

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.

F. G. RUFFIN & N. AUGUST, PROP'RS.

VOL. XVI.

RICHMOND, SEPTEMBER, 1856.

No. 9.

FOURTH ANNUAL EXHIBITION  
OF THE  
VA. STATE AGRICULTURAL SOCIETY.

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## ORDER OF ARRANGEMENTS.

MONDAY, OCTOBER 27th.

1. Ladies who have been appointed Judges of Award, will be received at the Ladies' Tent, on the Fair grounds, by the Female Committee of Arrangements, and they will be aided by the Assistant Marshal in completing their organization.

2. All other Judges of Award will report themselves to the CHIEF MARSHAL at his tent on the grounds, who will aid the Committee in effecting their organization, as far as practicable, preparatory to the punctual discharge of their duties on the morning of the 28th.

3. Articles and Animals will be received, registered and arranged on the grounds, during the whole of the day.

TUESDAY, OCTOBER 28th.

1. The grounds will be opened for the admission of Officers, Judges and Members only, at 9 o'clock, A. M.

2. At the same hour the Judges will assemble. The Ladies at the place appointed for their reception, and the Gentlemen at the CHIEF MARSHAL'S tent, and answer to the call of their names. Those Committees, of which there shall be in attendance not less than three Members, will be considered as organized for business. The organization of others, having a less number present, will be postponed until after the second calling of the roll.

3. If, at the second calling of the roll, which shall not be deferred later than 11 o'clock, a quorum of the Judges in any department be not found present, it shall be competent for any Member of the Executive Committee, at the suggestion of the Assistant Marshal having charge of such department, to fill the existing vacancies by new appointments.

4. Books of Entries, and Form Books, in which to record their Awards, will be placed in the hands of each of the Committees at their organization, who shall thereupon proceed immediately to the discharge of their duties, *except as to the Judges on horses, whose duties will be postponed until the next day.*

WEDNESDAY, OCTOBER 29th.

1. The grounds will be opened to the public at 9 o'clock.

2. Members shall have free admittance on exhibiting either a certificate of life membership, a receipt for payment of the contribution for the current year, or the badge prescribed by the Executive Committee to designate members, which may be purchased of the Secretary at 25 cents.

3. The badges for life and for annual members shall be of different colors. The former shall have the word "Life Member" distinctly printed on it, and the latter "Member for 1856."

4. Tickets of admission, (at 25 cents each,) will be obtained at the ticket offices, near the entrance gates.

5. The Judges on Horses will proceed to the discharge of their duties. Each class proceeding agreeably to the order in which they shall be called for by the Chief Marshal.

THURSDAY, OCTOBER 30th.

1. The Fair grounds will continue open to the public through the day.

2. The ploughing match and trial of ploughs will take place at 10 o'clock, A. M.

3. The Judges will require for two horse ploughs, a depth of furrow not less than six inches; for three horse ploughs, not less than eight inches; and four horse ploughs, not less than ten inches, with such variations of depth as may seem best adapted to test by the dynamometer, their comparative lightness of draught.

FRIDAY, OCTOBER 31st.

At 10 o'clock, A. M., the reports of the Judges will be read from the stand, announcing the names of the successful competitors for the Premiums of the Society.

## INSTRUCTIONS TO THE JUDGES.

1. The Judges are requested to report themselves on Tuesday morning, at 9 o'clock. The Ladies to the Assistant Marshal at the tent provided for their reception. The Gentlemen to the CHIEF MARSHAL at his tent on the grounds.

2. The Committees of Judges under Branch II. of the Schedule, viz: "Essays and other Written Communications," are requested to meet in Richmond on Friday, the 24th of October, preceding the exhibition, in order to allow themselves full time to make careful examination of the communications to be referred to them.

The subject matter under Branch II. are expected to be of great importance and interest to the Society as well as to the agricultural community generally. They are, therefore, commended to the timely and special attention of the Judges.

3. The Judges are requested to observe particularly and to conform strictly to the general rules and regulations adopted by the Executive Committee, as well as to the "Special Rules," interspersed through the Schedule of Premiums.

4. Should any thing be exhibited to the Judges which they shall deem worthy of special attention, and for which no premium has been offered, they will furnish a certificate in the form printed and furnished for that purpose, which the Assistant Marshal of the department will present, together with the article, to the Committee on Discretionary Premiums.

5. *Live Stock.*—The Judges will be expected, in making their decisions, to have regard to the symmetry, early maturity, size and general



characteristics of the breeds to which they belong. They will make the proper allowances for age, feeding and other circumstances affecting the character of the animal. They are particularly required not to give encouragement to over-fed animals for breeding purposes.

Animals fed for the shambles shall not compete for premiums, except in their proper class.

Judges will report not only the animals entitled to premiums, but also those next in merit in each class, to meet the contingency of any objection which may arise to the awards. Any animals which, in the opinion of the Judges, deserve a special commendation, they are requested to report to the Executive Committee.

6. The Committee on Discretionary Premiums will consider such subjects only as are brought regularly before them by certificates as prescribed in article 4th of these instructions.


Form of certificate to be presented to the Committee on Discretionary Premiums, agreeably to the 4th article of the instructions to the Judges.

Mr. \_\_\_\_\_ has exhibited to the Judges on \_\_\_\_\_

\_\_\_\_\_ for which no premium has been offered. They deem it worthy of the attention of the Committee on Discretionary Premiums, and recommend it accordingly.

\_\_\_\_\_, Chairman.

## RULES AND REGULATIONS.

 The EXECUTIVE COMMITTEE will not be responsible to any exhibitor, that his articles will be examined by the Judges, who neglects or fails to comply with the requirements of the following regulations. While every effort will be made to secure the examination and proper notice of every article on exhibition, *justice to those who comply with the regulations of the Society requires that they shall, in all cases, first receive attention.*

1. Members of the Society will be furnished with badges at twenty-five cents, which will admit them, their wives, daughters, and sons under twenty-one years of age, to the grounds at all times during the exhibition. Members are requested to wear or exhibit their badges upon entering the grounds, or the Society's hall of meeting.

2. Exhibitors at the Fair—who may not be members of the Society—must become such, or else will be required to pay an entrance fee of three dollars to entitle them to the privileges of exhibition and admittance to the grounds.

3. All who intend to become exhibitors are earnestly requested to forward to the Secretary at Richmond, at least ten days before the exhibition, lists and descriptions of the animals or articles intended to be exhibited, in order that timely provision may be made for the arrange-

ment and accommodation of all such articles and animals.

4. All animals or articles intended for exhibition, will be registered at the Secretary's office, up to the close of the day on Friday, the 24th of October, and thereafter at the business offices on the show grounds until the close of the day on Monday, the 27th.

Duplicate cards, descriptive of the animal or article entered, will be issued, one of which will be attached to, or placed near the subject of exhibition—the other be retained by the exhibitor until the close of the exhibition, and then, if for live stock or poultry, shall be returned to the Forage Master, who shall, upon receiving payment for grain furnished, grant him a permit to withdraw the same from the grounds, or if for any other article, then to be returned to the Assistant Marshal having charge of the department to which the article belongs, who shall thereupon allow the same to be withdrawn from the grounds.

5. Nothing will be allowed to enter the grounds which shall not have been previously registered, nor will any animal or article be received later than 9 o'clock on Tuesday morning, the 30th of October.

6. No animal or article entered for exhibition can be taken away before the close of the Fair, except by permission of the President, to be granted only for such special cause assigned as he may deem sufficient to justify a suspension of this rule. No premium will be paid on any articles or animals removed in violation thereof.

7. On Tuesday, the first day of the Exhibition, none but members of the Society and their families will be admitted, in order that the Judges may not be incommoded by a crowd whilst viewing the subjects of exhibition.

8. On and after Wednesday, 9 o'clock, A. M., the public will be admitted to the grounds. An entrance fee of twenty-five cents will be charged for persons not entitled to badges of free admittance; and for children under twelve years of age, (under protection of their parents or others,) half price.

9. Agricultural Societies of other States, and sister Societies within this State, are invited to send delegates to the Fair. Such delegates will be furnished with badges and admitted free.

10. The Executive Committee will take every precaution for the safe keeping of articles exhibited, but will not be responsible for loss or damage that may occur during the Fair, unless such loss occur clearly from want of due care on the part of the Society's officers, agents or servants. Exhibitors are, therefore, requested to give attention to their articles.

11. The Chief Marshal will call the Judges at 9 o'clock on Tuesday morning—furnish them with the printed lists of premiums, (one to each committee, when organized,) with the books of entries of animals or articles in their depart-

ments, and also with blank books in which to register their awards, and have the Judges conducted by the Assistant Marshals to their respective departments of the exhibition.

12. The Marshal and his aids shall give particular attention to the proper arrangement of all articles exhibited in their respective departments; point out the articles or animals to the Judges, and otherwise facilitate the examination by the Judges.

13. All productions of the soil placed in competition for premiums, must have been cultivated and grown by the competitors, unless it is claimed that it is a new product or a new and valuable variety of one already cultivated.

14. Hay and straw will be furnished, without charge, for all animals entered for premiums, and grain will be provided on the grounds, to be supplied to exhibitors at cost and expenses.

