible enemy is blasting the hope of the wheat grower,

that this dreaded thing is rapidly extending the field of his destructiveness; however successful individuals have been in producing this valuable grain, they, too, join in the question: What will prove an effectual means of overcoming the ravages of this destructive insect? Inquiry is invited, communication is encouraged, (are not these of themselves great means of advancing the agriculture of our State?). The wheat grower now can only succeed by fully enlightening his fellow laborer upon the means he himself would employ. There is then a double motive to communicate everything pertaining to the subject.

I have just read in the June number of the Planter, Mr. Jno. Roy Baylor's interesting communication on this subject. I observe he suggests "the plough in time is the remedy." With some disposition to begin at the fountain head, viz: the plough, in the extirpation of this evil, I come up to the aid of Mr. Baylor, and offer the Michigan Double Plough, a card exhibiting which I send you enclosed. I only saw a trial of this plough with one of the ploughs in much use in this county, (the McCormick) which was in the month of August last, when the particular (clay) soil was hard and tough, and surely there could be but one opinion as to the operation of the two ploughs, which was beyond comparison in favor of the Michigan, for ease of draught, uniform depth of furrow, complete turning and pulverization of the ground, and, what I remarked at the time, the perfect covering of the surface or whatever was upon it, while the McCormick but partially broke the tough soil, and that in hunks and chunks which repeated harrowing would not reduce to a proper state for seed; while the ground broke by the former plough was in admirable condition for the seed without even one harrowing.

If there be any virtue in covering effectually and deeply to provide against the joint worm, I know of no implement so well calculated for the purpose as this plough.

Such a plough, burying deeply the surface soil and with it all noxious seeds and insects, would be a valuable improvement, and though turning up raw earth that never saw the light the usual quantity of guano applied would still produce a crop, for this wonderful agent seems most certain of action where there is least vegetable matter in the soil. I might add, that it is stated that the growing wheat in Northern Michigan is, in appearance the most magnificent that has ever been seen in that country, and this Michigan Double Plough may be the plough in use in that section.

If you, Mr. Editor, or any reader of the Planter, have any experience with this plough, I should be glad to have your testimony, as I know of no one who has used it. I understand they are on sale in Alexandria and perhaps elsewhere. LEWEN T. JONES.

MOISTURE IN SOILS.

It is known that soils which contain much *humus*, or decayed vegetable matter, have great power in drawing moisture from the air. It might be supposed, therefore, that an application of peat—which contains much humus—would prove beneficial in a dry season on sandy soils. Has such been the case? Clay, too, possesses this power to a great extent, but it should be well pulverized in order to allow the air to permeate through it. Pure sand does not possess the power at all; and yet sandy soils which contain a little clay and humus, often suffer less from drought than tenacious clays, owing doubtless to their permeability. Sir Humphrey Davy says: "The soils which are most efficient in supplying the plant with water, by atmospheric absorption, are those in which there is a due mixture of sand, finely divided clay, and carbonate of lime, with some animal or vegetable matter; and which are so loose and light as to be freely permeable to the atmosphere. With respect to this quality, carbonate of lime and animal and vegetable matter are of great use in soils; they give absorbent powers to the soil without giving it tenacity. Sand, on the contrary, which also destroys tenacity, gives little absorbent power. I have compared the absorbent power of many soils with respect to atmospheric moisture, *and I have always found it greatest in the most fertile soils;* so that it affords one method of judging of the productiveness of land." There is a rich field open for investigation in this direction.

The quantity of water required to thoroughly saturate the various earths, is a question of much importance. Schubler found that a cubic foot, when thoroughly saturated, contained of water as follows:—Silicious sand, 27.3 lbs.; gypsum powder, 27.4; calcareous sand, 31.8; carbonate of lime 47.5; fine slaty marl, 35.6; pure grey clay, 48.3; stiff clay or brick earth, 45.4; garden mould, 48.4. The fact that "garden mould" imbibed more water than any other soil, and the poor "silicious sand" the least, indicates that rich soils are less easily saturated than sterile ones. Here, too, is a fine field for study.

The power of retaining water, when exposed to the atmosphere, is also known to differ ma-

terially in the several earths. Schubler found, calculating the evaporation as from 100 grains of water contained in the earth, that 200 grains of earth, spread on a surface of ten square inches, at a temperature of 65 3 4 0, evaporated in 4 hours as follows: Silicious sand, 88.4 grains; calcareous sand, 75.9; gypsum powder, 71.7; sandy clay, 52; loamy clay, 45.7; stiff clay or brick earth, 34.9; pure grey clay, 31.9; fine lime 28; garden mould, 24.3; magnesia, 10.8.

[*Rural New Yorker.*

REMEDY FOR THE BITE OF A MAD DOG.

While on a tour recently in the vicinity of the Ottowa river in Canada, we frequently heard it said that there was no difficulty in preventing the usual fatal results from the bite of a mad dog. It was said the remedy had been long known and administered with invariable success by many of the Catholic clergy throughout the Lower Province. Having ascertained that the Rev. John Edwards, Baptist minister at Clarence and Petite Nation, could furnish the recipe, we applied to him, and he has favored us with the following:

Luther Tucker, Esq.—I send the annexed recipe for insertion in your valuable paper, hoping it may meet the eye of any individual who should have the misfortune to be bitten by a mad dog. Of its efficacy to prevent Hydrophobia, I have fullest confidence, having seen persons when bitten, who took the remedy, and no harm followed, whilst animals bitten by the same dogs, died raving mad, or were killed to prevent mischief.

A gentleman of undoubted veracity, from whom I obtained this recipe 20 years ago, assured me that he had known it to be used successfully in at least 20 cases, where there was not a doubt as to the madness of the dog inflicting the bite, nor of the entire exemption from any serious consequences to the person bitten, after following this prescription.

I would add that while many instances have come to my knowledge of persons having been bitten by mad dogs, in this part of the country, I never heard of a single fatal result; which I am satisfied must be attributed to the knowledge of the above remedy. Jno. Edwards, *Baptist Minister, Clarence and Petite Nation, Ottowa River, Canada.*

Recipe.—Burn oyster shells to lime; pulverize and sift through fine gauze or muslin; put two table-spoonfuls (heaped) into a vessel; mix with eggs to the consistency of cream or butter for pancakes, and fry in a pan with a good sized piece of fresh butter or some sweet oil.

Let the person, as soon as may be after being bitten, eat this cake, in the morning, and taste neither food nor drink for six hours, when he may eat and drink as usual. Three such cakes to be eaten as above, on three alternate mornings.

This is for an adult; the quantity for a child may be administered according to age.—*Country Gentleman.*

ON THE MANAGEMENT OF YOUNG HORSES.

Cecil, the well known and able correspondent of the Marklane Express, has an interesting article on the subject, from which we make the following extracts:

Many persons are of opinion that it is unnecessary to administer physic to foals and young horses; but a few observations will dispel that notion. After a foal has been weaned and deprived of its mother's milk, the liver very frequently assumes an inactive, sluggish disposition. The coat indicates this by its harsh unhealthy appearance, and the animal gives evidence of being what is termed hide-bound. Very often the legs will fill from an irregularity of the circulation, consequent upon the state of the liver. In such cases one or two mild doses of aloes become indispensable. Diuretics are of no use under these circumstances, their action being on the kidneys and urinary passage, which are not the seat of disorder. For foals recently weaned, one drachm of aloes with an equal portion of ginger and of soap is the proper quantity; but if that does not relax the bowels sufficiently, the proportion of aloes may be increased on the second occasion. A slight dose is only required, because the aloes being supposed to act primarily on the liver, it is merely necessary to stimulate that organ to its healthy action. The only restriction necessary in the diet is substituting bran mashes for hay during the twenty-four hours preceding the time of administering the medicine, and carefully providing the animal from the effects of rain; otherwise, if the weather be favorable, no danger need be apprehended from the usual enlargement in the paddock or field during the operation of the physic, while the exercise will assist the desired result. Foals which have been fondly treated when with their dams, and subsequently, will not occasion much trouble in administering the ball. When they are weaned a light head collar or halter should be put upon their heads, and being accustomed to that, the ball may

readily be given by placing it on the end of a piece of whalebone or cane.

Those foals which have been fed upon an abundance of grass, are very subject to be troubled with worms; and some pastures are very liable to produce them. Many remedies have been adopted for their expulsion, but I have never found anything so effectual as calomel or emetic tartar, if properly administered; that not always being attended to, has led to the conclusion that the remedies are not infallible. Neither calomel nor emetic tartar should ever be given, if the expulsion of worms be intended, with the medicine administered to work it off; nor should soap, or any other alkali, form a portion of the ball, as those substances counteract the effect by decomposing both calomel and emetic tartar. The plan which I have always found successful to dislodge worms from horses, at any age, has been as follows, appropriating the quantity of medicine to the age and constitution of the subject. Keep the patient without any kind of food six or eight hours, when the appetites of the insects will become keen. A small quantity of bran mash is then offered to the animal, in which is mixed the calomel or emetic tartar: for a foal the proportion is from twelve to fifteen grains, and for a yearling from fifteen to twenty. This dose repeated after an interval of ten or twelve hours, during which period no other kind of food must be presented; otherwise the worms, seizing upon the nutriment which it affords, will not be destroyed, Six hours after the last dose has been given, it must be worked off with linseed oil or aloes. The quantity of the former is from four to six ounces; but if aloes be preferred, the dose will be from one drachm to one and a half, which should be dissolved over the fire in a quantity of oil or lard, and made into a ball with ginger and treacle. The quantity of calomel or emetic tartar for horses at a more advanced age may be augmented to the extent of sixty grains; but for two and three-year-olds, from twenty to thirty is sufficient, with the purgative remedy in proportion.

Considering the important functions assigned to the legs and feet, upon which a great portion of the horse's value depends, it is a matter of some surprise that more attention is not bestowed on the subject. There are many breeders who never think of inspecting them till the animals are about to be broken, or, if they observe any imperfections, they leave the remedy to its fate. The legs of young horses may be justly compared to willow twigs; you may train them to almost what form you please. By careful and judicious treatment, many defects may be relieved or corrected, if attacked in the earliest stage, before the parts have assumed an unyielding texture. Many of the imperfections to which the form of the leg is susceptible, may be traced to a portion of the hoof having been broken, worn away, or clipped off. In the event of such accident the opposite side of the foot grows more luxuriantly, and the weakest portion, or lower side, having to sustain an increased weight, an uneven bearing for the foot is established. This will assuredly cause the leg to grow crooked, and very probably occasion a turning in or out of the toe. The irregularity of shape is often seen in one leg, while the other is well formed. The pastern joints, in many cases, evince a disposition to grow too upright, or on the other hand to assume too much obliquity. The same principle which accidentally causes a limb to take an unfavorable growth or form may be adopted to restore it to its proper shape, providing it is attended to in time. Thus, if the inside of the near forefoot of a colt or young horse be broken off or worn down, it will cause the animal to tread more heavily on the inside than on the out, and the leg will become bent in consequence. To correct this it is only necessary to reduce the superabundant portion of the foot with a drawing knife or carp, so that the limb may have an even bearing. When the pasterns grow too upright, the heels require to be lowered; and the toes of those which are too oblique must be shortened. The texture of of the hoof varies considerably in different animals. In some measure it is constitutional; and it is likewise affected by the state or condition of the land upon which the animal is reared. Before shoes are applied, if the land be dry, the hoof is very liable to be broken off at the edges; and if neglected they will shell off, and frequently occasion soreness—sometimes even inflammation. To obviate this, the part should be rounded a little with the rasp, and the foot dressed with ointment composed of tallow, fat, or lard, two parts, tar one part, and treacle half an equivalent of the latter. These being melted together and applied warm on the soles and hoofs of horses at any age, will be found to promote the growth and toughen the parts effectively. If the land is very dry, it is advisable to throw water in some particular spot, where the animals may be induced to stand occasionally in order to keep their feet in a healthy state.—*Country Gentleman.*

The weather has been unusually favorable the past month.

BEST MODE OF RAISING WOOD.

Reading an article in the Farmer of March 8th, on the "growing of wood," it struck me at once that many did not know how to produce nut-trees from the seed. Now a few hints would set every one aright. I have tried a good many years to raise oaks, chestnuts and other kinds of trees, but met with no success, planting them as I did in drills, in common soil. Not one would sprout. In the summer of 1853, I noticed several sprouts as I was working under a chestnut tree, and in digging down through the leaves I came to the nuts from which the sprouts came. I took the hint, and the next fall I procured a quantity of nuts; thinking I would imitate nature, I prepared a rich bed, strewing the nuts thickly *on top of the soil*, covering them with leaves. All the nuts came up and are now doing finely. This manner of planting is to be observed only for those trees that are designed for transplanting. For wood lots I would recommend the following mode of planting: Select a still day. Let one man drop the seed eight feet apart each way, covering them with a small handful of leaves. Let another man follow with a barrow of heavy soil, sprinkling on *just enough to keep the leaves from blowing away.* Two men in this manner can plant one acre in one day with ease.

If these facts are followed, it will save much labor in the production of wood land. Hoping they will be the means of doing much good. I remain your ob't servant,

W. Howard.

East Orrington, 1855.

WINTER MANAGEMENT OF SHEEP.

In wet weather it is of great advantage to be able to fodder under shelter. I have abandoned the practice of salting my hay, except when compelled by stress of weather to house it before it is thoroughly cured. My sheep are salted about once a week the year round, and instead of giving them tar as recommended by some persons, I occasionally strew the yard with pine boughs, of which they are fond.

I regard the management of lambs as one of the most important branches of sheep husbandry. Having paid for my experience on this point as well as that of winter shelter, I can speak with confidence. They should be separated from their dams about the first of September, and with a few sheep, that require nursing, turned to the best pasture. Care should be taken that they are not stinted till removed to winter quarters, when they should have a small allowance of grain or oat-meal in addition to a plentiful supply of good hay. As soon as the pasture begins to fail the ration of grain should be supplied. By neglecting to provide suitable partures for a lot upwards of 100 very superior lambs one season, I lost the greater part of them the ensuing winter. My utmost efforts, after I had discovered the error, were of no avail. I gave them a comfortable shed, plenty litter, good hay, a regular allowance of meal and free access to water; but they never recovered, and the greater part died before spring.

My bucks and ewes are put together about the first of December. The flock, which I keep at my home barn, under my own eye, and from which I raise bucks for the supply of my own, and many of my neighbors' flocks, is managed in this way. The ewes in lots of 20 to 35 are placed in separate pens, and a select buck is turned into each pen, where they are kept together 15 or 20 days. The ewes in each pen are marked with a letter in tar and lampblack, to indicate what buck they were served by. At shearing time, the buck lambs are selected, and receive a mark to denote their origin.