15. No person will be allowed to interfere with the Judges whilst examining and comparing animals and articles submitted for their adjudication. Any competitor so doing, with intent to influence the decision of the Judges, shall be excluded from receiving a premium. Competitors will, nevertheless, be at liberty to communicate freely to the Judges any information which they may think proper to ask for.

#### STANDING RULES IN REGARD TO PREMIUMS.

1. As required by the Constitution of the Virginia State Agricultural Society, the premiums to be awarded "shall be, in all cases, such as are likely to benefit agriculture, horticulture, or the auxiliary mining and mechanic arts."

2. The decisions of the Judges of awards, as to the merits of subjects will be respected as final in every exercise of their legitimate authority. But any awards made contrary to the requirements of the rules for directing and restricting premiums, claimants, or awards, will be disregarded or reversed by the Executive Committee.

3. No subject, (whether animal, implement, writing, or other,) for which a premium or honor is offered shall be deemed entitled to either, though being the best, or the second best, of all of the kind offered, unless such article is deemed by the Judges of sufficient merit to deserve such reward.

4. Any animal, machine, or utensil, which shall have had a premium awarded to it once, as being the best of its kind exhibited, shall not thereby be debarred from claiming and obtaining the like distinction, so long as the particular subject shall still be deemed the best at subsequent exhibitions of the Society. But in such cases, after two premiums, in different years, may have been awarded to the same subject, any subsequent honor to the same shall be a testimonial only of its continued superiority.

No other subjects except the above named shall obtain a premium more than once.

5. The kind of admissible testimony in the case of farming, crops, experiments, &c., can not be described in advance. The committees for examining claims for premiums on subjects of this class, must judge of the value of the testimony offered, as well as of the value of the claim in other respects. As no other witness is usually available in such cases, the claimant must testify in his own case, unless he has obtained and prefers to offer the testimony of others also.

6. No one subject shall receive two premiums, by the awards of different committees of Judges, at the same Fair—unless when one of the premiums was offered expressly as additional.

7. All written communications (unless reports of experiments not then completed,) must be sent in to the Secretary of the Executive Committee at least two weeks before the annual meeting and Fair of the Society.

8. All articles offered for premiums, other than communications in writing, if not on the ground on the day preceding the day for the first action of the Judges, may be passed over. All reports of the awards of Judges, to be valid, must be delivered to the Executive Committee, for examination, by the afternoon preceding the day for announcing the awards of premiums.

9. When two subjects, of the same kind, presented for premiums, are deemed by the Judges of equal merit, and also of such high degree that to either, if alone, the premium would be awarded, in such case, the award must be to divide the premium between the two competitors.

10. In all cases the parties entitled to premiums may receive them, according to their own election, either in money or its equivalent in silver plate, bearing an inscription representing the particular subject for which the same shall have been awarded. Provided that no such inscribed plate shall be given, in lieu of money, if the premium is of less value than ten dollars.

#### MACHINE FOR HUSKING CORN.

Oren Stodard, of Busti, N. Y., has obtained a patent for a machine for husking corn. The ears of corn are pushed down by an attendant between a pair of rollers having raised stumps of rubber upon them. The rollers rotate in a direction contrary to that in which the ears are pushed and serve to strip off the husk. The but, or stalk part of the ear, is cut off by means of a knife, which comes in play as soon as the ear passes the rollers. The husks are discharged at one place, and the clean ears at another.

**GEOLOGY.**—Geology supplies us the medals of the past; the world's history is written on stones; link by link we unite the chain which assures us of a Divine architect.



## MEDITERRANEAN WHEAT.

We wish we were at liberty to give the name of the author of the following interesting and practical letter on the subject of wheat. Our readers must take our word for it that our friend is a gentleman who illustrates his sound judgment by practical success in farming. We can only say for ourselves, that having sought his opinions for our own private use, we mean to act on them so far as to sow one-third of our land in Mediterranean wheat.

It will be remembered that we published some time ago a letter from our former neighbor and much esteemed friend, Dr. Merriwether, of Albemarle, to the precise purport of the present extract. We commend a re-perusal of that letter along with this to all who expect to suffer from fly and Joint worm, or chinch bug:

August 1, 1856.

DEAR SIR—When I received your letter of the 18th July, asking me to give you my experience in the cultivation of Mediterranean wheat, I had just commenced threshing out a field of one hundred acres of it, and have postponed a reply to your letter until I could ascertain the result. I am much disappointed in the product. While other kinds of wheat of this crop have yielded very well, this field which from its growth of straw I had estimated would produce at least eighteen bushels per acre has yielded only about thirteen bushels. The field is an outlying one, of cold, stiff land, recovered a few years ago from briars and broomstraw, but brought into good condition in fallow, and sown from 30th August to 3d September with  $1\frac{1}{2}$  bushels Mediterranean wheat per acre, about 200 pounds Peruvian guano ploughed in with the fallow plough. The yield is not positively so bad for the land as unequal to its promising growth of straw at harvest.

My neighbours who are threshing find the comparative yield equally bad, and I think are generally disposed to abandon the cultivation of it. I am much at a loss to account for this bad yield, and suppose that it may have been injured in the bloom by a frost which we had about the 30th May, which killed some corn and tender vegetables in the garden. Since I commenced the cultivation of this wheat in 1843, I have had two crops of it seriously injured by Spring frosts after it had jointed, and this is one of our greatest dangers in sowing very forward wheats and very early sowing. I have heretofore found some important advantages in the cultivation of this wheat, and shall sow this fall fifty bushels of it about the 1st September, with Timothy on cold, stiff land, suitable for meadow, and on this kind of land I think it will produce as much as any other kind of wheat with less liability to injury from rust and win-

ter freezing; and with the great advantage of sowing Timothy and other grass seeds with it early in September, which I have found necessary to success. On dry soils, sandy or red clays, I have not found this wheat to succeed. To your inquiry "as to the time at which I know by experience this wheat may be sown without danger from fly," I can reply with confidence that I have repeatedly sown it about the 1st September without sustaining the least injury from fly, though it may be sometimes found in it. I would not sow earlier than the 1st September, because before that time we often have severe droughts to prevent the seed from germinating, and a hot sun unfavorable to the growth of the young plant. You inquire whether I have found full grazing necessary to success? I have never thought it safe to cripple or retard the growth wheat intended to produce a very early crop in any way, as our fall seasons are too short. On lower James river where the fall season is longer and the winter more mild, the practice might be judicious.

There are other advantages in our system of farming and grazing in the cultivation of early sown Mediterranean wheat. We cut up our corn and put it in shocks about the time that you commence pulling fodder or a little later. This we can seldom begin before the 10th September, before which time a field may be sown with Mediterranean, well drained, and put in perfect order before our farm work becomes pressing, and we are enabled to get our whole crop of wheat sown early in October, which all wheat growers with us now deem of great importance to success. At harvest, this is harvested before other wheats are ripe, being three or four days earlier than the early P. Straw and a week earlier than any other kind of wheat.

While I cultivated this wheat, from the years 1843 to 1848, as a regular part of my crop, I had good growths of Blue Stem and other late wheats almost ruined by rust year after year, while the Mediterranean, then as now, always having the worst wheat soils assigned to it, was little affected by rust, and produced fair average crops. For the last five or six years we have had little rust, and the late wheats have produced well, which I attribute in part to the general use of guano which hastens the maturity of the wheat, and which alone induces me to continue the use of it at present high prices. In 1853 our great enemy from Albemarle, the Joint worm, began to show itself among us. The late wheat seemed to be most injured by it, and the Mediterranean to get into head before the Joint worm had deposited its egg. I had that fall a stubble fallow field of 145 acres sown in wheat, 45 acres of the most inferior land, (except a few acres of bulk flat,) in the field sown with eighty-three bushels Mediterranean from 29th to 31st August, and 105 acres of the best wheat land in the field sown from 23d September to 20th October with 151 bushels Poland and Moravian wheat, chiefly the former, about

150 pounds guano per acre over the whole field, fallowed in with large ploughs.

45 acres Mediterranean yielded 1,040 bushels, about 23 bushels per acre.  
105 acres Poland and Moravian yielded 1,123 bushels, about 10 $\frac{3}{4}$  bushels per acre.

The Poland and Moravian wheats were greatly injured by Joint worm, and the Mediterranean sustained but little injury from it. Encouraged by this experiment in 1854, I sowed a stubble fallow field of the best wheat land I have, about one-half low grounds, say 97 acres, with 182 bushels Mediterranean wheat from 24th to 29th August, ploughing in with the fallow ploughs an average of 150 pounds guano to the acre, in unequal quantities, according to the quality of the land. This crop which was somewhat injured by a hail storm, lodged and harvested in bad weather, with great loss from shattering, produced 2,618 bushels—over 26 bushels per acre in 1855. No part of our crop was much injured by joint worm, and the general yield of wheat in the neighborhood was good—my own about 22 bushels average on 250 acres. The quality of the land in Mediterranean was very good, and may it not be a question whether with any kind of wheat forced by guano on poor soils the produce of grain will be in proportion to growth of straw.

The Joint worm seems now to have passed over our county, appearing this year only in spots and doing no material injury. The rust, fly, joint worm and other pests, like epidemic diseases in the human family, seem to return and prevail on cycles of years, and whenever any one of these shall come back upon us, I shall return again to the cultivation of Mediterranean as the hardest to resist them of any wheat that I know. It seems now, in some degree, to have undergone that mysterious process of running out in productiveness which all other kinds have done in succession after a few years cultivation. At least this is the popular opinion, and it appears to me to be a subject worthy of careful investigation both as to its truth and the remedy for it.

We are also much perplexed by the careless practice of farmers in giving new names to old varieties, and we have now several kinds in cultivation with various names in different localities. There is another subject to which I think you might profitably call the attention of wheat growers in your paper. The adaptation of different varieties to various soils. I have myself been baffled in obtaining any certain results from the variable character of our Spring weather in May and June, sometimes very wet and in other years dry—the first affecting the formation of grain at the time of blooming, and the last its plumpness in filling—so that a few days change will sometimes make an early or late variety which had been very productive in one season, a failure in another.

## CULTIVATION OF WHEAT.

MARCH, 1856.

GEO. C. GILMER, Esq.

*Dear Sir*:—I agree with you that there is scarcely a farmer who does not know something which, if generally known, might benefit the mass, and I am therefore induced to communicate to you the system pursued by me in the cultivation of wheat. You say that experiments are expensive and always troublesome. As a general thing I agree with you, but the gentleman you mention, who from the use of a bushel of lime to an acre, kept off the joint worm and fly with good effect, and my system of wheat growing, may, I think, be regarded as exceptions to the rule, so far at least as expenses are incurred. My practice in the culture of wheat, was to steep or rather manure the seed before sowing with nitre (saltpetre) and lime, alone sometimes and sometimes with lime and ashes mixed, plaster and ashes mixed, or unleached ashes alone, just as I had or could obtain the articles, if not, I preferred unleached ashes alone. I pursued the practice for many years, with the most beneficial results, a visible and striking instance of its benefits occurred with me in the year 1846. I had purchased some land which had been under tenure for many years, and so badly farmed that it was said to be worn out. One field immediately on a public road contained a flat knoll, composed of a light grey colored soil, in character it might be said to be an impalpable powder, it ran together during the winter season, and had a soft soap appearance on the surface, so poor that it would produce nothing scarcely. I sowed the field in wheat and some time after it came up, a Dutch neighbor of mine who passed the field almost daily for years, and had always observed this particular spot containing about an acre, remarked to me that I must possess some secret in sowing wheat, that he knew I had not manured that particular spot, and yet the wheat looked as well upon it as upon the other part of the field, and that I must have hoaxed the land to make wheat grow upon land that he had never seen any grow on before. I at once communicated to him all I had done, and advised him to use the same process and he could raise wheat on his land as well as I did, but as you remarked, experiments are troublesome and expensive, and he did not adopt it, sold out in a few years and moved to the west. So it is with most farmers, you cannot induce them to deviate from the old beaten track of their fathers, and therefore they do not succeed. The succeeding year I used upon another field of the same farm bone dust. I had sowed about 3 $\frac{1}{2}$  to 4 bushels to the acre on a part of it, (about half the proper quantity,) my neighbours kept a watchful eye upon its effect up to harvest, and perceiving but little difference between the growth of the part sown with the bone dust, and the other part of the field, condemned the experiment as expensive and useless. It was not so,



however, when harvest came on the straw of the bone dust part was bright and clear, while the straw on the other part of the field was badly struck with red rust, and upon examination the heads of the wheat (Mediterranean) contained pretty generally three grains a breast, while the other part contained but two. The field was sown in clover, the bone dust part produced double the quantity of hay, and to this day its effects are visible in all the crops which have been grown upon it. When the phosphate of lime is deficient in the soil, it is the most valuable fertilizer you can use. It is, however; an expensive manure at the commencement, but when its lasting effects are taken into consideration it is cheap, because it saves the trouble of repetition. Not so however with guano—I am no advocate for its use, except upon very poor light and slaty soils, where nothing will grow without its stimulating effects. Upon lands of that kind it enables you to set them in grass. It is too expensive, evanescent in its effects, flashing off with the first year's crop.

When your ground is prepared and you are ready to commence seeding, take a tight hog's-head that will contain 8 to 10 or 12 bushels, fill it with wheat, then for every bushel it contains take one pound of saltpetre (the crude will answer) for each bushel, dissolve it with boiling water, using a gallon to about six pounds in a watering pot, and sprinkle about one-third of it upon the wheat; in ten or fifteen minutes another third, and at an interval of about the same time the balance, keep it hot or warm all the time, for it will crystalize if it becomes cold, and if it is put in all at the same time it percolates or runs to the bottom of the hog's-head too soon, and you will find it there instead of being absorbed by the wheat as it passes down slowly. As soon as you have put it all on the wheat, spread upon your barn floor, your lime, plaster or ashes, alone or mixed, a quantity about an inch in thickness, and of sufficient area to receive upon it the half or less of the wet wheat, and with a shovel mix them together thoroughly; as soon as it is mixed, shovel into bags, take it to the field and sow it immediately while the mixture adheres to the wheat, and harrow it in as fast as sown, and unless your ground is very moist, (and even then it is better,) follow with a heavy roller to condense the ground.

My opinion is that the success of a good crop depends as much upon a good start as a horse race, and is it not reasonable that any thing which will promote a vigorous and healthy start will be most likely to produce a healthy and robust constitution. The process of preparation is simple and cheap, not costing much over 12½ cents per acre, when saltpetre can be bought at 5½ cents, which I paid for it by the keg in Baltimore. It is now advanced, in consequence of the war in the Crimea, to about double that price, but still is cheap enough to be used for that purpose.

INCOGNITO.

INGLEWOOD, near Carter's Bridge, }  
Albemarle County, Va. }

F. G. RUFFIN, Esq.

Dear Sir:—Enclosed I send you a copy of a letter written to me by a friend, for my own benefit, who does not wish to appear in the papers. This I very much regret, as I am of the opinion any article has more weight or influence when over the name and whereabouts of the author, who can be looked after, and his experiments investigated by any one who may wish to follow in his footsteps. But so it is, and we farmers must be thankful for hints, experiments &c. from any and every source from which they may be kindly sent, for most truly we are in great need of these experiments. Some time since I sent an article to your paper from Ex-Farmer of Berkeley. Some had no faith in it, because they could not know the author. Many thought highly of it, yet I do not know any one who followed his advice but myself. I thought I saw much sense in it, and gave it a fair trial and am well pleased with the results. The experiment was made upon my Buckyceland farm on the left hand side of the main road leading from the creek to the mill race, and up that—about three acres. Its results are so clear that I think a blind man could tell by walking over it where the experiment stopped. Now I did not know who Ex-F. of Berkeley was, nor do I now know, I wish I did; yet, I thought I saw sense in the thing; tried it, and am satisfied if I had known it the fall before, it would have saved me much in cash and time. Now you nor the farmers can know who Incognito is, yet read it and if you can see any good in it give it to the people, and if they see any good in it they may so easily test it. I think there is some good in it and shall try it, and will give out the results whether good or bad. It will cost but little cash, but I fear more faith than many will find to try it, while I cannot give either the name nor whereabouts of Incognito, I would endorse him as soon or sooner than I would have Ex-F. of Berkeley. I wrote an article on my experiments with lime upon guanoed wheat made last January and February, twelve months, and of my entire satisfaction with its results. Yet how few have tried it, tis true this has been a bad spring for any experiments, (so backward in work of all kinds) yet my faith was so great I have used upon my present crop of wheat this month 282 bushels of lime, of the result I'll inform you in due time. This lime was applied by the hand, it is a disagreeable work. Can a good lime spreader be had which can be relied upon. If so I think several might be sold in this neighborhood, as the lime fever has risen sufficiently high to tempt four of us to test its power upon our lands and crops; and if it succeeds up to our hopes we shall extend our use of it so much as to be compelled to use a machine for speed.

Yours truly,

GEO. C. GILMER.

## HARVESTING WHEAT.

WHITE POST P. O., Clarke Co., Va. }  
August 16, 1856. }

*Mr. Editor*—My attention being drawn to a communication in the August number of the Planter, under the head of "Harvesting Wheat," which is correct to a letter, I am induced from experience in harvesting in every way known in this blessed country of ours to communicate an improved method which makes hay and wheat harvest comparatively easy, and certainly less vexatious on account of trifling cradlers, and the universal disposition on the part of harvest hands, whether hiring or not, to prolong the operation as long as possible. In this portion of the State, the desire to prolong harvest is not so much to be wondered at, when we reflect that harvest is in fact a frolic; every one feeds liberally of every thing that their farms produce, and in addition they have coffee twice a day, pies, &c. at dinner, and with the exception of a few straggling "Sons of Temperance," they are allowed spirits twice a day. After resting an hour or two at night, if they desire, it they are not prevented from enjoying a dance, and at such times they are beyond a doubt the happiest portion of creation.