In my judgment, water is as essential to sheep and is to any other animal. They will go through the winter on snow instead of water, and so would a man or a horse, if compelled by necessity to do so; but either would prefer to have it thawed before using it, rather than perform that office in his bowels.

When my sheep ran in large flocks without shelter, they were occasionally affected with the scab, but since I have provided comfortable sheds for them, they have been troubled with no serious disease. This climate is well suited to sheep.—*E. Kirby, in Morrell's Shepherd.*

Every one who has a spot of land should raise fruits, that he may have them fresh from his trees; for in no way will it yield more profit for one's own house; and where there is a market, they are profitable for that purpose also.

NEW MODE OF RAISING FRUIT TREES.

A Bohemian agriculturist has successfully introduced a new mode of planting.—Instead of using the process of grafting, he takes an offshoot of any fruit tree—an apple tree for instance—and plants it in a potato, both being carefully placed in the soil, so that five or six inches of the shoot shall be above the ground. This latter takes root, grows with rapidity, and produces the finest of fruit. *Me. Farmer.*

THE DEAD HORSES OF PARIS.

Four hundred horses die or are killed in Paris in one week. There is a common pound, surrounded by a stone wall, covering some ten acres. According to some municipal regulations (there is an 'ordinance' for everything in France) all dead carcasses, except human ones, must be brought to this general receptacle. The carcass of a horse is valuable for the bone, the hide, and the hair, to say nothing of the flesh, much prized when fresh, in certain sausage manufactories. But should you wait until the horse has actually shuffled off his hairy coat, you might miss a bargain—another of the trade preceding and purchases. Hence it is important to buy the horse, before he is dead. It is a regular business in Paris. You can tell these agents for the purchase of dead horses at a glance; the dress is that of an English groom, save the vignette on the visor of the cap, representing a dead horse's head and cross-bones; a memorandum book, a pencil, a stamp, and a piece of caustic complete his accoutrements. With scrutinizing eye he travels the thoroughfares of Paris; should a horse go lame, break a leg or neck, should he show symptoms of distress—in a word, anywhere or in any way evince signs of the many ills to which horseflesh is heir, immediately is an offer made for the animal, deliverable when really dead. The bargain concluded, the 'signalement' of the horse and owner is carefully recorded, and a private mark stamped on the inside of the fore leg with the caustic; the horse goes perhaps rejoicing on his way for weeks, perhaps months, only to be met with and identified after death, at the grave yard for horses. Now, except in cases of fresh specimens, as mentioned above, the first operation on a dead horse is to take off the skin; then the flesh, to get at the bones. The skinning portion is easy, and performed with a dexterity and rapidity truly astonishing. I have seen in the enclosure spoken of, at one time, over one hundred horses skinned, or being put through that process. The next point is to divest the bones of adhesive and often putrid flesh—bones are valued in proportion as they are clean, neat, and free from other matter. To take off the flesh by hand is a tedious and difficult operation. An ingenious Frenchman solved the difficulty. He noticed that rats are very fond of horse flesh; he advised the authorities to colonize the horse pound with these animals; the catacombs of Paris furnished them by thousands. It was done, and now-a-days a dead horse's carcass put in over night, is literally nothing but a neat and beautiful skeleton in the morning. The pecuniary saving to the bone dealers from the voracity and gnawing propensities of the rat family, is, I am told, very considerable.

Our Yankee Frenchman did not, however, stop there. It was natural to suppose that rats so well fed and provided for, would rapidly increase and multiply; hence the necessity of regulating the matter. Every three months a grand 'battue' is made upon the aforesaid colony of rats, and all caught above ground die the death of rats. The manner of doing this amused me. Horizontal and cylindrical holes are bored all around, in and at the foot of the inclosing walls—the depths and diameter being respectively the length and thickness of the rat's body. Upon the morning of the 'battue,' men armed with pans, kettles, drums, &c., rush in at the peep of day and 'charivari' the poor rats, who, frightened to death, poke their heads into the first opening. Of course, all those in the wall holes have tails sticking out. The rat collector, with bag over his shoulder, now makes a tour of the premises, and the scientific and rapid manner with which the rats are seized by the tail and safely (to both rat and operator) transferred to the bag, challenges admiration. It even surpasses the 'Chiffonniers' rag picking. Perhaps you wish to know what becomes of the rats. These, also, are sold before they are caught or killed. The privilege of gathering rats on the 'battue' days is farmed out by the authorities, and a profitable business it is. These rats, sleek and fat as they necessarily are, fetch a highly remunerative price—the fur, skin, and the flesh, meet with ready sales.

TO PREVENT METALS FROM RUSTING.

Melt together three parts of lard and one part of rosin. A very thin coating, will preserve Russia-iron stoves and grates from rusting during summer, even in damp situations. The effect is equally as good on brass, copper, &c. The same compound forms an excellent water-proof paste for leather. Boots, when treated with it, will soon after take the usual polish when blacked, and the soles may be saturated with it.

Cleaning Gun Barrels.—We have somewhere heard of spirits of turpentine as being good to use on the swab instead of water in cleaning out gun barrels. It strikes us that this is a good recommendation, as there would be no danger of rusting if this article be used. We think, however, that a mixture of one part of spirits of turpentine and two or three parts of strong alcohol (spirits of wine) well shaken together, would be preferable. Cleaned in this way, they will dry and be ready for use immediately.—*American Agriculturist.*

LABOR.

The first great difficulty which a New England farmer has to contend with, at the present time, is the difficulty of procuring labor, and its excessive dearness. It is a fact, too, strange as it may appear, that the quality of labor has deteriorated in an almost inverse proportion to its demand and price. We pay double the wages of twenty years since, and we receive not much more than half as much labor in return, and at the same time the general products of the farm have not materially advanced in value. This state of things must lead to one or two results; we must either supply the place of much of this labor by machinery, or we must give up our farms, allowing them to return to their original waste. We are forced to do that which sharp competition and the desire of gain have accomplished in all other industrial pursuits, by calling to our aid mechanical skill, and applying, wherever it is possible, its labor saving power to the operation of the farm. Yankee farmers should certainly verify, to the fullest extent, the old proverb, that "necessity is the mother of invention," for there is no place where the demand upon her prolific powers is more urgent than upon New England soil.

[*Mr. Fay's Address.*

THE DESTROYERS OF OUR GRAIN.

In looking over our Wheat reports to ascertain, if possible, the relative amount of damage the crop has received from each class of the prevailing destructive insects, we have been surprised at the confusion of terms or names used in the descriptions. Indeed, there seems to be no intelligent comprehension of the difference between these various insects. Thus, from the same town where all the injurious results appear to be traceable to the same cause, we have one writer saying, "We shall lose half our crop by the *weevil*;" another says, "The *fly* is doing us immense harm;" and another still—more cautious in making a distinction—writes, "Much injury was feared from the *insect*, but it will be less than was anticipated." These three reports from a single town are a fair sample of those from the country at large.

It would materially assist investigations upon these insects, and also convey a more definite idea of the character and amount of injury to be estimated, if editors and all others reporting upon this matter, would state exactly what kind of "insect" is at work in their several localities. To facilitate such a course we will give a brief description of some of the more generally destructive insects that prey especially upon the wheat crop. Among these are the Grain Weevil, the Hessian Fly, the Clear-winged Fly, or Wheat Midge, several varieties of Grain Moth, the Chintz or Chinck Bug, &c.

The Grain Weevil (*Calandra Granaria, or Curculio Granarious of* Linnæus.)—There is a wrong impression as to the character of this insect, and especially in reference to the time of its chief depredations. Quite early in the Spring, while wheat was not yet in blossom, reports came from some interior counties of Michigan that the weevil was thus early committing extensive depredations. From many other localities we heard similar reports, but a little later in the season. These were founded in misconception, for the truth is the weevil proper preys only upon the grain, commencing its ravages about the time of its ripening, and continuing them long after it is gathered into the granary; hence the name of grain or granary weevil.

The grain weevil in its perfect state is a dark or pitchy red, winged beetle or bug, about a line and a half, or one-eighth of an inch long. It has a slender proboscis or snout, curving a little downwards. The thorax, or chest, constitutes about one-half of its body, and is nearly as large as the abdomen, or belly, lying back of the middle ring The thorax is punctured with a large number of holes, giving it a rough appearance. Over the abdomen are delicate wings, which are shielded by wing-covers, having lines or furrows upon their upper surface running parallel with their length. The wings do not entirely cover the tip of the abdomen. The female punctures the ripening or ripened grain with her beak or rostrum and deposits one and sometimes two eggs.—From the egg is hatched a grub or worm, which eats its way into the grain, closing up the aperture behind it with excrements so that it lies perfectly shielded from external injury. No mechanical action short of crushing the kernel can disturb the destroyer. They are effectually destroyed by kiln-drying the grain. This worm or grub grows to about one-twelfth of an inch in length; its body is white and soft, with nine rings around it. The head is small, round, yellow colored, and provided with cutting instruments. Arriving at maturity, which is not till after the flour portion of the wheat kernel has been principally devoured, this worm or larvæ assumes a nymph or chrysalis state, (like that between the worm and the butterfly,) and within two weeks after, the perfect weevil is formed, which eats its way out through the shell, and goes forth to depo-

sit its eggs in turn upon other sound kernels. They are very productive, a single pair often multiplying to five or six thousand in a single year. Both the perfect insect and the grub feed upon the grain.

The Hessian Fly, (*Cecidomya destructor,*) is so named because introduced, or supposed to have been, by the Hessian soldiers employed by the British during the Revolutionary war. It was first discovered in the vicinity of of New York, from which point it extended in all directions, its usual rate of advance being from 15 to 25 miles a year. The full grown Hessian Fly is nearly the size of a small musquito, which it resembles in general form. It has, however, no bill for sucking blood, and has proportionately a larger thorax or chest, and a smaller abdomen or belly than the musquito. There are two broods hatched annually, from eggs deposited in September and May. The full-grown fly deposits its eggs, which are very small, reddish grains, in the upper channels of the wheat leaf, soon after the stalk begins to branch. As this takes place in Sept. or early in October, late sown wheat usually escapes the Autumn egg. These eggs hatch out in about 15 days, producing a small worm which works its way down between the leaf-sheath and stalk to a point below the surface of the ground, where, in the form of a white or spotted maggot, it lies concealed, and sucks out the juice of the plant. In a few weeks it arrives at full growth, and changes to a pupa or chrysalis state, of a cone-like or flaxseed shape. In this state it lies until the following Spring, when the perfect fly comes forth and deposits a second brood of eggs, which attack the wheat stalks above the ground, but near the lower joints. The juice extracted weakens the stalk and it crinkles down. Its effects are not very visible until the stalk has attained nearly its full growth, when by going through a field the extent of its depredations is generally known by the number of lodged or fallen stalks. The flaxseed grub when present, may be found much earlier by carefully stripping down the leaf-sheath from the still green and upright stalk. Since the point of attack is usually below the gathered portion of the straw, the grub is left in the field, where it undergoes its transformation to come out the perfect fly again in Autumn. It is on this account that burning the stubble soon after harvest has proved a partial remedy against future attacks. There is a parasitic insect enemy, which multiplies faster than the Hessian fly, and to which we are indebted for the disappearance of this pest after its prevalence during a few years in any locality.

The Clear-winged Wheat Fly, (*Cecidomya Tritici.*)—This fly, by many called the Midge or Wheat Gnat, resembles the Hessian fly in general form and size, but differs from it in having an orange-colored instead of black body, clear or transparent wings instead of dark; its antennæ or horns are longer and more fringed, its legs are longer and more slender, and its abdomen is covered with short hairs and blunt at the extremity, instead of smooth and pointed, like that of the Hessian fly. It undergoes its changes in the soil and attacks the blossoms and immature grain instead of the straw. These distinctions should be studied, for upon a clear understanding of them depends the treatment to be pursued.

The clear-winged wheat flies conceal themselves among the grass and leaves during clear midday, but morning, evening, and on cloudy days, they appear in swarms over a wheat field, and deposit their eggs in the heads. In the course of a week or so, these eggs hatch out orange-colored maggots, which feed upon the pollen of the flour, and finally attach themselves to the soft grain. They cannot injure the kernel after it has acquired some degree of hardness. They do not make their appearance until the latter part of June or forepart of July, according to the latitude, and only attack the wheat while in a soft state, and on this account early wheat escapes injury.—Using only the early, hardy varieties, or sowing early, and forcing to quick maturity with guano or other stimulating manures, are the best known means of escaping this insect. The yellow or orange-colored maggots are easily observed—there frequently being as many as twenty or thirty, or more of them, on a single wheat head. We have often found several of them on a single kernel, upon carefully removing the chaff or sheath. From the imperfect descriptions given, we think that much the greatest "insect" injury of the present season has been done by this species. During the latter part of July and the forepart of August, the maggots or worms obtain their full size, cast off their skins, descend to the ground and bury themselves half an inch or so below the surface, where they remain during the Winter, and come forth perfect flies the following season, to continue and multiply their depredations. It is against this fly that sprinkling lime over the growing wheat, burning sulphur in the field, and such-like means, have proved a partial remedy.

The Grain Moth (*Tinea Grinella,*) when fully developed, is a small winged insect, a little resembling a butterfly in its general form. Upon its head is a white hairy tuft, and two

short antennæ or horns. Its fore wings are mottled with black, white and intermediate colors, always with one black rectangular or square spot near the middle of the outer edge. The eggs are deposited in Spring, and again in the latter part of the Summer. The first brood are hatched in July, and take the form of a sixteen-legged caterpillar, with a naked soft body, nearly half an inch in length. They gnaw the surface of the grain, and cover it with a thick web, which sometimes fastens together a number of kernels. After a time these caterpillars spin a cocoon, in which they undergo the usual transformations, like those of the butterfly.

The Angoumois Moth (*Anacampsis cerealella*) is another grain moth, which has proved immensely destructive in France, especially in the province of Angoumois, from whence it derives its name; and the same moth, or one very similar, has appeared in this country.—The perfect insect is a very small moth, of a pale cinnamon brown color, and satin lustre. Its wings are long, narrow, broadly fringed and ash or lead-colored. It has two thread-like antennæ or horns, consisting of numerous bearded joints; a spiral tongue of moderate length, and two tapering feelers turned back over the head. It lays twenty or more eggs upon each of three or four wheat grains, and within a week these hatch out little worm-like caterpillars not thicker than a hair, which immediately disperse, each selecting a single grain and burrowing into its most tender part. Within the grain (and not upon the surface like the grain-moth) it devours all the heart portion, then spins a web to divide its cell into cavities, in one of which it deposits its excrements or rejected fragment of food, and in the other it undergoes its transformations preparatory to coming forth a perfect moth. These, like the grain weevil, may be destroyed by kiln-drying.