The improved method alluded to is Manny's Reaper and Mower combined, with Wood's improvement. With two of these reapers, I cut the past harvest, between 250 and 300 acres of wheat, oats and grass. And after the horses (two to each machine) were practiced by myself and servant a little, my two sons, one 14 years of age, and the other only 11, cut my entire wheat and oat crop. The grass, about 70 acres, was cut in three days and a half before harvest, and before the boys left school. In a field of sixty acres of heavy wheat, ten binders did not keep up. The weather was hot and on all low situations the wheat was either leaning, tangled or lodged. Including all interruptions while in this field, the machines averaged twelve acres each per day, and the work was pronounced as being perfectly done. With such a machine the farmer governs his harvest, decides when it is necessary to stop, does his own whetting with a mill saw file once in 1, 2 or 3 days, as he may think necessary, and even then it may be done between 12 and 2 o'clock in the day, while the horses are feeding, or between dusk in the evening and sun rise the next morning.

If the ground be favorable and wheat good (for the machine will do more in good than light wheat) the machine will cut one acre and a half per hour. This machine I have found will cut short wheat, oats or grass better than a cradle or scythe. If the grain or grass has sufficient length to fall over the head of the machine which is flat, and only about 2½ inches thick, it will shave every stalk. By harvesting in this way the most inferior hand is made to do the work of four of the best cradlers, and the able-bodied cradlers do the binding and shocking,

and the farmer follows after the takers up and sees that all is nice and clean. By giving one or two machines (as the case may be,) half a day's start, the binders may be kept abreast which they much prefer—let the water cart follow, and there is necessarily no lost time. Laying aside the pecuniary saving and the satisfaction to the farmer to know that he has the means within himself of cutting his own harvest. I think that feelings of humanity for the laboring class should induce those who can to purchase such implements. In future I shall be content to grow as much wheat as my little boys can cut in twelve working days. My past wheat harvest was secured in eleven days.

Would it not be something to brag of if Virginia could say that the great grand sons (little boys) of the participators in the Revolution, now cut all the wheat grown in the State.

J. J. HITE.

## GEN. J. H. COCKE'S WHEAT CROP.

BREMO, Aug. 11, 1856.

*Mr. Ruffin, Editor of So. Planter.*

DEAR SIR—My wheat crop having attracted the notice of travellers on the canal, in the valley of James river, it may be interesting to such as observed its promising appearance to know how it is turning out.

Two measured acres, separately threshed, cleared and measured, has yielded eighty-one bushels.

Two other acres from another part of the same field has yielded seventy-five bushels.

These acres were taken with the view of getting a fair average of the whole field of seventy-five acres—all bottom land of James river, and fallowed in August and first week in September with four horse ploughs, seeded first week in October, two bushels and one gallon to the acre—one-half guanoed at the rate of 200 pounds to the acre, and the other half limed at the rate of 50 bushels to the acre.

The above turn out was from the guanoed portion. From all appearances, the portion limed was judged to be equal, but as the crop from this is not yet all threshed, I have not been able to make a comparison between them. Should the result show any difference worth your notice, I may communicate it in future.

Respectfully yours,

JOHN H. COCKE.

## USE OF PHOSPHATES ON CLOVER AND PEAS.

ROCHESTER, N. Y., April 21, 1856.

I would willingly answer the inquiries of your correspondent and of yourself, but I have really nothing worth communicating.

So far as my experience goes, though superphosphate of lime does *more* good on clover and the common pea than on wheat; yet it will not pay to use it, at present prices, on these crops.



On very poor soils, or soils that will not produce more than 5 or 8 bushels of wheat per acre, its effect on clover and peas may be sufficient to make its use profitable; but even in this case, I should prefer to use Peruvian guano, for this reason: Soils which have been impoverished by the growth of cereals, are quite as destitute of ammonia as of phosphoric acid, and Peruvian guano furnishes a large quantity of ammonia, and some 25 per cent. of phosphate of lime in addition. In proportion to the requirements of the wheat plant, Peruvian guano furnishes more phosphoric acid than ammonia. That is to say, if a crop of wheat is manured with Peruvian guano, the ammonia is all used up the first year; but there will be more or less phosphoric acid left in the soil for the next crop. Instead, then, of purchasing superphosphate of lime, in order to supply the clover and pea crops with phosphoric acid, I should prefer to manure the wheat crop with Peruvian guano, and seed it down with clover; the phosphoric acid remaining in the soil, from the previous dressing of guano, would be available for the clover crop, and increase its growth.

Another argument against the use of superphosphate of lime is found in the fact, that the commercial articles sold under that name are generally very far short of what a good superphosphate of lime should be. For instance, in England, a superphosphate of lime, warranted to contain 18 per cent. of soluble superphosphate of lime, is sold for about \$30 per ton; while here, one of the most popular superphosphates contains, according to the analysis of Dr. STEWART of Baltimore, only 3 per cent. of soluble superphosphate of lime. That is to say, the English article contains six times as much superphosphate of lime as the American manure. The analysis was made for the manufacturer, and published by him in his circular; and it may reasonably be presumed, therefore, that it fairly represents the value of the article. This superphosphate, we believe, is sold at \$45 or \$50 per ton. Even if it would pay, therefore, to use a good superphosphate of lime for the purpose of furnishing the clover, or pea plant, with available phosphoric acid, it does not follow that it would be profitable to use the superphosphates now found in our markets. It is quite certain that the superphosphate we have referred to, would be a very dear source of available phosphoric acid, either for clover, peas, or wheat. It is equally certain that 100 lbs. of Peruvian guano would furnish more available phosphoric acid to the plants the first season than such a superphosphate, and in addition some 15 lbs. of ammonia—unquestionably the most expensive ingredient in all fertilizers.

Superphosphate of lime, however, can be manufactured and sold so as to afford soluble phosphates at a much cheaper rate than any other source open to the farmer. It would be well, therefore, for farmers, or for our Agricultural Societies, to institute a series of experi-

ments in order to ascertain what effect soluble phosphates have upon the pea, clover, &c., on the impoverished soils of the Atlantic slope. We may theorize on the subject, but actual trials alone can throw any satisfactory light on the subject.

May I be allowed to say to you, sir, that the Virginia State Agricultural Society could not expend a hundred dollars where it could do more for the advancement of agricultural science, than in offering a premium for experiments on the cow-pea, clover, &c., somewhat similar to those on corn, for which the New York State Agricultural Society have recently offered a premium of \$175.

I remain, with great respect, yours truly,

J. H.

F. G. RUFFIN, Esq.

#### DISEASE IN CHICKENS.

SIRS—In your August number a subscriber inquires of you or some of your subscribers for a remedy for a disease which has prevailed more or less amongst his fowls since 1848. From the description he gives of the disease, I am well satisfied I know what it is; but know of no remedy and believe there is none, as they are poisoned either accidentally and designedly with salt, either in water or food; it will kill all kinds of domestic fowls in two or three days. You can make this fact known to your Spottsylvania subscriber.

Yours, &c.,

EDWIN EDMUNDS.

August 13, 1856.

#### FREE ACID IN SOILS.

We have, on several occasions, attempted to neutralize this common notion about "uncombined free acid" in soils. Hear, however, what the *New England Farmer*—one of our ablest and most intelligent exchanges—says: "The presence of free uncombined acids in the soil, affords one of the most insuperable barriers to successful and profitable culture, by which the efforts of the farmer can possibly be opposed." "On all lands where there is a growth of red sorrel, acids of some kind abound, in a free and uncombined state, and it is only by adopting some emendatory powers of culture, or by the application of neutralizing substances, such as lime, ashes, &c., that they can ever be rendered fertile in the production of valuable crops."

This is very strongly put. These acids afford "the most insuperable barriers to successful culture." Then the "red sorrel" always shows that "acids of some kind abound, in a free and uncombined state," and is a certain sign of an "insu-

perable barrier" to improvement or successful culture. This "red sorrel" is one of the most familiar native plants, growing every where. Every body knows what it is—and we put the question to every intelligent man,—does he really consider this plant the indication of an "insuperable barrier," or any sort of a barrier to the improvement of his land? How does the writer know that these "free acids," he speaks of, exist in the soil? Then does he infer, from the growth of the gooseberry and the currant, that free acids are present, and will lime change the character of these fruits, or by neutralizing the "free acids" deprive the plants of their proper food, and so destroy them? Does an apple tree which bears sour fruit indicate acid in the soil, and will one bearing a fruit of entirely different character not grow along side of it until the acid is neutralized? The absurdity of the idea is here apparent, yet we hear continually of this bug-bear of "free acids" as an "insuperable barrier" to "successful culture," and of the "red sorrel" as its certain index. Put the lime on to neutralize the acid, and *presto* the "sorrel" disappears, and all good things will grow at once.

The writer has a direct personal acquaintance with this plant, from the days that he rolled on the green sward and ate grass like Nebuchadnezzar; chewing up with a *gusto* the little-pointed, pleasantly acid leaves of this "sheep sorrel," as he always called it. When he commenced reading agricultural publications he imbibed these theories about "free acids," and the necessity of neutralizing them, and practiced upon them to his cost; and now, after many years of experience in the cultivation of such soils, he not only thinks but *knows* that the "red sorrel" is not an indication of "free acids," as they are called, or that if it is, then these "free acids" are no impediment whatever to the most successful cultivation and improvement.

He has now in cultivation a considerable body of land, not very long since taken out of the woods. He verily thinks that there is not one foot of this land which, if ploughed and thrown out without being cultivated, but would produce *sorrel* in luxuriance. He can point out at this moment a piece of sward thoroughly "set" with white clover and timothy, and not a sprig

of "sorrel" apparent, and, a part of it, ploughed up during the last summer, cultivated in turnips, and not yet ploughed again, which is covered with a growth of "sorrel," now in full bloom. There they stand, the sorrel showing to the line the ground which was broken up the past season, and the white clover and timothy turf along side, showing as distinctly that the lurking enemy has no power to hurt them.

Immediately adjoining this is a lot of fifteen acres of clover, which has just been harvested, and which justifies fully the remark of the worthy manager who superintended it, that he "don't reckon clover ever does grow much heavier than that." Take the lot through, it was a specimen of luxuriant growth, which we do not recollect to have seen surpassed. Now as we have said, we know that every foot of this ground, if merely ploughed and let alone, would produce "sorrel" luxuriantly. If the "sorrel" indicates a "free acid," and the "free acid" is "an insuperable barrier to successful culture," how *could* such a crop of clover grow? But mark, the clover is classed in the books as a *lime* plant; that is, one of a class of plants to which an abundance of lime is essential. But acid plants and "free acids" show a deficiency of lime; then *where* did such a crop of clover get its supply of lime?

But there were exceptions to the general character of this crop of clover: on a stony knoll where there was little depth of soil, the clover failed and the sorrel had possession. On the spots upon which the grain was shocked and the clover smothered out, the sorrel appeared. At the foot of a tree, where the plough and the hoe failed of a thorough cultivation, sorrel abounded. On a spot where the water failed to get easily away, and a portion of the clover was winter-killed, there the sorrel grew.

It grew every where in the absence of the clover, it grew no where when the clover flourished. Wherever the clover failed, it was readily accounted for by an accidental cause, entirely independent of the "sorrel" or the "acid," and notwithstanding the universal prevalence of this same condition, the clover failed no where when the other necessary conditions were present, viz: thorough cultivation, and freedom from accidental obstructions. It is a common thing in passing a field where



the clover has failed and the sorrel has possession, to say that the sorrel has overrun the clover—that the land is full of acid and wants lime. Now, so far from over-running, the sorrel only grows where the fastidious clover refuses to grow. The clover requires a clean, thorough cultivation; any accidental cause which prevents this, or any general cause, as an excess of vegetable matter not well decomposed, will cause a failure. The "sorrel" is a natural growth, not requiring the same conditions, and will flourish where clover will not. It takes possession, therefore, as a matter of course, when the clover fails from other causes, but is not the cause of that failure.

Now as to lime, it is well known to be upon some soils an exceedingly valuable manure. It is an essential constituent of a fertile soil, and if absent or deficient must be supplied. Its absence or deficiency is *not* indicated by a growth of acid plants, such as "sorrel," because if so, it would be impossible, without an artificial supply where such plants grow, to produce abundant crops of wheat, corn, clover, &c., such as we know are constantly made upon some such soils. Lime is not necessary upon *all* soils which produce acid plants; it may be and very probably is necessary upon *some* soils which produce them—not because these acid plants grow, but because there is a real deficiency which experience testifies to.

But an application of lime may be useful, when it is not necessary. In the writer's experience he finds that his soil contains quite lime enough for the purpose of *feeding* all plants. But the action of lime goes beyond the mere supply of that which goes into the plant consumption. It has a powerful agency in decomposition, and in preparing other material for use. And the question here arises,—how far it may be useful for this purpose, and what expense would be justified in procuring it? He has thus far found it unnecessary for this purpose, on his land, and not likely to justify any expense. He finds the "sorrel" perfectly under the control of *active, thorough cultivation*, or to speak more correctly, he finds a *deep, thorough and cleansing* cultivation produces that condition of soil, which fits it for the growth of clover, wheat, &c., to which the "sorrel," under such circumstances, always gives way. For him,

therefore, and for such soils as his, lime is not necessary as the food of plants, because the natural supply is sufficient, and its agency in decomposition, &c., would not pay the cost of the application. He finds a more economical agency in the use of the plough and the action of the atmosphere.

But it by no means follows, that what is true for some soils and some circumstances is true for all; a sufficiency of lime for the supply of the plant food must be present, either naturally or by application, in all productive soils; and the propriety of the application for other purposes, must depend upon circumstances, of which every man must judge for himself. There are regions of country where the effect is so striking, that no one can hesitate to use it at almost any cost. In other sections, the good effect is less apparent, yet a less price may amply justify its use.—In other sections, again, while it may not be without good effect in preparing the food of plants, yet if this same action is brought about by ordinary methods of tillage, and the influence of the atmosphere, his labour and expense are lost. In this, as in every question of practice, let farmers learn to exercise sound discretion, untrammelled by fashionable theories. Let each man, while he makes himself acquainted with the best opinion of others, make careful note and observation of the circumstances under which he is operating, and guide his own action by his own judgment.

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#### TO CLEAN CHESH OUT OF WHEAT.

On our last visit to the farm of Mr. John Johnston, near Geneva, N. Y., he informed us that some years ago he was a believer in, and an earnest advocate of, the theory that wheat would turn to chesh. In some of the early volumes of the *Gennessee Farmer* he cited several facts which had come under his observation, and which appeared to prove that, in spite of botanists and vegetable theologians, wheat *would* turn to chesh. This idea was combated by several correspondents of the *Farmer*; and, as Mr. J. confessed to us, he had to acknowledge to himself that he was worsted in this "paper war." Fully persuaded that he had the best side of the argument,

and thinking that his opponents had the advantage simply because skilled in the use of the pen, he resolved to prove beyond all controversy, by ocular and practical demonstration, that wheat would turn to chess.

He took three bushels of wheat (we believe this was the quantity, but it is immaterial,) and looked it all over, grain by grain, picking out all the chess. When he had finished, he was satisfied that there was not a grain of chess in the whole three bushels. Now, then, thought he, I shall have them; if I get chess from this wheat, it won't do for them to tell me that I sowed chess with the wheat; and he had no doubt that, as usual, he should have "lots of chess." The wheat was sown; and the result was, that while there was an abundance of chess in the wheat cleaned in the ordinary way, *there was not a single ear of chess on the land sown with the clear wheat.* This experiment, which Mr. J. made in order to convince the theorists that wheat would turn to chess, had the effect of convincing him that he was in error, and that the great cause of chess in wheat must be ascribed to sowing chess with the seed wheat.

Once satisfied that wheat would not turn to chess, Mr. J. resolved to sow no more of it; and he hit upon a plan of cleaning seed wheat which took out every grain of chess. The method is simply this: after the wheat has been cleaned in the ordinary way, by running it through a fanning mill, *take the riddles out of the fanning mill, leaving the screen in;* take off the rod that shakes the riddles and screen; pour the wheat slowly into the hooper with a basket or half bushel, turn the mill a little quicker than for ordinary cleaning, and every grain of chess will be blown out, unless where three seeds stick together, which is sometimes the case with top seeds. Two men will clean from ten to fifteen bushels per hour. If the wheat is light, say weighing from fifty to fifty-five pounds per bushel, considerable wheat will be blown away with the chess; but where good Genesee wheat is raised, as in this section, weighing from sixty to sixty-four pounds per bushel, little or no wheat will be blown out. In some cases it is better to raise the hind end of the fanning mill about two inches from the floor. More wind can be given and not blow away the wheat.

Since Mr. Johnston adopted this method of cleaning his seed wheat, he has not raised a "wine-glass full of chess in more than twenty years."—[Genesee Farmer.

#### CYCLES OF COLD AND HOT WEATHER.

It is somewhat remarkable that, though the historic period is several thousands of years old, comparatively little is known of the science of meteorology. One would have thought that one of the first subjects to which the attention of inquirers would be directed, would have been to the causes of storms, the fluctuations of hot and cold years, and the laws generally which governed the weather. But, with the exception of a few popular signs, to which little or no additions have been made since the time of Virgil, we know almost nothing on the subject so universally interesting. A few farmers, shepherds, or sailors, in the course of a long life, have obtained, by a close observation of nature, some insight into the laws of the weather, and have originated these popular signs; but being unlettered men, most of their knowledge has perished with them, so that each generation has had to begin over again the acquisition of the necessary facts. It is only within the few last years that science has taken up the subject seriously. Even yet the paucity of data is so great, that only an approximation has been made to a true theory of the weather.

One of the few things which may be regarded as established, is that cold and warm seasons come in regularly recurring cycles. It was not until A. D. 1700, that the observations began to be made on which this conclusion is founded; and until A. D. 1750 these were loosely conducted, the thermometer not coming into general use before. Noah Webster, LL. D., so long ago as A. D. 1792, published a series of tables on the weather, in which he gave the comparative temperature of each year for a century preceding. From these tables it appears that there was a general tendency to extreme seasons from the sixth to the tenth year of every decade, and especially every alternate decade. Since that publication, more accurate observations, extending over a large portion of the interval, have confirmed his opinion. The first five years of every decade have generally had a mean temperature higher than



the last five years. Thus, from A. D. 1791 to A. D. 1795 was a warm period; and from A. D. 1796 to A. D. 1800 a cold one; and so it was continued, in each decade, except that from A. D. 1806 to A. D. 1816, up to the present time. These tables also show that, from A. D. 1786 up to A. D. 1830, the temperature was gradually rising, while from this last period it has been as gradually falling, though in both epochs the fluctuations in the decades have regularly prevailed.