There are several other species of grain-moths, but they are yet imperfectly known, and have not been generally destructive.

Chintz or Chinch Bug(*Lygæus leucopterus.*)—This insect has proved more destructive in Virginia and other Southern States than at the North. In its perfect state it has a black downy body, about one-sixth of an inch in length, and is readily distinguished by its white wing-covers, upon each of which there a short, black central line, and a large, black oval spot upon the margin. They do not arrive at their perfect state until about the time the wheat is ready to cut. Previous to this they are without wings and resemble the bed-bug in odor and color. It is at this time that they are most destructive. From the eggs laid in the ground the previous season, the young come forth in the Southern States in May—later at the West or North—at first of a bright red color, but changing with age to brown and black. They travel from field to field in immense columns, like locusts, destroying everything as they proceed. They destroy wheat by attaching themselves to the green stalk and sucking out the entire moisture. They have been arrested in their course by running ditches across the field before them, filling these with dry straw which is set on fire when the bugs are seen thereon. They have also been destroyed by burning the dry leaves of the forest, upon which they have settled.

From the Boston Cultivator.

CORN FODDER.

Messrs. Editors—It is the opinion of many farmers that the butts of corn stalks cannot be used as fodder for cattle, without bestowing upon them some extra labor to prepare them for that purpose,—such as cutting, steaming, and sprinkling them with meal; and some have but little faith in them as fodder after all these means of preparation. Your correspondent, Wm. J. Pettee, I conclude by his communication in a late number of your paper, almost, if not wholly, belongs to this latter class. He says, I have a sort of an inkling, that there is but very little nourishment in them, but adds, any information on this subject will be highly prized by me. I have waited to see what some of your able and intelligent correspondents might have to say in reference to this matter, but none having spoken, I am somewhat inclined to tell my brother farmers what little I know about it, and with you permission will endeavor to do so. And let me remark in the first place, the value of this kind of fodder depends very much on the way in which it is secured or harvested. By the old method of cutting off top-stalks at the ear, and letting the butts remain standing in the field until late in the fall, they become dry and weather-beaten, and hence, are very much injured for fodder, and when fed to cattle, they will reject a large portion, and look very anxiously for something better, and who blames them? Every one knows that grass must be cut and properly hayed before its sap is wholly dried out and its greenness gone, or its nutriveness qualities are mostly lost, and why can't we know as much about corn-fodder?

Experience teaches me that when corn is harvested by cutting it up at the ground and shocking or stocking it in the field at the right

time, that is, when the ears are fairly glazed over, cattle will eat every pound of the stalks, the butts not excepted, and that too, without their being steamed, cut, crushed, or any such thing. All that is wanted, after the shocks become properly hayed and are dry is to get them into the barn, husk out the corn, mow up the stalks with a proper mixture of straw, pea-vines, bean-pods or any such materials, so that they shall not heat too much and beeome mouldy, giving them also a few sprinklings of salt as we mow them up, and then, don't be in too much hurry to get rid of them; give only one foddering of them in a day, and let that be the last at night, and I know that in this way cattle will relish them well, and the butts with which many farmers find so much trouble, will be found in the morning "among the things that were, but are not."

The practice of harvesting corn by shocking, is not yet adopted by all farmers, partly, because they have an idea that the corn is not so valuable, and partly, because the proper way to do the work is not understood. Now, in regard to the first point, let me say, what little experience I have had, satisfies me that the shocked corn is equally as good as that harvested in the old way, and this is the testimony, I believe, of all practical and scientific farmers who have experimented with respect to this very business; and in regard to the latter point, I find various ways and methods are adopted in shocking; I have also tried a number of ways, but have found none I like so well as the following: The implements to be used—take a round stick, about two inches in diameter, and long enough to reach up to the tops of the ears of corn as they stand in the field; insert in the lower end an iron point about eight inches in length, of the shape of a large butcher-knife, only thicker; bore two one-inch holes through this stake close to the top, and at right angles; then have two rods about four feet long that will easily slip into these holes. Now, with this simple machinery under your arm and an old sickle on your shoulder, you are ready for the corn-field. Stick down your stake with two rows on your right hand and two on your left, so as to put four rows of corn into one row of shocks, and so as to have one of the rods in the top of the stake point, directly with the rows, and let this rule be observed every shock; from eight to sixteen hills are enough for a shock; stout, heavy corn require a less number than eight. After a sufficient number of hills have been set as equally as possible around the stake in the four corners between the rods, pick up your wisp of straw, or whatever else it may be, which should be previously dropped along through the corn for bands; fetch together the tops of the shock, bend down the top of the stalks, and with your band put once round, make all fast, then with your right hand take hold of the rod that points with the rows, at the same time securing the top of the stake with your left hand, draw out that rod, and then the other also with the same hand, and there is nothing more to do, but to take out the stake with your left hand, and your shock is finished.

I have been thus particular in describing my method of shocking corn, because I know that a great deal depends on knowing how to do any kind of work. Whoever adopts this method of harvesting corn, will find that it takes no longer to do it, than it does to cut and bind the stalks in the old way.

Thus, labor is saved, the fodder is worth far more, and the grain equally as good, if not better. So, when asked, what advantage has the new over the old way? the answer will be, "much, every way."

Warner. B. E. HARRIMAN, Jr.

HOW TO KEEP HARNESS.

In answer to an inquiry for information as to the best mode of cleaning and oiling harness, &c., we re-publish the substance of an article given in the Rural New-Yorker:

Observing the good condition and fine appearance of the harness of Ald. Baker, proprietor of the most extensive livery establishments in Rochester, we requested him to impart to us, for publication, the *modus operandi* by which so desirable an object was achieved. In compliance therewith, he stated the course adopted as the best and most economical, after twenty years' experience in a business which required considerable attention to tackling apparatus. His process of oiling and washing harness is substantially as follows:

Take neat's foot oil and ivory or patent black—the latter well pulverized, or to be made so before using. Mix thoroughly, adding the black until the oil is well colored or quite black. In cool weather the oil should be warmed somewhat before mixing. With a sponge apply a light coat of the mixture—only what the leather will readily absorb, unless the harness is very dry, in which case a heavier coating may be necessary. After the harness is dry—which will be in from two hours to half or a whole day, depending upon the weather and previous condition of the leather—wash thoroughly with soap-suds. In making the suds use good Castile soap and cold rain-

water. Warm water should never be used on harness leather. Apply the suds with a sponge. Rub off with buckskin. This will give your harness a nice, glossy surface, and the leather will retain a good color and continue pliable for months. If it becomes solid with mud or sweat, an application of soap and water as above directed (without oiling) will be sufficient to give it a bright appearance.

Two applications of this oil and black mixture a year, (or once every six months) will be sufficient to keep harness, as ordinarily used, in good order. It may be necessary for livery men, and others, who use harness constantly, to apply the oil oftener—but in most cases, two oilings a year and washing with suds when soiled, will keep a harness in good trim for sight and service. This process will pay a large dividend in extra service and durability—to say nothing of improved appearance.

Ald. B. assures us that the same, or a very similar application, is just the thing for carriage tops which are made of top-leather. The only difference in treatment is, that less oil should be used, or rather a lighter coating applied—and it should be washed off before drying in—top leather being thin and much more penetrable than harness. Of course this mixture would not answer for enamelled leather, of which some carriage tops are construeted.

For the Southern Planter.

From the Transactions of the Nottoway Farmers' Club.

STACKING WHEAT STRAW—LIGHT BREAD RAISER.

Mr. Editor:

In discharge of my annual obligation, to submit an essay or result of some experiment, I remark that on a former similar occasion, I presented most of the experiments which had been tried on my plantation.

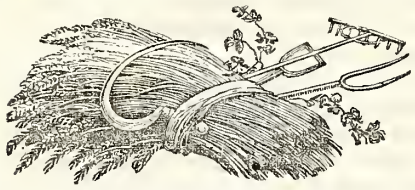
When threshing my wheat last, I made a very simple preparation to receive the straw, which I think was advantageous in many particulars. On one side was formed such a shelter as is usual for cows, when made of rails, inclined at an angle of about 45 degrees, except that the posts upholding it were more firmly planted, and the inclined poles were placed about one foot apart, and notched into the cross pole on which they rested. On the opposite side, leaving a space on the ground about 8 feet wide, a similar structure was erected. Between the two the straw was stacked, length and height, according to necessity. The advantages are, that a fine shelter is formed for stock, with food accessible at all times, and protected from the weather and from wasteful depredation.

I will also report in behalf of my wife, (and for the benefit of wives, and consequently husbands, in promoting good humour at breakfast) the result of an experiment with a light-bread raiser, made after the directions of Dr. Thos. Booker—so simple that a common hand can easily construct one. A box is first made about one foot square—then another, in which this is placed—leaving a space of about four inches between, all around which is closely packed with powdered charcoal; a top is closely fitted in the hole on top; then a top piece, made like the sides, stuffed with charcoal, is put on the top; 4 pounds of iron are placed in a pan at the bottom, heated a little beyond endurance by the hand. The vessel containing bread is then put on it, the box closed and suffered to remain till morning. There has never been a failure. On one occasion, when it was desirable to make up more than the box contained, that which was placed in the box succeeded, while the balance managed in the ordinary way, failed.

I will add, in reference to my water ram, that though it has been frequently out of order, still it was not ascribable to any defect in the principle. Experience and attention are necessary. With their exercise, I see no reason to apprehend a failure, where incidental circumstances are favourable. Mine is now performing well, and I see no reason to doubt its continuance.

HAY FOR COWS IN SUMMER.

An observing, intelligent and successful farmer informs us that he is in the practice of feeding his cows with hay in summer, particularly if the season is such as to afford flush pastures. His reason is that a full, rapid and vigorous growth of grass gives to cattle that feed upon it a desire for something to absorb the excess of the juice of their food. Dry hay they devour greedily, and though in ever so small quantities, evidently with the most beneficial effects. Every farmer must have observed that in dry seasons, horses, cattle and sheep keep in good condition upon herbage parched and apparently scant, while in wet seasons, in all pastures, though always full, the process of fattening with them was slow. Dry fodder in such cases is required to give substance and tenacity to the green, and can be profitably used by feeding it to cattle. *Newburgh Tel.*



THE SOUTHERN PLANTER.

RICHMOND, SEPTEMBER, 1855.

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☞ Office corner Main and Twelfth steets.

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A limited number will be inserted at the following rates: For each square of ten lines, first insertion, ONE DOLLAR; each continuance, SEVENTY-FIVE CENTS. Advertisements out of the City must be accompanied with the money, to insure their insertion.

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PLOUGHING FOR WHEAT.

To the heresies that we have occasionally promulged, we are now about to add another, viz: that as a general rule, it is an error to plough deeply for wheat, whether on fallow or corn land. We say, as a general rule, because there are certain circumstances, and certain conditions of soil, and certain sorts of land, which render deep ploughing advisable. For instance, if the land be poor, and yet of such uniformity of ingredients that deep ploughing will not introduce any noxious element into the soil, then it is proper to depart from the rule, and by deepening, increase the area of sustentation of the wheat plant. Else it would not be enabled in the shallow mould to find sufficient nourishment. In such case, as in most others of deeply ploughed wheat land, a risk must be run, but it is less than the risk of starvation to the plant.

Again, if a soil be very stiff, flat, and retentive of water, it is neeessary to plough deeply, because not otherwise, in the present condition of our agriculture, can it be properly drained. High bedding and deep water furrowing, which will allow the surplus water, in whole or in part, to percolate to the level of the bottom of the water furrow, (or bed furrow or alley, as it is variously and improperly termed,) and so to pass off, are necessary on such lands.

On still another class of soils it is proper to plough deep, and that in the very small class which is "thorough drained" by nature,—supposing that none have reached that stage of improvement by art. We mean by the term "thorough drained," those lands in which a subsoil of dry sand, or sand not saturated with hidden water, absorbs the surplus rain and conveys it away so rapidly as not to leave any of it stagnant upon the surface for more than a few hours, or a few days at farthest. Those lands some of which are very stiff clays, or still stiffer sands, and some fine loams more or less sandy, resting on the substratum we have just spoken of, can be ploughed to a very great depth with advantage.*

In each of these three kinds of soil, all very different, strong reasons prescribe deep ploughing. But the great bulk of our soils, especially improved soils, are of a different character. They are of imperfect drainage, and when deeply ploughed have thereby a greatly increased capacity of absorption and retention of rain water.

But the wheat plant loves a dry soil and climate, and to give it this, whenever it can be done consistently with other considerations, should be our great aim. Every farmer knows that his wheat is most apt to lodge on the richest land that he has, and that, other things being equal, it is most apt to rust in the rankest growth. If his thin wheat rusts, it is either because it is later than any other, or because it is grown on badly drained or wet spots. He also knows that in a wet season, when the ground is saturated with water and the air overcharged with vapour—in what is vulgarly but expressly called "funky weather,"—that his wheat is in most danger from the same disease, and that then he is constantly hoping for a cool, dry, breezy spell.

Now the drying of land after rain is due to three causes: absorption to a lower stratum, flow of the water to a lower level, and evaporation, either from the soil or its vegetation. But if it be deeply ploughed, less will flow off; and of what is absorbed much more than usual will sink below the influence of evaporation, there to remain until it is taken gradually up by capillary attraction, or down by gravitation, and is carried by the roots of the plant into the leaves, and evaporated through the pores which they contain. But in doing this the plant becomes supersaturated with sap, the sap

*For a very able and interesting elucidation of this point, though on a soil artificially brought to the above condition, see "The Yester Deep Land Culture," a small octavo of 150 pages by Henry Stephens, author of "The Book of the Farm," to be had of J. W. Randolph.

vessels become varicose, and either burst from inability to withstand the dilatation, or clog and refuse to circulate the sap. In the first case, their contents are poured out over the surface of the stalk, and when evaporated to the consistency of syrup, become the appropriate receptable for the miscroscopic seed of the countless millions of fungi, constantly floating in the air in such weather as we have spoken of, and ready to grow to visible plants, feeding on the juices of the stalk as other visible and invisible parasites do on other vegetables. In the second, the wheat, which was at first of a dark, rank, unhealthy green, looking almost black at a little distance, becomes darker, the stalk and blade gradually dry up, and it ripens of a dead, dark colour, the rich golden gloss being entirely wanting or found only in more favoured spots. In both cases the grain of the wheat shrivels and loses weight, and is found to be deficient in both starch and gluten, though the constituents of the bran remain nearly the same.