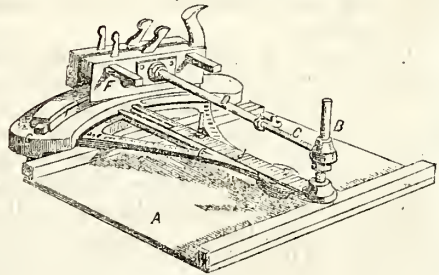
Some writers attribute these changes to the spots on the sun, while others convert the notion. The existence of these spots is thought to increase the mean heat of the summer, in our latitude, while it adds also to the severity of the winters. On the other hand, the absence of such spots is said to make the seasons extreme, without seriously disturbing the mean of the year. In both cases, the result is supposed to be produced by the influence of the sun's rays on terrestrial magnetism, and its consequent effect on the volume of the trade winds and the amount of moisture. This is the opinion of Mr. Butler, an American, one of the latest investigators of the laws of the weather. But it is not concurred in by M. Schwabe, a distinguished European meteorologist, who made accurate annual investigations, on this very subject, from A. D. 1826 to A. D. 1850. It must be said, however, in favor of Mr. Butler, that the magnetic action of this continent is more intense than that of Europe, and that, in consequence, effects might be traced here which were not observable in the other hemisphere. But whatever may be the cause, the fact seems indisputable, that cold and hot periods of years follow each other according to a determinate law, which there is hope may yet be discovered. The experience of the present year, as compared with that of the five preceding ones, certainly favors the idea that we are entering on the colder half of the decade. As fully does the experience of the last twenty years favor the notion that the mean temperature is declining, and that we are now in a cold cycle, which, to judge from the past may continue twenty or thirty years longer.—[*Massachusetts Farmer*.

#### AMERICAN STAR PULVERIZER AND HARROW.

Mr. S. D. Tracy of Vernon, N. Y., has invented an agricultural implement which he de-

nominate as above. The object of it is to thoroughly pulverize lumpy soil, or greensward, after being plowed, by the action of 46 wheels in the shape of a star, that revolve as the machine is drawn along, cutting the earth into fine particles, and mixing the soil in the most perfect manner. The weight of a two horse machine is much greater than that of a common harrow, while it does not require any more power to propel it, than it does to draw a harrow. The cost for a double-team pulverizer will be about \$25, and for one for a single horse \$12 50. They will last till the cast iron wheels are worn out by ordinary use, and their liability to break by coming in contact with stones is very slight. As much ground can be pulverized in a day as a common harrow will pass over, and do the work much better. The inventor thinks that this machine will supersede the use of common harrows almost entirely.

#### WM. W. JOHNSON'S FELLY CUTTING MACHINE.



NEW MODE OF CUTTING WAGON FELLIES, EITHER BY HAND OR OTHER POWER.

No machine for planing out wagon fellys of different sizes and radius has ever been constructed to operate with such success as the one illustrated by the above engraving. Mr. Johnson has just received the exclusive right to his invention through the patent agency of Messrs. Fowler and Wells, New York.

The difficulties heretofore experienced in regulating the radius of the curve of the felly, and at the same time making the radius of the sweep of the plane to correspond, are very ingeniously overcome. The plane is also adjustable to the size and depth of the felly to which it is desired to cut, in a very perfect manner. A is the bed-piece, which supports the working parts of the machine; B is a stationary upright guide-pin, upon which the hub turns which holds the rod, C, passing into and adjustable within the tube, D, the tube D, being made fast to the plane, F, as represented. The felly, I, is made fast to the felly-table, G, which is also made adjustable with the center pin, B, by means of the bar, J, sliding within a dove-tail channel of the triangular frame attached to the bed-piece, G. A clutch upon the top of J holds it firmly in place, except voluntarily moved and set by the graduated bar, J—C being graduated, the tube, O, is also made adjustable as desired.

Fellys for carriages are planed very rapidly by this machine, and the work is of good quality. The plane may be moved by any power required; but the engraving represents a hand-plane. Most wagon makers will use this kind for ordinary work, as it may be more easily constructed. Further information may be obtained by addressing the inventor, at Clifford, Pa.

[For the Southern Planter.]

SWEENEY.

RAPPAHANNOCK Co., 22 July, 1856.

Mr. Ruffin :

In the July number of the Planter, page 204, I have read your remarks on sweeney, and your quotations from Percival showing that the disease "is in the foot" and not in the shoulder. I cannot undertake to say that *I know* the disease is not in the foot, but I certainly *believe*, that in a case of sweeney the foot is not at all affected. In the last ten years I have had three or four cases of sweeney, and in every instance I could trace the disease to a strain or bruise on the shoulder—by having the collar too large and thereby pressing too far back on the shoulder, and fallowing land very hard and dry it is apt to give a young horse the sweeney—or by ploughing new ground that is full of roots and stumpy.

The disease is easily cured in the following manner:—Take up the skin of the horse (between the thumb and forefinger) at the top of the part of the shoulder that is sunk, which will be from one to two inches from the top of the withers and make an incision through the skin with a sharp pen knife, there insert a goose quill and blow up the skin, and with your hand press the wind along the part that is sunk to its lowest extremity—thus filling the part that is sunk with air until it is at *least* even with the surrounding parts, and stick a piece of pitch over the incision, and a cure will be affected. I have never had to repeat the above operation but once, except in a case that I had this summer—I had to make a second incision and blow up as at first and poured in through the quill as much spirits of turpentine as the quill would hold, and the horse was well in three weeks, although at work all the time. It is better to rest the horse if you can, but not absolutely necessary.

Respectfully,

A SUBSCRIBER.

#### GAPES IN CHICKENS.

Ye ladies of Virginia but especially of Prince Edward.

I hasten to lay before you what I consider a sovereign remedy for that most dreadful of all diseases, common among fowls, to wit: the gapes.

Take in the first place a small pinch of gun powder, and drop it down the patient's throat—this will produce a moisture; then dip a straw into vermifuge and shove it in an inch or two down the *wind pipe*. The chicken will commence sneezing, and you will soon observe, a roll as it were, of very small red worms, which you may see, by having a towel or any thing in your lap. For this receipt, ladies, I charge nothing more than your faithful experiment—your good wishes and the very best chicken pie, that any can make at the next annual fair in Richmond.

Yours,

N. F. S. of Prince Edward.

#### PRACTICAL HINTS ON PRESERVING FRUITS AND VEGETABLES.

##### SELF-SEALING OR AIR TIGHT CANS.

In our last issue we referred to the "self-sealing" cans, and stated that we had concluded to give them a trial the present year. Recently we had a lengthy conversation with Mr. S., an intelligent gentleman who had the time, means, and inclination to give these cans a full trial last year. He states that for the sweeter varieties of cherries, for peaches, and for sweet fruits generally, they give the highest satisfaction; but with currants and other strongly acid (sour) fruits they failed entirely, as the acids invariably eat through the cans. Tomatoes keep beautifully without a case of failure, and this fruit preserved came out of the cans at different periods, not only in an excellent state of preservation, but it tasted quite as good as that fresh picked from the vines. This superior flavor may be owing to their being eaten at a time when fresh fruit is not obtainable. Mr. S. says he has not succeeded in preserving green corn, peas, beans, or other articles of this class. His experience is different from that of some others, and thus far those we have conversed with appear to be about equally divided as to the utility of the tin vessels, for either green vegetables or acid fruits—some having succeeded with them, while others, with apparently an equal degree of skill and care have signally failed. We repeat the caution offered last month, to invariably close every can perfectly with wax. The screw and India rubber collar may make a can nearly air-tight, but these are not to be depended upon. Beeswax is quite as good as any compound preparation that can be made.

##### OTHER METHODS OF PRESERVING.

Everybody knows how to *dry* fruit, or at least his wife does. Green corn is not dried as often as it should be. We have had all the present season a good supply of green peas, that were



picked green in Germany last year, dried and brought in that condition to this country. We have been unable to learn the method pursued there in drying them. Can any of our readers inform us?

A method of drying peaches, apples, &c., not much in use, is to be commended. Let them be pared and grated or mashed to a pulp, and then spread out on plates and dried into thin sheets. This is an excellent plan for "curing" tomatoes, peaches, &c. The drying can be done in an oven kept at a low heat. It is better to add a little sugar and cook them somewhat before drying. We prefer the addition of a small quantity of salt to tomatoes dried thus—not enough to affect the taste, but about as much as would ordinarily be used in cooking them.

Well ripened fruit will keep well in cans, or dried, without much cooking, but all unripe articles should be cooked. The want of care in commencing the preserving process just at the time of maturity, is the source of much loss. If too ripe, fermentation commences and is likely to continue.

#### FRUIT JARS.

One of the best things for putting down preserved fruits cheaply, is a well-covered, *well-glazed*, stoneware jar, holding from one to two quarts. We have several of these, of two quarts capacity, which we think the next best thing to the self-sealing tin cans for any kind of fruits, and better than the latter for acid fruits. They are seven to eight inches high, and five to six inches internal diameter. They have a close fitting cover about four inches in diameter, which sets down into them upon a flange or neck nearly an inch from the top.

Whatever article is to be preserved is cooked in the usual manner of preparing it for the tin cans. The jar is then heated quite up to the temperature of boiling water, and the fruit boiling hot poured in, filling it just up to the bottom of the cover. The cover, which has previously been prepared with a piece of cotton cloth dipped in melted wax and placed upon its under side and extending over the edge all round, is then placed upon the fruit and firmly pressed down. A layer of beeswax is then poured around the edge and over the top, and cooled by applying a cloth wrung out of cold water. As soon as the wax begins to harden, it is pressed down around the rim of the cover with the fingers, care being taken that the liquid that may have oozed out in pressing it down, does not prevent the perfect adhesion of the wax both to the cover and jar. Before the jar is entirely cold a little more melted wax is put upon the most exposed parts.

We do not claim that this process is as perfect as that adopted in the use of the screw-covered "air-tight" tin cans, but it has some advantages. The stone jars of good quality can usually be obtained where the tin cans are not accessible. The well-glazed vessels are not

acted upon by any acid in the fruit. The wide opening of the jars renders it easy to preserve the large fruits, such as peaches, in a whole state. The stone jars are quite cheap; a dozen of superior quality cost us \$1 50.

There is a manifest advantage in the use of small jars over the larger sizes, for all kinds of preserves, as the first cost of the former is but a little greater, proportionally, while if those holding one or two quarts are used, only that amount of fruit need be opened at any one time.

We say then, those who can, may well provide themselves with some of the tin cans for tomatoes and sweet fruits, getting jars for the tart kinds; and all may easily procure *small* jars enough to supply themselves with the luxury of fresh fruits the year round.—*American Agriculturist*.

#### SELF-ACTING EGG HATCHING MACHINE.

J. MARTIN, Eng., *Patentee*.

In this egg-hatching apparatus water is poured into one of certain cylinders or water vessels, and flows through hollow shelves beneath the egg trays, and into a cylinder on the opposite side. When the cylinders are nearly full, lamps are lighted underneath.

As the temperature of the water rises, the air within a glass expands and depresses mercury contained within a chamber; this causes a float to rise, and act upon a lever attached to a chain or wire of a valve. Should the heat of the lamps cause the temperature to rise above 105° Fah., the float will be sufficiently elevated to act upon the lever of the valve, and raise it from its seat; this causes a quantity of cold water to flow down the pipe into the cylinders, which immediately reduces the temperature to the proper degree.—*Scientific American*.

#### MANUFACTURE OF SOAP.

Pure white soap is composed of fatty acid, an alkali, and water. In 100 parts of soap there are 63 of fatty acid, 6½ of alkali, and 30½ of water. The process of making hard soap is not so simple as that of soft soap. White or curd soap is made of the finest tallow or suet only, and boiled to a thicker consistency than other soaps upon a stronger alkaline lye, and before it is put into the frame to cool it requires *crutching*. This consists in stirring it about in an intermediate vessel between the boiler and the cooling frame, to break and mix the curd. Nothing but the best materials are used for this soap.

All our common brown soaps contain resin. Colophane or resin is soluble in a caustic alkali, hence its adaptability to increase the quantity of our common soaps. Its use is so common, and as it produces a lather with water it is not generally held to be an adulteration, still it does not produce proper saponification. The quantity of fatty matter required to make a ton of perfect soap is 1,540 pounds. From eight to ten per cent. of this fatty acid is converted into glycerine, and owing to the limited use made of this substance it may be called waste.

The most convenient and cheap alkali for manufacturing soap is sal soda—the carbonate of soda manufactured from common salt. It will not make soap by boiling it direct with grease, as it contains too much carbonic acid; it must be prepared for use by dissolving it in about five times its weight of water, then adding half its weight of fresh slacked lime. The carbonic acid leaves the soda, unites with the lime and forms chalk, which sinks to the bottom of the vessel. The clear liquor is caustic soda lye, fit to be boiled with tallow, oil or fat, to make soap. In soap works, the soda lye is deprived of its carbonic acid in vats prepared for the purpose; but any person may make hard soap from soda lye by a very simple apparatus, viz: a wash tub, and a small tin or iron boiler.

It is not our intention to give a full description of the processes for manufacturing soaps on a large scale; our "Notes" are general on points where information can easily be obtained, but *particular* respecting some things that are not so well known.

The most recent work published in our country on Soap and Soap Making is that of Campbell Morfitt, by Parry and McMullan, of Philadelphia—a good treatise. Another work, and a very excellent one also, is that of Kurten, being a translation from the German, published by Lindsay & Blakiston, Philadelphia. Different soap makers employ different methods of working; and we know one not many miles from New York City, who pursues the methods described in Dr. Ure's old Dictionary of Chemistry, published in 1823. Soap making is not an art which has undergone much improvement for many years. Tallow, suet, lard, oils, resin, fat from deceased ani-

mals, and boiled bones, are the most common materials employed in soap making. It has been proposed to make soap from cotton seed oil, and we have a sample of such soap in our possession; Edward Conklin, of Cincinnati, has made soap direct from the seed, and there are some prospects of his being successful in its manufacture on a large scale.

In England palm oil is now extensively employed for making soap; 40,000 tons of this substance is consumed annually for this purpose, and the consumption of it is increasing rapidly. It is obtained from Africa, and is an economical material. Fish oil and vegetable oils of every description can make soap by being boiled with caustic alkali, and thickened, if required, with salt. A grand discovery in the manufacture of hard soap would be the saving of the glycerine by combining it with the soap.

*Fancy Soap.*—Those small cakes of perfumed soaps used for the toilet can easily be manufactured by dissolving common bar soap of any kind, and adding perfumed ingredients and coloring matter—if the latter are desired. The bar soap is cut up into thin slices placed with a small quantity of water in a pan over a fire, and is stirred until it is reduced into a paste. The perfumes are then added, well stirred, and the soap run off into a flat frame or dish, and set in a cool place. In the course of three days it is fit to be cut into cakes and stamped with any ornamental figure or name. In establishments for conducting the manufacture of these soaps, the heating is performed in a steam bath, and machinery and apparatus are employed for conducting the business with facility and economy.

*Almond Soap.*—This is perfumed with 2 pounds of the otto of almonds added to 128 pounds of dissolved bar soap. The heat should be as low as possible.

*Camphor Soap.*—This is made by adding 1½ pounds of otto of rosemary and the same amount of otto of camphor to 28 pounds of dissolved bar soap.

*Brown Windsor Soap.*—This soap has a distinguished reputation, and sells at retail for 25 cents per pound. It is made by adding half a pound each of otto of caraway, cloves, thyme, cassia and lavender, to 168 pounds dissolved bar soap. Its brown color is produced by roasted sugar—caramel.

Perfumed soaps of endless variety can



be produced, according to the perfumes employed to give them their peculiar odor. Some of the fragrance, however, is always lost by adding the volatile perfumes warm; therefore another method to produce scented soaps is to add the odoriferous ingredients cold. This is done by shaving bar soap in very thin slices, pounding them in a mortar with a very small quantity of cold soft water, adding the perfumes, and triturating well with the pestle. When well triturated, the soap is taken out and pressed into any desired form of cakes in moulds, and then set to dry in a cool place.

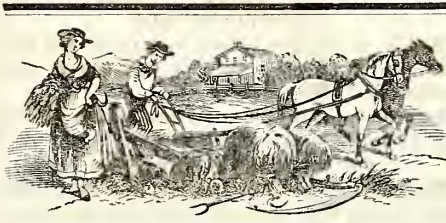
A very fine fancy soap is thus made by adding to 6 lbs. of soap shavings, 8 ounces of oil of citron, half an ounce of verbena, 4 oz. of the oil of bergamot, and 2 ounces of the oil of lemons. This is an expensive but excellent toilet soap.

Transparent soap is made by dissolving pure tallow or oil soap in alcohol, then allowing it to dry in a warm situation. The soap is added to the alcohol in fine shavings, and after being dissolved it is formed into cakes or balls, as may be desired. Any kind of perfume may also be added to transparent soaps in the alcohol.

*Medicated Soaps.*—Septimius Piesse has stated that he made a series of experiments with soaps, by medicating them with sulphur, iodine, bromine, creosote, &c. These substances were added to the soap while cold. He believes they might be of service in the treatment of some diseases, but does not speak of their effects positively. Sulphur combined with soap has been found very useful for skin diseases caused by insectoria. It is employed in the warm bath, and is found to be very effectual.—*Scientific American.*

SOWING WHEAT BROADCAST is almost an obsolete practice in England. It is only barely tolerable when a good ley has been well ploughed and pressed, so that the grains fall almost entirely into the seams, and rests upon a solid and therefore congenial bed. An important and almost insensible change has lately taken place in the quantity of wheat planted per acre. The numerous reasons for and against thick and thin sowing have been advocated often enough to be very well known. It should be remembered, however, that the time and mode of sowing the wheat, the crop that preceded it, the kind and quality of wheat used, the natural fertility or poverty of the soil, its tenacity and aspect, and the artificial power given it, all exercise an important influence upon the quantity of seed re-

quired. Still, that wheat is sowed considerably thinner within the last few years, is certain. The quantity of seed used now may be stated to be from 4 to 6 pecks per acre, when dibbled; from 6 to 8 pecks when drilled; and from 8 to 12 pecks when sown broadcast. It should be borne in mind that too little seed may be used as well as too much; the soundest economy is to use that quantity which produces the best crop in an average of years.—*Ohio Valley Farmer.*



## THE SOUTHERN PLANTER.

RICHMOND, SEPTEMBER, 1856.