Every farmer of observation will admit that such appearances are the symptoms of failure in the crop, and that they occur under, if they are not the result of, just such a state of things as has been described. It is very true that rust sometimes, though rarely, takes place in consequence of a change from warm to cold weather, but it is still in consequence of a derangement in the circulation of the sap, most probably, as some very interesting experiments on the flow of sap would seem to prove, from its rapid descent into the roots, followed by an equally rapid rise into the stalk—but that does not militate against the general rule here stated. On the contrary, it rather seems to confirm it, and to warm us against a system of culture which makes the plant liable to the consequences of plethora. *

Another evil of a different sort results from improper deep ploughing. The rains are taken into the soil in excess during the winter, when evaporation is feeble; this keeps the ground so much colder, that it freezes more frequently than it otherwise would do, and kills the plants by cold or by heaving them out of the ground; or it retards and enfeebles their growth beyond the remedy of the summer's heat, always later in warming such spots than any others.

An abundance of vegetable matter in the soil will not remedy the latter evil, and it increases the former. The warmth that it imparts is due to the heart of decomposition, which cannot take place in winter, whilst the increased porousness it causes only produces more absorption; and so more wheat is winter killed. In the matter of rust it increases the risk by stimulating the growth of the wheat and rendering the plant more sappy.

The best preventive,—for there is no remedy save the very slight and partial ones of rolling and grazing, not always effectual, and often unattainable—would seem to be that sort of culture which would leave the land most compact and best capable of resisting the entrance of moisture; and we know of no mode of doing this but shallow ploughing. One should aim therefore to have just fine dirt enough to cover the wheat and permit it to root well before cold weather sets in, and plough only so deep as he is obliged to plough to turn the sod, break the whole surface, and harrow it thoroughly.

It may be thought that this will not afford space enough for the plant to feed in, but there need be no fear of that. The roots will easily penetrate the subsoil if it contain food for them; and if it be so hard that they cannot do so, we may be sure that it has not the capacity to elaborate any, in whatever abundance it may contain the elements of it. Deep ploughing, it is true, will most likely improve such a soil for wheat, but it will be proper to give it at another period in the rotation, and for another crop.

If the above observations are true of fallow, they are much stronger in their application to corn land. Corn is a gross feeder, and with its large leaves, greedy roots, and rapid growth, is a great evaporator, perspiring probably twenty times more than a man.* The ploughing for that is generally, and, for the above reasons, properly, as deep as circumstances will allow, and the subsequent tillings have kept it open and mellow. It is almost always too light for the wheat crop which follows it, to which cause, on some soils, perhaps as much as to exhaustion by previous cropping, is to be ascribed the comparative failure of corn-land wheat. If this be so, the preparative ploughing of the corn stubble with any but light one horse implements, turning a shallow furrow, or, better still, slightly scarifying the surface, must be highly injurious except on those lands which require deep and frequent drain furrows.

The land we at present cultivate is of this character, and we plough it accordingly; but at Shadwell, where never a drain was wanting, the other plan was found best, and was the practice of the best farmers on similar farms.

* There are a good many theories of rust in wheat, which it is unnecessary here to enumerate. However the disease may be described, all admit this it is caused by a derangement of some sort in the circulation, originating in sudden changes of weather and most usually accompained by rain, and the best authorities can only go so far towards a remedy as to say, it "may be partly guarded against by preserving as free a circulation as possible of air among the plants, and increasing its current." "British Husbandry, vol. 2, chap. 10." Of course this preventive is resolved into a case of evaporation, and the less that is required, the less the danger of rust.

* "Hales says his sunflower perspired seventeen times more than a man." Lindley's Theory of Horticulture. B I. ch. IV.

The best plan on such lands is to pass a beavy harrow or a three horse cultivator over the field and across the corn ridges so as to smooth them down and drag up the grass, which may be afterwards scattered or burned: then sow the wheat directly on the land, and the guano, if any is used, after that, and plough both in as shallow as possible, following with a roller, where that is practicable, to compact the soil around the seed, retain the guano until it is all dissolved, and ensure an earlier and more certain vegetation. This plan will not only give a better crop of wheat, as we know by a comparison of the two modes once made in experiment, and often subsequently observed, but it will save a great deal of useless labor, and so expedite the process of seeding as to give a week or ten days longer for the wheat to grow in, at a time when it wants all the pushing it can get to prepare it for winter.

It sometimes happens that the farmer has less than the usual press of work between the time when he may begin to cut up bis corn and the proper season for wheat seeding: in such a case another mode will set him forward in his wheat sowing without compelling him to begin too early; let him, as the corn is cut up, flush the land with one horse mould board ploughs running a shallow furrow, or with sbovel ploughs: then at the proper time sow the wheat and guano both together, out of the same bag, if he chooses, having previously mixed them, and cover with the harrow, as before. This plan will answer perfectly for both wheat and guano.

We have heard it agued that land thus treated, merely scratched over, as it were, will be too foul; the running briars, it is contended, and the fox tail and crab grass, will remain on the land ready to spring up with the return of warm weather, and choke the wheat. But we have never experienced that evil, though some of our land was run away with running briars. With blue grass land, it is true, such a course may be impracticable, but it is bad farming to put land in wheat until the blue grass is temporarily exterminated; as it easily may be. As to the running briar, if it were true, as we conceive it is not, that that needs cutting off, after the plough has passed over it, it is a saving of labor to chop up with the hoe all that requires extermination; and that process is greatly preferable in view of the greater yield of wheat. The summer grasses that are supposed to be in the way, are in fact, a great advantage to the wheat. When there is an unusual prevalence of insects, as there may be in the chinch bug-*ged* districts next year, it may be well to burn them and destroy that much of the harbors in which they hibernate, but, otherwise they form a protection to the wheat during winter, and enrich the land by shade and decomposition in the summer. We could name instances in our own and others' experience of wheat that has produced finely when sowed upon the *very rankest* grass standing as it grew, and merely covered with the grass combed down on it, and laid flat by the harrow; and we could give the particulars of nearly a whole field of rich low grounds, thus treated, after corn, surpassing the rest by its side, of earlier seeding put in in the usual way. But it is unnecessary now to do more than state it as an undoubted fact.

Some will object that this is a rough, slovenly preparation, leaving the land full of small heaps of grass and of hard clods. If it does, so much the better. Utility in such matters is the standard of beauty, and what will give the best yield is the handsomest, because it is the best. The nearer the hog's figure approaches that of the horse the less do we admire him; and the bull that resembles a buck is condemned alike by grazier and dairy man. In England, where there is but little cold compared with what we experience, and at the North, where the snows lie nearly all winter, and protect the wheat from sudden changes of temperature or from intense cold, a smooth surface may not be undesirable; but here we are liable to great and rapid fluctuations in temperature, and have no snow to shield the wheat from its effects. With us, therefore, some shelter is indispensable, and nothing is better than the grass and the clods. If these latter are of moderate size, they occupy but little room and interpose most favorably between the wheat and the bleak chilling winds: they will most of them melt down by successive thawings, and as they disappear benefit the plant by giving their pulverized substance to its roots. A light wooden toothed harrow,* or a roller, one or both, passed over the wheat as it takes its spring growth, after the frost is out, will easily reduce them all to a mass of fine friable earth, and smooth and compact the whole soil to the benefit of the crop, and in aid of the operations of harvest.

One other great advantage of this mode of preparing land is that it fits it better than any other for the reception of clover and grass seeds, all of which, like a hard shallow soil, well pulverized at the top.

To recapitulate, then: we state that except in certain classes of soils, it is of advantage to plough shallow for wheat, because it tends to secure for it dryness of soil and climate, thereby preventing luxuriance of growth, and consequent liability to lodging, rust and mildew, because it saves labor whilst it enables one to sow in better time, protects

* We have never had the courage to try the harrow, but have no doubt of its utility.

the wheat better in winter, starts it to growing earlier in the spring, and ripens it sooner—and that it is more conducive to improvement by better fitting the land for a fine stand of clover and grass.

We have given what we think are the correct causes of these effects, because people are more apt to look into these matters with interest when there is an attempt to account for them on principle. And we have enumerated the cases in which their application is to be modified by circumstances or foreborne altogether. Aiming to be plain and practical, we have written with great caution, because we would not mislead or give ground for a charge that we had.

If haply any one of our readers shall have followed us to this point, and thinks of acting on the principles we have ennnciated, we take leave of him with this piece of advice, that he consider well before hand, what he is going to do, and be convinced by his own reflections, not by our assertions. We do not wish to do any man's thinking for him—our highest ambition, if there be any in the case, is to make him think for himself.

THE PRICES FOR WHEAT

Still keep up, and the time within which we had expected them to decline is passing away pretty rapidly under a higher market than we had anticipated. As our convictions, expressed in previous numbers, are still unchanged, we have nothing more to say on the subject. But to show that our opinions are not singular, we call attention to Mr. Newton's letter, which we were sorry we could not get into the last Planter. We like to divide our responsibility with men like him.

The reader will also find a capital article on the general run of the wheat market from the New York Economist. When *will* our leading farmers take that valuable paper?

REMEDY FOR CHINCH BUG.

A subscriber, one of those modest men who cannot bear to see his name in print, or to write a line for publication, says that he *knows* soap suds will kill chinch bug. The soap must be strong, the suds poured on the bud, about half a gill or gill to each stalk, and the bug will die. He has tried it, and thinks the labor not half so great as the labor of working the crop once, at a time when all the cultivation in the world wont save it.

He also thinks that rolling the land will be a great preventive of chinch bug in wheat or oats, as smoothing and pressing it will destroy the holes, hollows and clods in and under which they harbor.

The first expedient cannot be tried now. The latter may be, and will benefit the wheat in other ways.

RYE.

This is the time to sow rye for soiling or for a crop. The sooner it is got in now, the better. For a crop, a bushel of seed per acre is the greatest abundance. For soiling, it is said, that three or four bushels is the proper quantity for an acre. In our experiment last fall, we sowed only a bushel, and three or four acres soiled ten cows, twenty sows and pigs, and fifteen horses for nearly a month; being in all that time, the only long food that any of them got. Part of it yielded two crops. For soiling the old fashioned rye is better than the Multicole: it branches more.

It may be sowed on land prepared as for wheat, and the better it is treated the better the crop will be. Those who are scant of long food will find it invaluable—those who are not will find it an agreeable change for their horses, and a valuable and healthy ingredient of their food. For cows just going on the short grass it is first rate.

Sowed now, if the fall is forward, it will be high enough to be grazed this winter, until February with advantage to the crop, if the stock are taken off in rainy weather.

We want all our pets to try a crop of rye.

GUANO.

A subscriber from Waynesboro' asked us to say something about guano. The paper on page 279 extracted from the Southern Planter of 1852 or '3, gives as much practical information in a short space as any we can now lay our hands on.—From it our subscriber will see that he may use it any way he pleases without risk of loss or injury. The only question is, will it answer on rich land. We think it will not, as a general rule; and as we don't believe there is much poor land West of South River, in the neighborhood of Waynesboro'—if there is we never saw it, or heard of it either, for Augusta people don't talk much about their poor land—we hardly expect to hear of the introduction of much guano in that region. On towards Fishersville the case is different, but we understand the Engineer is bribed to run through that country at the rate of 70 miles per hour! that rate to continue until they get the land rich. As we like to give names, we beg leave to state that our informant is Mr. J. B. Breckenridge.

PREMIUM ON KOSSUTH'S COLTS.

Mr. H. J. Smith, the owner of the fine trotting stallion, Kossuth, authorizes us to offer a premium of twenty-five dollars for the best colt of said horse of this years foaling. The exhibition to take place on the Fair Grounds of Virginia State Agricultural Society at their next meeting, and the award to be made by the Society's Committee on quick draught and saddle horses.

We hope the owners of other fine stallions will follow Mr. Smith's liberal example.

We have frequently been asked by various friends and correspondents about some patent stump extractor. What do they think of the following?

PATENT STUMP PULLER.

Among the visits made by us during the present month to the homes of the farmers in various parts of this State and New Hamphsire, was one to the town of Orange, Mass., to witness the operations of the eighth wonder of the world, the *Patent Stump Puller*, owned and operated by Mr. W. W. Willis, of that town. Notice of the trial had been given, so that persons assembled from the adjoining towns, and a few had come from remote distances.

At ten o'clock the hook of a stout chain was placed under the root of a moderately-sized stump, and it was turned out with as much apparent ease as though it had been a mere log with no attachments to the ground. Other stumps of still larger size, and more extensive roots, were then taken out, and all with certainty, and without the slighest confusion, and the time occupied in removing each one after the chain was applied, not exceeding ten minutes!

At length, the visitors having multiplied to quite a crowd, a larger chain was attached, and an enormous stump, the growth, perhaps, of centuries, was selected. With a small half-circular spade, room was made under one of the roots and a stout hook attached; the chain passing from the hook up over the end of the shears. The whole surface of the ground about the stump was covered with the stumps of a later growth of young pines, whose roots penetrated the soil, and mingled with those of their ancient progenitor. The stump itself was between two or three feet in diameter, and sound, as were its roots.

A pair of stout oxen were then hitched to the lever, and driven forward. When they had advanced some four roost, the chain was taken up, and they were turned back without any unhitching, the roots in the meantime cracking and making a noise like a pistol exploded under water. The ground gradually rose about the stump, and in five minutes its gnarly roots which had securely laid there for ages were brought to the light! At the expiration of *ten minutes* the old hero was fairly turned over, and the roots on the upper side pointing to the heavens! Upon actual measurement, we found the roots extending something more than 16 feet from each side of the stump.

A gentleman from Valparaiso, who accompanied us, and who is entrusted by the Chilian government with funds to purchase agricultural implements, after witnessing the exhibition, at once ordered three of the machines to be sent to his country.

The experiment was one of the most astonishing exhibitions of mechanical power that we have ever witnessed. The machine is exceedingly simple, and not liable to get out of repair.

A very pleasant and appropriate address was made to the multitude at the close of the exhibition by —— Field, Esq., of Athol. All present seemed pleased and instructed by the occasion.

Below we give a statement of the power of the machine, furnished by Mr. Willis.

Orange, June 7, 1855.

The power of the machine varies according to dimensions. Suppose a machine to have a lever 18 feet long, the anchor loop or fulcrum to be 14 feet from the end upon which the power is applied, the first purchase loop to be 6 inches from the fulcrum; this will give you 28 times the amount of power applied at the end of the lever. Suppose your team to draw 2 tons, you have an actual purchase on the stump of twice 28, or 56 tons, and more in the same proportion as you extend the lever.

Suppose, in combination with the lever, you rise shears 12 feet high, and the foot of the shears placed 2 feet from the stump; in this case, you have an amount of power 168 times greater than that applied at the end of the lever. Suppose your team to draw 2 tons, you have an actual purchase on the stump of 336 tons! Sufficient to hurl out well nigh any monster!

When the power of the shears has become exhausted, if you apply the chain and pulleys, you double the power of the lever, which gives 56 times the amount of power applied at the end of the lever. That is, suppose, 2 tons purchase by the team, you obtain 112 tons; this is sufficient when the stump is once moved from its bed by the greater power, to perfect the work.

The shears should be placed near to the stump to get the greatest power, and they exert the greatest, when, rising, they reach exactly the perpendicular position. A large portion of all work may be done without their aid.

A strong horse will answer most purposes, though oxen are preferable. One man can work this machine slowly, but it requires two or three to work it rapidly. A little patience and practice will enable almost any one to work it in a short time.

Yours, very respectfully,

Wm. W. Willis.

Drinks for the Sick.—Lemonade.—Very thinly shave the rind of two large lemons, not taking a morsel of the white pith, which pith should next be entirely removed, taking care not to break or cut the fruit so as to waste the juice; cut the middle part of the lemons in thin slices, (a silver knife is best for the purpose;) add from one to two ounces of loaf-sugar. Put these three articles, (thin rind, slices and sugar,) into a jug, pour over them a quart of boiling water—let it stand a few minutes before using.

When lemons are not in season, the same flavor may be obtained by adding to the sugar a drachm of citric acid and eight drops of pure essence of lemon.

Orange drink may be prepared in the same manner as lemonade, allow two China oranges and one Seville orange to a quart of water, or three China oranges. Half the rind will be quite sufficient.

Drink from Fresh Fruit.—One pint of currants, stripped—a few raspberries make an agreeable addition—one pint of water; boil them together ten or fifteen minutes, strain to one or two ounce of loaf-sugar. When fresh fruit cannot be had, dissolve two table spoonfuls of currant jelly in a half pint of boiling water.

[*Lady's Book.*

[From the Fredericksburg Recorder.]

A NEW FEATURE FOR VIRGINIA FARMERS.

It is not too late to call the attention of Virginia Agriculturalists to a matter which has given us some concern for several years. It is to the folly and stupidity which they evince, in neglecting a source of profit that is diligently heeded by Northern farmers. Very many of our people, perhaps the majority of them, make no effort to save seeds of the various plants which they rear. Not uncommonly, as the Spring opens, and the season for putting seeds into the earth draws near, the farmer and gardener finds himself under the necessity of going to the seed store to purchase supplies. When he walks in and asks for what he wants, where were the seeds raised, that are furnished him by the seller? The label upon the package tells the same story invariably, that they were cultivated at the North. Not a spoonful of seed of home production can be had for love or money. Last spring we visited Richmond and endeavored to obtain a supply of Watermelon seed of the varieties cultivated near that city, but none could be had, and we were reluctantly compelled to purchase others. And yet there are millions of melons raised within 20 miles of Richmond city every year. Why don't the cultivators save the seed?

Throughout the State, this policy with respect to seeds is pursued by the farmers. In the interior counties, men save seed enough for their own planting, but who thinks of saving and sending seed to market? Where they reside near enough to the city to visit it and furnish themselves with such varieties as they may desire, they give themselves no concern about securing a quantity sufficient for their private purposes.

This utter disregard of seed-saving is the more astonishing, when we call to mind the long list of esculent vegetables cultivated in all our gardens and upon all our farms. Cabbages, Beets, Parsnips, Carrots, Egg-plants, Squashes, Cucumbers, Melons, Radishes, Beans, Peas, Potatoes, Turnips, Lettuce, Tomatoes, and others too numerous to mention, all mature well in this climate, and are universally cultivated. Why may not Virginians, who rear these articles, save a sufficiency of seed, not only to supply themselves, but to supply the seed stores in all our cities? Must our merchants, of necessity, continue forever to import LANDRETH'S garden seeds, when the money thus paid out of the State could so easily be retained in circulation in our midst?

It would astound many of our farmers and gardeners to hear what immense sums are annually expended in garden seeds by the people of this State. It looks like a small business, but there is a vast deal of money to be made at it. We are without data upon which to form an accurate opinion, but we have no doubt that the cost of seeds, of various kinds imported into this State, reaches to hundreds of thousands of dollars. We know of one house that sells every year not less than $10,000 worth.

And then, be it remembered, that in addition to what are used by farmers and gardeners for planting purposes, very many seeds enter largely into the medical practice of the State. Mustard seed and watermelon seed, may be mentioned as examples. Even for these purposes, seed must be imported because Virginia farmers are so much taken up with corn, wheat, tobacco, oats and rye, that they cannot find time to devote to the collection and preparation of seeds for market.

In our judgment, nothing could be more unwise than this policy, which has been so persistently pursued. Our farmers waste labor and capital which they might judiciously employ, if they would only open their eyes and give some attention to little things. They affect to despise, or they at least neglect, such means of money-making as that to which we advert, and go on starving upon large and half cultivated farms, when they might live in comfort and amass wealth. We doubt not that there are small farms in Pennsylvania, that pay better as seed farms, than many of our magnificent Virginia plantations do, where nothing is cultivated but the staples heretofore mentioned.

We want also a large seed storehouse, like that of Landreth in Philadelphia and Sinclair in Baltimore. Who will begin the enterprise? The man that makes the effort, if he goes to work energetically and systematically, and continues it perseveringly, will reap a rich reward for his pains. Let him select and prepare his seeds with care, and judiciously employ printer's ink, and our word for it, he will not fail to find wealth pouring in upon him like a flood.

CROPS AND EXPORTS.

From the U. S. Economist.

The estimates of the crops are generally large, and of wheat some of the figures run to a high range. It does not appear, however, that the effect of the export demand is taken generally into calculation. At such times as the present the public feel the necessity of some statistical data in relation to the actual products of the soil. The *guesses* indulged in as to the product of each and all the States are of no value. Unfortunately, however, the census of the United States give the only approximation, and it is only by comparing these returns with the actual export and current prices, that the available crop can be estimated. These for the two last enumerations were as follows:

	Population.	Wheat Crop. bush.	Wheat exported. bush.	Export Val per bush.
1840...	17,069,653	84,827,272	11,198,365	$1.05
1850...	23,266,723	104,799,230	8,656,982	1.02

The product per head in 1840 was 5 bush., and in 1850, 4½ bush. In the year 1847, the United States wheat crop was estimated as a large one, and that year was known as the "famine year" abroad. The Commissioners of Patents made, in that year, from the best authorities at their command, the following estimate in relation to the wheat crop:

Crop of 1847.....bush.	114,245,500
Seed.....	11,424,550
Surplus.....	102,820,950
Consumption—3 bush. per. head.....	62,239,200
Disposable for export.....bush.	40,581,750

Now the fact was that the export reached but 26,312,431 bush., and that quantity only, being far more than could be well spared, although rising prices diminished home consumption, *doubled* the price. The following shows the census crop of 1850, the number of bushels actually exported,

and the export price in each year since:

	Crop.	Bushels exported.	Price in Eng'd.	
1849.....	..	12,309,972	$1.09	40
1850.....	104,799,230	8,658,982	1.02	40
1851.....	114,000,000	13,948,499	0.95	38
1852.....	114,000,000	18,680,686	0.79	41
1853.....	125,000,000	18,958,993	1.05	45
1854.....	85,000,000	27,000,000	1.80	80
1855.....	135,000,000	2,000,000	2.40	75

It is to be observed that the estimate of 114,245,500 bush. by the Patent Report of 1847, left 40,581,750 bush. for export, allowing no more than 3 bush. per head for consumption. The fact was that the export of 26,312,431 bush. caused freights to rise to $2 per bbl. for flour, and the price in New York from $4.44 to $9.50 per bbl., and the price did not return to its old level until 1852. It follows that the crop was not so large as estimated, or that the consumption was much greater. The census gave the crop of 1850 at 104,799,230 bush. and the population 23,257,720. The result would have been as follows:

Crop, 1850.....bush.	104,799,230
Seed.....	10,479,923
	94,319,307
Export.....	13,948,499
For consumption.....bush.	80,370,808

This would give 3½ bush. per head. The export of 1851, the year ending in June, was, of course, the product of 1850. Now, it appears above, that with a crop of 104,799,230 bush., of which 13,948,499 was exported, the *price fell*, hence the supply was excessive; but the price in England was very low. The crop of 1853 was very large; of that crop 27,000,000 bush. was exported in 1854. The population in 1854 must have been 26,292,000. Allowing the same consumption per head as in 1850, the crop of 1853 must have been as follows:

Crop.....bush.	125,000,000
Seed.....	12,500,000
Available.....bush.	112,500,000
Exported.....	27,000,000
	85,500,000
Consumption, at 3½ bush.....	92,023,090
Deficit.....	6,500,000

The result was a very high price, which has since continued. The crop of 1854 was very short. The quantity exported has been smaller than any year since 1837. The consumption has also been less than usual, by reason of the price, which has continued high to the present time. If now we take the crop of 1855, now being harvested, at 135,000,000 bush., which is a large estimate, the result works thus:

Crop.....bush.	135,000,000
Seed.....	13,500,000
Available.....	121,500,000
Consumption---3½ bush.....	94,670,355
For export.....bush.	26,921,645

The quantities imported into England are as follows:

	Wheat. qrs.	Flour. cwt.	Total. bush Wh't.	Price. s.
1850....	3,738,995	3,819,440	37,702,280	40
1851....	3,833,636	5,263,478	46,760,522	38
1852....	3,060,268	3,865,174	36,077,666	41
1853....	4,949,314	4,646,400	53,533,712	45
1854....	..	..	26,449,628	80

England imported all she could get in 1854, and the whole supply down to the present moment has not reduced the figure below a famine price. It is to be observed that England, in 1853, took less than half the exports from the United States, and her crop of 1854 was large, added to which 26,449,628 bush. imported did not reduce the rates. If now the United States should have 27,000,000 bush. to spare there seems to be a customer for the whole of it.

Inasmuch as that all kinds of food are very abundant this year in the United States, the consumption of wheat under an active export demand may be less than usual. That will result, however, from a *high price*, and there appears to be no chance of a small price.

A table may be constructed as follows: The consumption of the country, per the census figures of product, population and export, for the years 1840 and 1850, and the rate of increase in population being known, the results are as follows:

Years.	Population.	Consumption at ½ bush.	Actual Export.	Seed.	Crop.	Price in N. York.
1840	17,069,653	64,565,447	11,198,098	8,482,727	84,827,272	$5.44
1850	23,267,723	84,182,986	8,817,010	11,479,922	104,479,923	5.62½
1851	24,023,913	84,483,895	13,948,499	12,000,000	110,032,394	6.68
1852	24,780,103	86,730,815	18,600,680	11,689,803	117,511,501	4.37
1853	25,536,290	89,377,025	18,958,990	12,500,000	121,136,048	4.94
1854	26,292,483	92,023,690	27,000,000	13,000,000	132,023,690	9.25
1855	27,048,673	94,670,355	22,000,000	13,500,000	110,170,000	9.50
1856	27,804,863	97,317,020	30,000,000	13,000,000	140,317,000	—

The crop, of course, is that of the previous year in which the export and consumption take place. Thus the crop now being harvested, if it should reach 140,317,000 bush., must be consumed and exported during the fiscal year which ends June 30, 1856. The population is calculated at an annual increase of 3½ per cent., the actual increase between 1840 and 1850 having been 3½ per cent. At 3½ bush. per head the required consumption is as given in the column, but seasons when other articles are cheap, the consumption will probably be less. It is manifest, however, that the consumption increases largely, and a crop which, in 1851, allowed of a large export at fair prices, was entirely insufficient in 1855.

For the Southern Planter.

SYNOPSIS OF AN AGRICULTURAL DISCUSSION,

Held by the Albemarle Hole and Corner Club, No. 1, on the 9th day of November, 1850, several farmers from adjacent counties, as well as from the county of Albemarle, being present, as invited guests.

The subject of Guano being introduced, Mr. Peter Meriwether said that he had made various experiments with Peruvian guano upon wheat, oats and corn,—had used it on a variety of soils, slate, stiff white clay, (holding water,) and upon mulatto soil,—had applied it in various ways; covered it with one, two and three-horse ploughs, with the coulter, and with the harrow, and had found it invariably to act well, upon all these crops and in all these kinds of soils,—he could see no difference from the different modes of application, whether covered shallow or deep. In one instance, by the use of two and a quarter tons of Peruvian guano on wheat land, applied at the rate of 200 lbs. per acre, he made 291 bushels of wheat where he was satisfied he could not have made 20 bushels without it, and in another instance 36½ bushels of wheat from a quarter of a ton of guano on very poor land. He values it highly for corn and oats, and feels well assured, from the improvement which has invariably been produced in the clover and second crop after wheat and oats, that it cannot be temporary in its character, as some suppose. He had, in the use of guano on corn, *placed it in contact with the grain without injury.* He used the guano unmixed with plaster or other substances. In one experiment on oats where 70 lbs. guano were used per acre, he had reaped 900 bushels of oats, where, without guano, he would have expected 300 bushels; and this crop, moreover, sustained great loss from a storm. In the use of guano he had several times been stopped by rain from ploughing it in after being sown, and could detect no difference. He has applied different quantities per acre, and found the yield in proportion to the quantity used. Mr. Meriwether also gave the experience of several of his neighbors in the use of Peruvian guano. That of Wm. C. Rives, who used a ton on ten acres of wheat land, which yielded 167 bushels. This wheat was somewhat rusted, though not so much injured as the adjacent land. The crop immediately preceding the wheat on this land was corn, and the yield about four barrels per acre, and he thinks would have made ten bushels of wheat per acre without guano. Mr. Meriwether stated that Mr. Frank Nelson used it at the same rate on mountain land, with a yield of ten bushels of wheat per acre; but this wheat was too thin to be regarded as a fair test: that Dr. Mann Page used it at the same rate on wheat land, with a yield of seventeen bushels per acre, and this was the third successive crop on the same land, one of wheat and one of corn having immediately preceded. This experiment, however, was upon good land, which would have made eight barrels of corn per acre. That Mr. James H. Terrell used half a ton of guano upon five acres of land, and the yield was 67 bushels of wheat, while the crop upon adjacent land was destroyed by rust. That Dr. Thomas Meriwether applied one ton (200 lbs. per acre) on ten acres, and obtained 100 bushels from land so much galled and worn that it would not have produced anything without the guano; and in one case only among his neighbors had the use of guano been unprofitable, which was that of Mr. R. Gambill, who applied it on very poor land, sowed very late. This crop was destroyed by joint worm. Mr. Meriwether said he thought the use of guano would, in a great measure, prevent the effect of fly and rust, from the vigorous growth it gives the wheat, and the earlier ripening of it by three or four days.

Mr. James Morris, of Louisa, said he had used guano upon tobacco without effect; applied three hundred pounds per acre broadcast (without plaster,) ploughed in with three horses, in the month of March. The season was dry until June, when the tobacco was planted. A good crop of tobacco was made on adjoining land, manured from the stable and farm-pen.

Mr. Wm. Garth stated that he had sowed one ton Peruvian guano, in 1849, at the rate of 200 lbs. per acre, upon very poor land, fallowed for wheat, and increased the crop from two to fourteen bushels per acre. He applied it at the same rate upon rich corn land which had produced fourteen barrels of corn per acre with a proportionate increase of the wheat. Mr. Garth also stated that his son, Mr. Woods Garth, had applied 500 lbs. on two acres of very poor land, and obtained eighteen or twenty bushels of wheat per acre. Mr. Garth had used guano on tobacco, (200 lbs. per acre) and on rich land it produced no effect, but on land rather thin where he used it at the same rate, mixed with plaster, it produced a good crop, and acted as well as stable manure. He thinks plaster should be mixed with guano in all cases, at the rate of one to one and a half bushels per acre. He agrees with Mr. Meriwether as regards the effect of guano on fly and rust, and his experience of last year in-

duces him to use twenty-three tons this season on wheat.

Major Robt. Grattan, of Rockingham, said that his experiment with guano had not been accurate, but that he was satisfied the effect was very good where he had used 300 lbs. per acre on wheat.

Dr. William G. Carr said he had used guano on corn applied in May, (200 pounds per acre,) broadcast, and covered with three-horse ploughs. The increase of crop was three barrels per acre; the season was wet, the land poor; red, high-land. He thinks it would be dangerous to apply it to spring crops in dry seasons.

Mr. Wm. Ragland, of Louisa, had used guano upon tobacco in poor, grey slate land, (old pine field, newly cleared, which would have brought no tobacco without guano.) He applied half an ounce to the hill without plaster; the crop was increased in weight, and ripened earlier. Where one ounce was used on rich old land, the effect seemed to be injurious, as there was no stand of plants.

Mr. William Overton, of Louisa, agreed with Mr Ragland as to its effect on the stand of plants. He had applied it to tobacco in the hill, mixed with plaster and ashes, and thought the effect bad, not being able to make the tobacco stand.

Mr. Hugh Minor stated he had experimented with guano on corn, both in the hill and broadcast, with good effect; also on watermelons, Irish potatoes, eymblins and cucumbers. The potato crop was the only one not benefitted.

Mr. Richmond Terrell said he had applied 250 lbs. guano (mixed with one-third its bulk of plaster,) per acre on poor red high-land, broadcast, and ploughed in with two-horse ploughs the 15th of May. Thinks the crop of corn increased four or five barrels per acre. Applied the same quantity and mixture in the same manner on tobacco, with little or no effect, the land being red high land of pretty good quality; thinks guano will not pay in the tobacco crop.

Mr. Wm. H. Southall stated that he had made experiments with Peruvian guano on wheat similar to those of Mr. Wm. Garth, and with like results.

Mr. William W. Minor said he had used guano on tobacco plants. On the 2d April he prepared a plant bed without burning, chopped in guano thoroughly at the rate of 1800 lbs. per acre, and sowed tobacco seed the same day. The plants were equal to those on a burnt and manured bed adjoining, which had been prepared and sown the 14th of March; obtained good plants from it 20th of June, though the bed was much injured by grass and weeds from not having been burned. He had applied 200 lbs. per acre on corn, broadcast, and ploughed in with three-horse ploughs; land poor, grey high land; increase of crop from two to three barrels per acre. Sowed plaster on tobacco beds, and rolled corn in plaster when planted, as usual. Mr. Minor also stated that his neighbor, Mr. William S. Dabney, used guano on tobacco, broadcast, about 200 lbs. per acre on good land, (though not very rich,) ploughed in with two-horse ploughs. One bushel of plaster was also sown per acre; the crop showed little or no effect from it while growing, but ripened decidedly earlier.

Mr. Geo. Clive said he had tried guano on tobacco, a table-spoonful to the hill, with marked effect. He had applied 100 lbs. guano per acre (mixed with plaster and ashes) on oats; the crop was double that on adjacent land. He thought there was a better stand of clover on the guanoed land, which was poor grey high land; he had used it on corn, peas, beans, Irish potatoes and parsnips, in the drill, with good effect.

MAPES AND THE GUANO FRAUD ONCE MORE.

We give below the article from the Country Gentleman, in reply to Prof. Mapes, which we deem conclusive.

Suppose a party should purchase a lot of rye and indifferent wheat, and have it ground up at the mill of our friends, the Haxalls of this city, who should only charge a fair milling profit for the job, and then at the instance of the same party, brand every barrel of the compound Tennessee Flour; and then suppose Mr. Delaplane, the inspector, should pass it as Extra Superfine—what would be thought of the transaction? and how long would the above gentlemen retain their present high character? and how long would the Columbian rank as one of the highest and most reliable brands in the world? Yet this is the colour which Mr. Mapes' own account gives to the transaction. For Tennessee Flour substitute Chilian Guano, for the names above substitute those of Mr. Mapes and his associates, for the Inspector's name substitute the eminent chemist who certified the purity and high quality of the article.

Mr. Mapes manufactures for sale super-phosphate of Lime.

The August number of the Working Farmer contains Mapes' reply to the charges we have been compelled to bring against him in regard to his connection with the Chilian guano fraud. We wish our readers could see the whole article; but it is

such a mass of verbiage that it would occupy too much of our space to copy it entire. We will therefore give its prineipal points, appealing to our contemporaries, and to all who see both papers, whether we do not give substantially the meaning of the artiele. We make these remarks lest our readers should suppose we had distorted Mapes' article, and that he cannot possibly have made such a *confession of guilt*. Here it is:

"Some time since, during the dull season of the year, the owners of the Mexican guano applied to us to grind it; * * and we did grind it, at an expense of a little less than $5 per ton, 200 tons of their material. * * We did this as any miller might grind a quantity of material sent to him for that purpose, having nothing to do with it as a business matter, further than the receipt of the mere cost, without profit of grinding it, while our mills were not wanted for other purposes. We consulted with the proprietors of this artiele; and after giving our views, we took their instructions as to its necessary constituents. After the manufacture was commenced, they wrote to the Factory giving orders as to the brand to be placed upon it. * * We had nothing to do with the name of this artiele, and think that selected a bad one, calculated to cause those who purchase to suppose it a different article."

We shall make no comments on the above, but would call attention to the fact that, while Mr. Mapes has hitherto tacitly denied having any business connection with the "Improved Superphosphate of Lime," although made on his farm, he here admits unwittingly that the mills and apparatus of the Superphosphate Factory, are his. "The owners of the Mexican guano applied to *us* (Mapes) to grind it;" "and *we* (Mapes) did grind it." "*We* (Mapes) did this as any miller might, without profit [of course!] while *our* (Mapes) mills were not wanted for other purposes. *We* (Mapes) consulted with the proprietors, and after giving *our* (Mapes') views, *we* (Mapes) took their instructions," and made a mixture of Mexican guano, sugar-scum, salt, plaster, a little Peruvian guano and quick lime, which gave it "the strong smell desired by many farmers." "*We* (Mapes) knew the proprietors to be men of the highest integrity," and so innocently obeyed their instructions to smear the bags with Peruvian guano, being at the same time especially careful that no superphosphate of lime stuck to them, lest it should reveal the source of their precious contents! "*We* (Mapes) thought the name selected a bad one, calculated to cause those who purchase to suppose it to be a different article"—calculated to deceive, to defraud,—but "*we* (Mapes) were only the miller," so we did not scruple to mark this mixture "Chilian guano," and to endorse Dr. Hayes' statement that it was "said to come from the coast of Chili."

We wish to do Mr. Mapes no injustice, and will therefore give his explanation of this endorsement.

He denied in his July number, having any knowledge of it whatever. He now says "*it was not written for publication*," but was "*given to one of the proprietors for the purpose of being shown to two friends*, one in Philadelphia, the other in Baltimore." We are not sufficient casuists to determine which is *worse* to deceive the public, or only "two friends," but we give it as our most decided opinion that no man,—not even Professor Mapes, is morally justified in stating that an artiele made by himself, in his own factory at Newark, is "said to come from the coast of Chili."

Although Mr. Mapes fully confesses that he manufactured the Chilian guano, he contends that it is a manure of great value. If it is, chemical analysis is unable to determine the value of a manure. Our analysis showed its fertilizing value to be less than $15 per ton. The guano inspectors at Baltimore and Petersburg, Messrs. Reece and Pleasants, analized it and stated it to be very inferior, in fact, comparatively worthless. The parties to whom it was consigned, demurred to these opinions, and the matter was referred to Dr. Stewart, of Baltimore, who analized it, and gave its value as *thirteen dollars per ton*.

Mapes says "the sweeping item of organic matter which is composed of *dried blood* * * has not been properly alluded to in giving value to its parts." The analysis—every one of them, Dr. Hayes' included—show most conclusively that the organic matter is *not* dried blood. It is the refuse scum of the sugar refiners, of which Mapes has *thousands of tons* on his farm.

From the Country Gentleman.

DWARF PEARS.

We have repeated and almost constant inquiries in relation to the value of the pear or quince stocks. "Are dwarf pears going to answer? Are they not a humbug? Are they as good as standards? Would you rather have a tree on pear or quince root?" These are some of the questions that are continually asked; and the conflicting answers that are given do not help to clear up the subject.

Yet it is a very simple one, and very easily understood when cleared of the fog which partial observers and interested persons have thrown around it. To say which is the best under all circumstances, would be like attempting to answer the question, "Do you think the watermelon as good as the strawberry?" Shall we not confine ourselves hereafter to the best of these two, and discard the other as a humbug?

Dwarf and standard pears are each excellent in their places. The standard pear, as a general rule, grows to be a much larger tree, requires more time, needs more room, ultimately bears much more per tree, will endure more neglect, and in most cases live to a greater age. The dwarf will come sooner into bearing, will occupy less space, and will not bear neglect, but requires good cultivation. We are not sure but the last quality is a positive recommendation; for planters certainly need the stimulus of necessity to induce them to take better care of their trees. A standard will indeed grow and bear under ordinary circumstances; but give it the best chance, and the fruit will be so much improved, as sometimes to be scarcely recognized. The dwarf is emphatically the tree for THE GARDEN, where two hundred may be planted on a quarter acre, instead of but twenty-five standards, and where no difficulty exists in giving them the best soil and treatment. Those who are about occupying new places, may secure for themselves a supply of fruit in two or three years by planting three year dwarfs: and pomologists may get the fruit of new kinds the first or second year.

One leading reason why some have pronounced

dwarfs a failure, is the attempt to raise *too many kinds* on the quince. There are a few sorts that are entirely at home on this stock, and are always seen in a flourishing state, under anything like favorable influences, among which sorts may be mentioned Louise Bonne of Jersey, Duchess of Angouleme, Glout Morceau, and Vicar of Wakefield, trees of which, twenty or thirty years old, are now productive and vigorous, and will probably live to a hundred. Some of these, and especially the Jersey and Wakefield, seem to grow well on almost any kind of quince. But all do best on the French stock, and this only should be used. The Angouleme appears to be the hardest dwarf under neglect. We have just examined an orchard of these, about nine years planted, which until the present year, had been almost totally neglected for five or six seasons, and enveloped in weeds and grass, and growing on a hard stony soil. The present season they have been cultivated but not manured, and they all show a thrifty appearance, and are bending under their loads of magnificent fruit. The trees are about two and a half to three inches in diameter, and stand erect, although allowed to run up as standards, with no pruning. They bore very little while neglected. As a proof of their superior hardiness, all or nearly all of those originally planted are flourishing, while other dwarfs, interspersed, have nearly all died out from neglect.

There are several sorts of the pear, that usually do well and live long on the quince, if enriched and cultivated annually, but not otherwise.

Partial experiments often lead to erroneous opinions. One acquaintance has denounced dwarfs, because, having an admirable soil (a strong clay) for standards and a very poor one for dwarfs, he has been eminently successful with the former, and failed with many of the latter. Some others have soils on which dwarfs only will succeed well, and they consider them as far preferable to standards. Seasons, also, sometimes have an important influence. Many years ago, a hard winter destroyed many young standards, while the dwarfs escaped. At a later period, another winter spoiled a portion of the dwarfs while the standards were uninjured. All these and many other considerations are to be observed in drawing general conclusions.

ALPACA, OR PERUVIAN SHEEP.

The following extracts are from a paper presented by Capt. James Pederson, to the United States Society:

Having recently returned from Peru, and brought with me to New York, some fine specimens of the several varieties of celebrated Peruvian sheep, and having, after much difficulty succeeded in devising means by which I am enabled to calculate on procuring from that country a sufficient stock of those valuable animals, to warrant an attempt to introduce them to the prominent notice of the agriculturists of the United States, I am desirous to call the attention of the U. S. Agricultural Society to the subject.

* * * * * * * *

The character and habits of these animals is very similar to that of our own sheep, or perhaps an amalgamation of them and of those of the domestic goat. They are gregarious, excessively gentle, and timid to a degree. One valuable quality they possess that deserves especial attention: wherever they are driven, *there* they remain for hours, or for days even, without wandering more than a few yards from the spot.

* * * * * * * *

An evidence of the high esteem in which these Alpacas are an addition to the domesticated animals, I may mention that in my searches in Peru to obtain them, I met an individual who is at this very time stationed upon a rancho on the border, but without the boundary of the country, where he is rearing them for the purpose of their export to Australia. And I found from him that he has made arrangements with the government of Australia for the sale of all the Alpacas that he sends there, at the rate of $60 a head, without, however, being restricted from finding a better market for them if he can do so: the sole object of the government being to procure the introduction of the animals into the country.

These animals are found in all parts of South America, upon the Pacific coast, from the Equator to about the twenty-fifth degree of south latitude, inhabiting principally the mountainous ranges; frequently at the height of twelve to fourteen thousand feet above the level of the sea; and in the region of continual mist and snow. It is not, however, in these intemperate regions alone that they find a congenial abode; on the contrary, they are found to prosper equally well on the middle elevations of the Andes, where in summer the clouds accumulated from the evaporations of the sea, are blown over and burst in torrents of which we can form but a faint idea. No change of temperature, appears however, to affect these interesting animals; and when to these considerations is added the circumstance, that in temper and docility they combine the intelligent vivacity of the deer tribe with the meek and confiding innocence of our own sheep, it appears impossible to conceive an animal better adapted in every point of view to form a valuable addition to our farms and homesteads. Such an animal would live and thrive where a sheep would starve.

[*Practical Farmer, Indiana.*

To the Editor of the Southern Planter:

As the club (and my wife) seem to think my experiment with sweet potatoes in '52, didn't prove anything, I concluded to try it again—only pushing it a little further; I dug them last fall, the 25th of November; they kept finely until the 20th of April, when we ate the last. My wife gives up that it is owing to late digging, and I think the club ought to, as it is the first time I ever knew her to give up any thing.

Respectfully submitted, by

———.

An Experiment in keeping Sweet Potatoes.

I have tried various ways to keep potatoes, have put them up in a cellar and kiln, both out and under shelter, but never succeeded preserving them longer than Christmas, until this winter. They were dug between the 20th and last of November, after many severe frosts and the day we dug the ground was frozen. We put them up in the same cellar we have always used, in the same manner, in barrels packed with pine beards, and they kept finely until time for planting in March.

Respectfully submitted to the club, by

May 11th, 1855. ———.

AGRICULTURAL WRITING AND READING.

There are some fifty agricultural papers in the United States, besides a large number of newspapers which either have agricultural editors, like the Louisville Journal and N. Y. Tribune, or copy freely from the rural periodicals of the day. The rapid growth of this kind of literature is one of the most auspicious signs of the times; for it indicates both an increase and an elevation of knowledge in the masses who own and cultivate the soil. That our agricultural writing is not all of the best quality, nor our agricultural reading entirely reliable, is plain enough to every well informed observer. Indeed, our defects are often so glaring with absurdity, and so injurious to the public, that one who really feels a deep interest in the character and permanent good of the rural literature of the country can hardly abstain from exposing and condemning some of the more mischievous errors with which the agricultural press everywhere teems. So far as the writer may attempt anything of the kind, it will be with no unkindly feeling, much less in a dogmatical spirit, but solely to prevent a departure from the true principles of the most important profession to be found in civilized nations.

The following remarks are taken from the June number of the New England Farmer, where they are commented upon approvingly by one of the clearest and best informed minds connected with the agricultural literature of the Northern States. The paragraphs are there ascribed to Prof. Mapes, of the Working Farmer:

"The chemist tells us, by analysis, that blood is composed of certain materials and water. All these materials exist in rocks, and may be separated from them.

"Now let us suppose ten square yards of soil to be fertilized by 10 lbs. of bullock's blood, and another ten square yards of soil to be fertilized by the constituents which analysis shows to exist in 10 lbs. of blood, and that these constituents shall not only undergo the greatest degree of mechanical division by grinding, but they shall absolutely be placed in solution, and applied to the soil, still, notwithstanding this great mechanical sub-division, the ten yards fertilized by the blood will yield double the amount of crop of that fertilized by the same constituents from the rocks.

"As another instance. Should we fertilize one piece of land with the bones of an animal, previously heated to redness, so as to drive off the gelatine, fatty matter, etc., and leave phosphate of lime only, dissolving it before its application in sulphuric acid, and should fertilize another similar piece of land with the same amount of phosphate of lime taken from the rocks as at the location at Dover, N. J., or Crown Point, Lake Champlain, and dissolve this also in sulphuric acid, we should find that the portion fertilized by the dissolved bones would yield a crop much larger than that arising from the use of dissolved phosphate from the rock.

"This gives rise to the question, Does matter, by its entering into animal and vegetable organisms, undergo any changes which are important for after-progression, but which changes are not discoverable by chemical test or microscopic investigation? All experiments seem to prove that isomeric compounds, although chemically alike so far as analysis is capable of discovering conditions, really do differ in their adaptability for appropriation in organic life, and thus the ingredients found in the blood or bone of an animal, between the time of its leaving the original rock and becoming blood or bone, may have occupied place in vegetable or animal life a thousand times, at each of which assimilation, growth, and decay, it may have been more fully suited for its present advanced purposes, and thus the phosphate of lime and other constituents of blood may differ in their applicability for re-appropriation, from the same materials in a less advanced state. We all know that when a plant or animal decays or is consumed in any way, that its ultimates pass back either to the soil or the atmosphere, and are re-united in some new organic form; no one particle is ever put out of existence—and may not this be the cause why many manures are to be found so much more effective than others of similar composition?

"All know that the ultimates contained in a green crop, when applied to the soil from original sources, will produce no such result as is consequent upon the plowing under of a green crop.

"We all know that nightsoil, urine of animals, stable manure, etc, produce effects in vegetable growth not to be arrived at by the use of the same constituents direct from the rocks."

The above reads smoothly and prettily; but whoever shall adopt the theory therein propounded, and act upon it in the preparation of manures, and the renovation of impoverished fields, will soon lose hundreds, if not thousands of dollars. It is based on no facts whatever. It rests solely on idle assertion; and this assertion on a vivid imagination, perhaps, quickened by pecuniary interest.

Where is the evidence that "Should we fertilize one piece of land with the bones of animals, previously heated to redness, so as to drive off the gelatine, fatty matter, etc., and leave phosphate of lime only, dissolving it before its application in sulphuric acid, and should fertilize another similar piece of land with the same amount of phosphate of lime taken from the rock, as at the location at Dover, N. J., or Crown Point, Lake Champlain, and dissolve this also in sulphuric acid, we should find that the portion fertilized by dissolved bones would yield a crop *much larger than that arising from the use of dissolved phosphate from the rock*"?

The above theory may be advantageous to one engaged in the manufacture of superphosphate of lime from calcined bones, or bones not calcined, in competition with others who make their superphosphate from the cheaper phosphate found at Dover and Crown Point. But is that fact a good and sufficient reason for its general promulgation by the agricultural press as a principle in agriculture?

It will be difficult to find a well-informed geologist who doubts the existence of vertebrated animals, and others which had sensible quantities of phosphate of lime in their organized tissues, on this planet, millions of years ago; and that from their first creation to the present moment they have never ceased to subsist on organized food containing atoms of phosphoric acid and lime. The same is true of atoms of water, (oxygen and hydrogen) atoms of carbon, (coal,) and atoms of nitrogen, sulphur, chlorine, potash, and other elementary constituents of plants and animals. How ridiculous, then, to assume, without the least proof or probability, that an atom of lime or water is constitutionally changed every time it perchance

e xists in the living cell of a plant or animal for a few days, weeks, or years? Who doubts that the Author of nature keeps the atoms of pure water and all the elements of things terrestrial, in the same unchanged purity?

What we earnestly desire is, to keep agricultural philosophers and would-be philosophers as closely as may be to the inductive system of reasoning. Let the critical reader, who knows something of the difference between solids and fluids, between combustible blood and incombustible rocks, weigh well the following propositions: "Let us suppose ten square yards of soil to be fertilized by 10 lbs. of bullocks blood, and another ten square yards of soil to be fertilized with the constituents which analysis shows to exist in 10 lbs. of blood, and that these constituents shall not only undergo the greatest degree of mechanical division by grinding, but they shall absolutely be placed in solution, and applied to the soil, still, notwithstanding this great mechanical subdivision, the ten yards fertilized with blood will yield double the amount of crop of that fertilized by the same constituents taken from the rocks."

Did not this humbug, like that of Signor Lattis, appear to make converts of really intelligent men, we should not notice it. But when this false doctrine is travelling over the country, as scientific gospel, may we not pertinently inquire, how Prof. Mapes will extract organized nitrogen (the most important fertilizing ingredient in blood) from any common "rock," after he has ground it as much as he pleases? Naked comminuted rocks form a barren earth, (we cannot call it *soil*) mainly because such rocks and earths lack the fertilizing atoms known to exist so largely in the "blood of bullocks." The case put is not, therefore, a supposible one, because the thing supposed is as impossible in fact, as it is unsound in theory. No scientific reader needs to be told that all elementary bodies, like iron, gold, lead, oxygen and carbon are minerals; or that vegetable vitality, under favorable circumstances, is able to combine and organise these minerals, (such as nature has adopted to the purpose) into the food of animals, man included. The agriculturist evinces his wisdom, or want of it, by the skill with which he uses all the minerals and organized elements of his crops and domesticated animals. This is the test of his scientific and professional attainments. That knowledge which is based on mere assertions in books or periodicals, may look well on *paper;* but you may believe one who has tried it, it will not *work* well in practice on the farm. We yield to no one in our profound regard for the due consideration of the conditions of elementary matter, whether solid, gaseous or liquid, soluble or insoluble, organized or disorganized; for all these ever-varying conditions are elements of power and wealth in the hands of those who know how to turn them to a profitable account. The close and careful study of *things* agricultural, is precisely what we contend for. It is equally unphilosophical and injurious to agricultural progress to make assertions like the following: "We *all know* that night soil, urine of animals, stable manure, etc., produce effects in vegetable growth not to be arirved at by the use of the same constituents direct from rocks."

Instead of suggesting the possibillty of extracting night soil, urine and stable manure "direct from rocks," how much better it would be to indicate the power of certain leguminous and other plants to imbibe the elements of these valuable fertilizers directly from the atmosphere and the subsoil for the use of the cultivator? In this way he may easily increase the aggregate quantity of organized food for man and beast on his farm, and also the materials for making an increased amount of rich manure. But plain, common sense facts of this kind leave not room enough for the full exercise of the imagination. It craves the light and shade of more pleasing abstractions—the impossible changes, from year to year, of the "ultimates of matter." It is, however, the part of wisdom to learn what is *knowable* and be content therewith, rather than neglect that, and dive out of sight into the abyss of the unconditioned."
—*Country Gentleman.* L.

For the Southern Planter.

In the July number of the Southern Planter is a letter from Dr. Baldwin, of Winchester, offering three premiums of one hundred dollars each, in accordance with the rules and regulations of the Virginia Agricultural Society. The first is 'a premium of one hundred dollars for any fact or facts, derived from experiment, which prove conclusively that woody fibre, in a state of decay, is the substance called humus.' What is the meaning of this offer? I may expose my ignorance, but I frankly confess I do not know. Johnson defines humus as 'a modern term given by some chemists to the very finely divided organic matters which all cultivated soils contain, and which is generally regarded as the chief element of fertility, the source from which all plants are directly nourished. Woody and vegetable fibre, in a state of decay, constitutes the substance called humus.' Dr. Dana says, 'the essential element of fertility in a soil has been called humus, geine, vegetable extract, mould, as well as several other names, all meaning a brownish black, powdery mass, the result of putrefactive decay and the remains of decomposed organic matter.' To these names may be added those of Sprengel, Barzellius, Leibig, Jackson and Ruffin, all giving the same name to the same substance. To this list of names I shall add that of Dr. B. himself; he says that 'wood, when properly putrified, makes good manure.' What is the difference between 'woody and vegetable fibre in a state of decay,' and 'wood in a state of putrefaction?' I would like the Doctor to answer, or does he consider that 'humus' is not 'good manure?' I would advise him to 'make good manure' by 'properly putrifying' some wood and he will certainly stand a fair chance for getting the premium himself.

His second offer is 'a premium of one hundred dollars for 'any fact or facts, derived from experiment or observation, which prove satisfactorily that any substance, whatever, possesses the fertilizing qualities of manure, except the residue of putrefaction.' What is meant by the term 'residue of putrefaction?' Is it that portion of decayed organic matters that becomes food for plants? Sulphate of lime cannot be considered the 'residue of putrifaction,' yet I have seen its application increase greatly the crop of both wheat and clover. Did it not possess 'fertilizing qualities?'

The third offer is 'a premium of one hundred dollars for any fact or facts, derived from experiment, which prove that the surface of the earth

itself is incapable of experiencing the putrifactive process.' It is unfortunate for the Doctor, or rather may be fortunate for his theory, that he is not sufficiently explicit to be perfectly understood. Does he mean by 'the surface of the earth,' both the organic and inorganic matters of which it is composed? If so, he is inconsistent with himself. In a former number of the Planter he says: 'If vegetable substances be ploughed under when saturated with water, the decomposition of the water will furnish the oxygen necessary, and manure will invariably be the result.' If this be true, and all experience proves it, where is the consistency of offering a premium to prove that which we know cannot be proven? But if he means only the inorganic matter in 'the surface of the earth,' then we can understand him, and I may say that I have never seen anything in my observation that leads me to suppose that the inorganic matters of the soil ever undergo the 'putrifactive process' at all. That they undergo decomposition, by which they are prepared to be assimilated by the growing plant, is doubtless true, and that this decomposition is accelerated by the presence of organic matter in the soil undergoing the 'putrifactive process,' is also certainly true; but while the 'putrifactive process' always follows decomposition in organic matters, it is not so with regard to inorganic; they never putrify. And were it not that my pecuniary means prevent it, I would offer to the Doctor a premium of $100, if he could prove by any facts, that the inorganic matters of the 'surface of the earth' undergo putrifaction, either with or without the presence of organic matters.

Dr. Baldwin appears to act upon the principle referred to by Wm. Cobbett, as sometimes practised by politicians, and that is 'that a lie stoutly maintained, is more effectual than the truth plainly told.' And while I most sincerely assure him I have not the least desire to charge him with falsehood, yet I may be permitted to say I consider his theory a false one, and he has again and again reiterated it, both north and south, and as far as known he has never once condescended to notice any objections or inconsistencies that have been pointed out by other writers against it. Why is this? Is he fearful he cannot maintain it by public discussion? Truth needs no concealment, and above all a Virginia farmer that stands deservedly high as an agriculturist, should studiously refrain from giving his experience along with his theory. It is something so unusual, and I may say inconsistent with Virginia generosity, and seems as if he wanted his brother farmers to bow down to his theory, without the why and the wherefore.

7th mo., 16th, 1855. YARDLEY TAYLOR.

From the address of Hon. M. P. Wilder, at the late meeting of the American Pomological Society, we take the following remarks:

There is but one other topic to which I will advert: the preservation and ripening of fruit.

Much progress has been made in this art within a few years, and important results have been attained. The principle has been settled that the ripening process can be controlled. Autumnal fruits have been kept and exhibited the succeeding spring. We have seen the Seckel, Bartlett, and Louise Bonne de Jersey pears, in perfection in January, and even later. The maturity of fruits depends on saccharine fermentation. This is followed by other fermentations, as the vinous and acetous. To prevent these, and preserve fruit in all its beauty, freshness and flavor, the temperature must be uniform, and kept below the degree at which the fermentation or the ripening process commences, especially summer pears. A summer pear ripened on the tree is generally inferior. In respect to the latter, Mr. Barry, editor of the Horticulturist, has so aptly expressed my own sentiments, that I use his language:

"The process of ripening on the tree, which is the natural one, seems to act upon the fruit for the benefit of the seed, as it tends to the formation of woody fibre and farina. When the fruit is removed from the tree at the very commencement of ripening, and placed in a still atmosphere, the natural process seems to be counteracted, and sugar and juice are elaborated, instead of fibre and farina. Thus, pears which become mealy and rot at the core when left on the tree to ripen, become juicy, melting and delicious when ripened in the house."

Various fruit houses have been built both in this country and in Europe, and experience shows that their object can be attained only by a perfect control of the temperature, moisture and light. Hence, they must be cool, with non-conducting walls, or with exterior and interior walls, or a room within a room. Thus the external atmosphere, which either starts the saccharine fermentation or conveys the agents which produce it, can be admitted or excluded at pleasure. It is possible, however, to preserve the temperature at so low a degree and for so long a time as to destroy, especially with some varieties of the pear, the vitality, and therefore all power ever to resume the ripening process. Experience proves that for the common varieties of the apple and pear about 40 degrees of Fahrenheit is the temperature best suited to hold this process in equilibrium.

The proper maturing of fruit thus preserved demands skill and science. Different varieties require different degrees of moisture and heat, according to the firmness of the skin, the texture of the flesh, and the natural activity of the juices. Thus, some varieties of the pear will ripen at a low temperature and in a comparatively dry atmosphere; while others, as the Easter Beurre, are improved by a warm and humid air.

Some varieties of the pear, ripening with difficulty, and formerly esteemed only second rate, are now pronounced of exeellent quality, because the art of maturing them is better understood.

But so many experiments have been tried, or are in progress, and so much has been written on this branch of our subject, that I need not enlarge except to say that the art of preserving and ripening fruit in perfection involves so much scientific knowledge as to require great attention and eare; and, until its laws are more fully developed, must be attended with considerable difficulty. I therefore commend it to your special attention, as second in importance only to the raising of new varieties.

Oat straw is best for filling of beds, and it is well to change it as often as once a year.

Cedar chests are best to keep flannels, for cloth moths are never found in them. Red cedar chips are good to keep in drawers, wardrobes, closets, trunks, &c., to keep out moths.

When clothes have aequired an unpleasant odor by being from the air, charcoal, laid in the folds, will soon remove it.

If black dresses have been stained, boil a handful of fig leaves in a quart of water, and reduee it to a pint. A sponge dipped in this liquid and rubbed upon them, will entirely remove stains from erapes, bombazines, &c.

In laying up furs for summer, lay a tallow candle in or near them, and danger from worms will be obviated.

CONTENTS OF NUMBER IX.

RICHMOND MARKETS, AUGUST 31, '55.

APPLES—Va. $5 per bbl. none in market.

BACON—City cured, none in market; Western Sides (new) held at 12½c., new Shoulders, 11½c., Hams, 12½a15 c., Smithfield hog round, 12½c. Queen City Hams, 13½.

BUTTER—Mountain 24 to 25 cts., Goshen 23a25 cts., old and inferior, 8a10½ cts.

BEESWAX—25½a26½ per lb.

COTTON—11½a12cts. per lb.

COTTON YARNS—17a18 cts., cash. Cotton Cordage 20 cts., per lb.

CORN—We quote 87½a90 cts., per bushel.

CORN MEAL—95ca$1.

COFFEE—Rio 10¾a11¾ cts, Laguyra 11½ cts., Java 15 c., Mocha 15½c.

FLOUR—We quote country superfine at $9a9 25 extra $9 50, family $10½a11. Stock very light and very little arriving.

FLAXSEED—We quote at $1 60a1 65 per bushel.

FEATHERS—Live geese 40 cts. per lb.

FISH—Herrings, N. C., cut, $7 a 7 25; Halifax, clipped, No. 1, $5 50; No. 2, $5. Shad—Last sales $9; Mackerel, No. 1, $21 per bbl., No. 2, $12 50, No. 3, small, $4 50a5, No. 4, $4 50a5, medium 5 50a6, large 9 25 a9 50.

GINSENG—25 cts., per lb.

GRASS SEEDS—Clover $8 per bushel, Timothy $4a4 50, Herds' Grass $1 25a1 50 per bushel.

GUANO—We quote $52 from wharf, $52 50 delivered, for Peruvian, Mexican Guano $30a$35.

GUNPOWDER—Dupont's and Hazard's Sporting, F, FF, and FFF, $4½, Blasting, $3a$3,50 per keg.

HOOP POLES—We quote at $7 per thousand.

HIDES—Slaughtered 6½ cents per lb., green weight; calf skins, green, $1. No Spanish Hides in market.

HAY—Sales from store $1 30.

IRON AND NAILS—Pig Iron, $30a$ 35, Swedes $107 50; English refined and Tredegar $95, Common English $80, American country $85. Cut Nails 4a4¼c.

LIQUORS—Brandy, Otard, Dupuy & Co. $3a5 per gal.; A. Seignette, $2 25a$4; Sazerac, $3 25a $4 50; Hennessey, $3 95a$5; Peach, scarce at $1 25a$2; Virginia Apple, 60c. a85c.; do. old, 75c.a$1 50; Northern do, 55a75c.; Imitation, 45a47½c. Rum, New England, 48c. Gin, Holland, $1,20a $1 75; American 45 cts.

LEAD—Pig 6¾a7¼c., cash and time.

LARD—Prime Lard, in bbls. 12c., scarce, in kegs, 13½a14, in pails, 14c.

LEATHER—Good stamp 22a25c., per lb., damaged 22c., poor 15a17c., upper leather $1 50a$3, as in size, weight and quality, the latter price only for superior heavy sides. Skirting and harness Leather is more plenty. with less demand. We quote 20 to 30c., as extremes, principally sales 22a26c.

LIME—$1 37 in store, $1 12½ from vessel.

MOLASSES—New Orleans 32a35c. per gallon. Cuba, 28. Porto Rico, 35.

OATS—Stock very light—sales at 40cts. per bush.

OFFAL—Bran, 15c. per bushel; shorts, 20c; brown stuff, 30c. shipstuff, 50c.

POTATOES—No demand for old and nothing doing.

PLASTER—Ground $9 per ton; calcined $2 50 per bbl.

RYE—$1 per bushel.

RICE—New 7¾ cts. per pound.

SALT—Liverpool fine $1 60 per sack from wharf.

SUGARS—Fair to strictly prime New Orleans 7¼ cts., Coffee Sugar 8a8¾, refined loaf 10¾a10½, crushed and powdered 9¾a10c.

SHOT—7½a7¾ cts. per lb.

TEAS—Imperial and Gunpowder 55c.a$1 20.

TOBACCO— We quote inferior lugs at $5a5 25; good and fine, $5 50a6 62; inferior leaf, $7a8; good, $9a10; fine shipping, $11a12,50a$13; fine manufacturing, $12a17.

WHEAT.—Arrivals pretty large—last week about 100,000 bushels and no falling off this. Prices have dropped a notch lower. We quote $1 80 to $1 85 for prime Red and White.

WINES—Port, Burgundy, $1a2,50, Port Juice $2,50a4, Madeira, Sicily, 45a$1,75 old Madeira, $2,50a4, Sherry, Permartin, Duff Gordon and, Amontilado, $2a6,50.

WOOD—Oak $3 50 per cord, $2a2 25 for Pine, retail $4 50 for Oak, $3a3 25 for Pine.

WOOL—Small parcels of tub-washed sold at 27c; Unwashed 18a19c. No sales of firm fleece made as yet.

BEEF—$3.50a4, per cwt. gross, which is $7a8 net.

HOGS—$8 per hundred, supply moderate.

SHEEP—Mutton sells for $2 50a5 a piece for ordinary and superior Sheep Lambs $2 a 3 50 each.

STOCKS.—Virginia 6 per cents, 34 years to run, last sales at the Treasury, $100; Virginia 6 per cents, 25 years time, sales at $99 and int.; Coupon Bonds of Virginia, $99 and int.; Bonds guarantied by the State, last sales at $96 and int.; Richmond City Bonds, 34 years to run, sales at 98 and int.; Virginia Bank Stock, par $70, sales $73; Farmers' Bank Stock, sales at 104½ dol.; Exchange Bank Stock, 105; Richmond, Fredericksburg and Potomac Railroad Stock, 95 dol.; Virginia Central Railroad Stock, 42 dol.; Richmond and Petersburg Railroad Stock, 50 dol Richmond and Danville Railroad Stock, 50 dol.; James River and Kanawha Stock, 13 dol.

PAYMENTS TO THE SOUTHERN PLANTER,

To the 28th of August, 1855.

All persons who have made payments early enough to be entered, and whose names do not appear in the following receipt list, are requested to give immediate notice of the omission, in order that the correction may be made in the next issue:

George W Carroll January 1857	2 00
N S Braden July 1856	2 00
A J Wise January 1856	1 00
W M Bowie July 1856	1 00
Dr D E Watson January 1857	3 00
Richard Irby July 1856	2 00
Ro Scott January 1856	2 00
W F Hobbs January 1856	1 00
Ro Douthat April 1856	1 00
John Hendrews Estate	1 75
Capt W M Thornton December 1855	1 00
J D Scarborough January 1856	3 00
John Tabb January 1858	4 00
Dr J P Tabb January 1856	1 00
J L Ganaway November 1856	1 00
H C Boyd July 1856	1 00
O C Fowler N. C.	1 00
E Carrington, July 1856	1 00
John George July 1855	1 00
J K Pitzer July 1855	2 00
G A Sinclair October 1856	2 00
T O Rowlett January 1857	1 00
James Whitehead January 1856	1 00
H Bynum July 1856	2 50
James T Jones January 1856	1 00
P A Blackburn July 1856	1 00
J D Makeley July 1856	1 00
E F Douglass September 1854	1 00
James S Yarborough April 1858	5 00
R F Hammon January 1856	1 00
Joseph H Rowlett January 1856	1 00
Capt J F Callaway January 1856	1 00
H F Bocock January 1856	1 00
John W Woodson January 1856	1 00
J R Warren January 1856	1 00
A Gills July 1856	1 00
Dr W L Wight January 1856	2 00
John D Christian January 1854	2 00
Joseph Segar January 1859	5 00
N B Massenburg January 1857	2 00
S M Harvey July 1856	1 00
J M Morriss September 1855, P J Vest January 1856, S B Henson January 1855, R H Fox July 1856, J M Vest, January 1856, Wm Michie January 1856, Col. W O Harris January 1856, B Kirtley January 1856, C Dickenson January 1856, W Reynolds September 1856, J O Claybrook January 1856, N Q Lipscomb January 1856, R M Graves January 1856, J D Smith July 1856, R S Ellis January 1856, Col J Woolfolk January 1856, P Boxley January 1856, R W Goodwin January 1856, D T Armstrong January 1856, W T Wright January 1856, A J Perkins Jan 1856, George Turner Feb 1856, D E Hickman Jan 1856, A C Vest Jan 1856, A W Talley Jan 1856, Dr F Perkins August 1855, Dr W W Beadles January 1856, R N Trice January 1856, A M Baker January 1856, A F Butler Jan 1856, Dr E F Ginter Jan 1856, B T Winston 1856 H W Jones Jan 1856, John R Quarles January 1856, W M Ambler January 1856, A T Goodwin January 1856, C G Coleman January 1856, D Anderson, jr. January 1856, G A Payne January 1856, T P Smith January 1856, J T Payne January 1856, M T Gooch, Louisa county, returned.	
A T Perkinson July 1856	1 00
A H Garnett July 1856	1 00
T W Atkinson July 1856	1 00
R P Cooke July 1856	1 00
J M Royster July 1856	1 00
James Stamper July 1856	1 00
B D Christman July 1856	1 00
Dr W J Seymour July 1856	1 00
W A Dandridge July 1856	1 00
W R Crump July 1856	1 00
James Chandler July 1856	1 00
John Sclater July 1856	1 00
J M Goddin July 1856	1 00
H D Vaiden July 1856	1 00
A V Scott July 1856	1 00
Dr E Powell	1 00
Jacob Morton June 1856	1 00
S H Hairston January 1856	1 00
Miss C Carver January 1856	1 00
Ro Whitehead January 1856	1 00
J Pamplin January 1857	2 00
J F Hite July 1856	1 00
James W Henry July 1856	1 00
A L Kelly July 1856	1 00
A Wren April 1855	1 00
Samuel Booker December 1855	1 00
W H C Reynolds July 1856	1 00
Dr J B Kirby July 1856	1 00
J A Bruce August 1856	1 00
W H Sizer July 1856	3 00
Judge P V Daniel January 1856	2 00
W B B Walker January 1855	1 00
Dr R T Jones May 1856	1 00
N Sherer July 1856	1 00
P Bosseau January 1857	1 00
Thomas Garland July 1855	1 00
J Horner September 1856	1 00
S B Atwell July 1856	1 00
G C Dickinson January 1856	1 00
John White January 1856	1 00
John A Mosby to April 1856	1 00
H St George Harris to July 1855	1 00

We very cheerfully insert the following explanation of our friend, Mr. Nelson, of Clark, in respect to his guano attachment. We beg leave to assure all who may not know him, but know us, that full faith and credit may be attached to every thing he says. He is incapable of intentional wrong of any sort:

THE subscriber, on a recent visit to some of the southern and middle counties of this State, has learned with surprise and regret that he is, by many persons, held responsible for the pernicious errors into which machinists have fallen, who have availed themselves of his invention for sowing guano with wheat by machinery, without adopting the proper principles of said invention. One gentleman, of very high standing in the State, estimated his loss on the last crop of wheat, from using a badly constructed drill and guano attachment at seven hundred dollars. Another gentlemen states that his loss on the crop of the same year from the same cause, was at least four hundred bushels of wheat. The subscriber was not aware that either of these gentlemen had ever owned a wheat drill or attachment at all. Other cases of serious failure from this cause have come to the knowledge of the subscriber, in which much blame has been imputed to him. He claims now, as ever, the full, entire and original invention of applying guano in this manner to grain, but he has no lot, part or interest in any drill or guano attachment manufactured north of Richmond, Va., and he hereby disclaims emphatically all responsibility, *present* or *future*, for all such implements. Unforeseen events have prevented his bringing out, this fall, a lot of drills and attachments, for the work and workmanship of which he would have held himself responsible to the purchasers. Of the success of this invention, carried out upon his own principles, experience has given him full assurance. In proof of this assertion he would adduce the result of his last crop of wheat. A portion of this crop was sown with a drill and attachment, as it came from the hands of a drill maker of high reputation. This part of the crop was much injured by bad sowing; the machine was then altered by a son of the subscriber under his supervision, and the remainder of the crop seeded with it.

The wheat sown after the alteration was, for the season and circumstances, the best ever produced on the same land since it has been owned by the subscriber. T. F. NELSON.

August 17th, 1855.