### TERMS.

ONE DOLLAR and TWENTY-FIVE CENTS per annum or ONE DOLLAR *only* if paid *in advance*. Six copies for FIVE DOLLARS; Thirteen copies for TEN DOLLARS—to be paid invariably *in advance*.

No subscription received for a less time than one year.

Subscriptions may begin with any Number, but it is *desirable* that they should be made to the end of a volume.

☞ Subscribers who do not give express notice to the contrary on or before the expiration of their yearly Subscription, will be considered as wishing to continue the same; and the paper will be sent accordingly.

☞ No paper will be discontinued until all arrearages are paid, except at our option.

☞ Subscribers are requested to remit the amount of their Subscription as soon as the same shall become due.

If Subscribers neglect or refuse to take their papers from the Office or place to which they are sent, they will be held responsible until they settle their account and give notice to discontinue.

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All Payments to the Southern Planter will be acknowledged in the first paper issued after the same shall have been received.

☞ All money remitted to us will be considered at our risk *only* when the letter containing the same shall have been registered.

☞ It is indispensably necessary that subscribers remitting their Subscription, should name the Office to

which their papers are sent; and those ordering a change should say *from* what to what post office they wish the alteration made. A strict observance of this rule will save much time to us and lose none to them besides insuring attention to their wishes.

Postmasters are requested to notify us in *writing* as the law requires, when papers are not taken from their Offices by Subscribers.

RUFFIN & AUGUST, *Proprietors.*

OFFICE: No. 153, Corner Main and Twelfth Streets.

#### ADVERTISEMENTS.

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,

POSTAGE on the Southern Planter, (when paid in advance,) to any part of the United States, one cent and a half per quarter, or six cents per annum.

#### APOLOGISTIC.

Indisposition in the Editor's family will, he trusts, excuse the late appearance of the Planter.

#### TO SUBSCRIBERS.

We earnestly request that you will read our "Terms" at least *once a year*, and *always* before writing us upon any subject connected with your paper. We frequently receive letters containing remittances, and others requesting discontinuances or directing a change to other post-offices when the office to which the paper is sent is not named. Such omissions occasion us a great deal of trouble, and it not unfrequently happens that your wishes cannot be attended to in consequence of your neglect to conform to this *standing request*.

REMEMBER *always* to name your post office when writing about your paper.

#### THE SOUTHERN PLANTER BOUND.

In reply to numerous enquiries on the subject, we state that we can furnish the "Southern Planter" bound, at \$1 50 per volume, postage included.

#### GENERAL NOTICE.

In accordance with the notice given in a previous number of this paper, we commenced with the July number to drop from our list, all subscribers who are in arrears for three years or more, and shall continue to do so until the first of January next, at which time we intend to drop all who are then in arrears for two

years and upwards. But in doing so we do not intend to relinquish our right to collect our dues from such delinquents, but shall send out their accounts regularly or place them in the hands of Agents for collection. We do not design to adopt *strictly* the *cash system*, but we desire to approach as near to it as possible, and wish our "Terms" which are printed conspicuously in every paper to be understood by all our subscribers. They are as follows:

#### TERMS.

ONE DOLLAR and TWENTY-FIVE CENTS per annum, or ONE DOLLAR *only*, if paid in *advance*. Six copies for FIVE DOLLARS; Thirteen copies for TEN DOLLARS—to be paid invariably in *advance*; and to them we mean *strictly* to adhere with this variation only, subscribers who owe for two years, or \$2,50 and remit, \$5 will be credited for two years of arrearages and three years in advance. We think no one who intends to pay can object to this arrangement.

#### BILIOUS FEVER IN COWS.

We are sometimes applied to for a remedy for this disease. Not the murrain or distemper, and not infectious, but sure to attack cattle brought from the mountains or any lower point in Piedmont to tide water; and very apt to attend a removal from any of the lower tier of Piedmont counties to a still lower locality in the same district.

A friend in Amelia, who suffered greatly from this disease, which in fact attacked his cattle, raised upon his own premises, has obtained a preventive which he thinks infallible, and commends through us to the public.

It is simply to keep a mixture of salt, saltpetre and sulphur *always* accessible to the stock in a trough, which is well tarred, and kept so. The mixture is to be in the proportion of one gallon of salt to a tumbler of sulphur and a tumbler of saltpetre.

So confident is our friend of his remedy, that he offered if we would buy a cow from Albe-marle, at any season, to pay for her if she died, provided we kept her supplied with his preventive.

As September is the worst month for the disease, it is now just the time to try it.

Possibly it might be well to commence with a smaller proportion of sulphur and saltpetre at first, until the cattle shall become accustomed to those ingredients.



If this remedy is successful, we shall call this brief editorial the best essay that has been written on one branch of cattle distemper.

#### A WRINKLE ABOUT THE AGE OF HORSES.

A few days ago we met a gentleman from Alabama, who gave us a piece of information in regard to ascertaining the age of a horse, after he or she has passed the ninth year, which was new to us, and will be, we are sure, to most of our readers. It is this: after the horse is nine years old, a wrinkle comes on the eyelid at the upper corner of the lower lid, and every year thereafter he has one well defined wrinkle for each year of his age over nine. If, for instance, a horse has three wrinkles, he is twelve; if four, he is thirteen. Add the number of wrinkles to nine, and you will always get it. So says the gentleman; and he is confident it will never fail. As a good many people have horses over nine, it is easily tried. If true the horse dentist must give up his trade.

We believe the best judges have a rule, which they rely on as infallible to the age of fourteen. The horse has six incisors, "nippers" as they are commonly called—the front teeth. They have each a dent in them just like the dent in gourd seed corn, and are hence called gourd seed. At four years old, the front pair at bottom lose the gourd seed, become smooth; at six the next two—one on each side; at eight, the next pair, which completes the bottom sett. At ten, the front upper pair becomes smooth; at twelve, the next pair; at fourteen the last pair. After this the "wrinkle" may come into play.

Another indication upon which we are told the late Wm. R. Johnson relied, to ascertain the age of the horse, was an inspection of the termination of the lachrymal duct, which opens into the *septum*, or cartilaginous division of the nose on each side, an inch or two above the nostril. Any one on examination will easily find these orifices; but it requires a good deal of practice and a nice eye to apply this test. It is said that it enlarges with the age of the animal.

#### SEYMOUR'S BROADCASTER AND DRILLING MACHINES.

It will be seen in our advertising columns, that Thos. Branch & Sons, of Petersburg, have for sale these very valuable agricultural implements, as have also Messrs. Baldwin & Cardwell of this city.

We have tried both the Broadcaster and Drill and have recommended them repeatedly. It is unnecessary therefore to say more about them now than this: We are frequently asked if the Broadcaster will sow guano? We have stated publicly, and do so again, that it will not sow damp guano, and that no machine will. The jaws of the broadcaster will choke and rust, and so will the iron on the manure rod. If they are kept clean of rust, it *will* sow damp guano *provided* it is WELL PULVERIZED.

There *is* a machine for sowing guano, which is said to pulverize and distribute it perfectly. We have heard of one sold by Montgomery & Brother, of Baltimore, makers of the wheat-fan. But they are not the owners or inventors of the machine. We made an effort to get one and try it, but the agent would not warrant it, and we declined the purchase. The price is \$80, and the man who makes a machine of that cost for that purpose, and will not warrant it until it becomes established, does not deserve to be encouraged.

#### LIME AS A PREVENTIVE OF SMUT IN WHEAT.

A very excellent farmer told us, a few days ago, that water-slaked lime—two bushels to every hundred bushels of wheat—would prevent smut from appearing in wheat. It is to be dusted over the bulk, a small quantity at a time, and thoroughly incorporated with the bulk. It destroys the smut and also keeps off the weevil. If necessary, the Wheat may be run through the fan to cleanse it of lime when sowed. If sown by machinery, either drill or broadcast, as all wheat ought to be, there will be no occasion to fan it.

As it is reported to us by one good farmer, recommended by another, and approved, as we see in a late number of the Southern Farmer, by the practice of Mr. Batte of Prince George, also we believe a good farmer, we commend it to the use of those who may apprehend rust in their wheat another year.

#### AGRICULTURAL AND COMMERCIAL REVIEW.

The wheat harvest has now been completed throughout the United States, and at last accounts, was progressing in Great Britain and the Continent with a continuation of very favorable weather, and encouraging prospects of

a full average yield—in the British isles at least. The auspicious change of the weather almost produced a panic in the British markets and prices declined considerably, but subsequently there was a reaction, and a portion of the decline was recovered. It seems to be conceded by those conversant with the grain-trade, that prices will not materially decline the present season. The consumption of breadstuffs will be largely increased everywhere under the benign influences of a general peace, and its concomitant, *prosperity*; the stocks of last years' wheat are nearly exhausted, before the new crop is garnered; and, after a general survey, taking into consideration the serious losses resulting from the inundations in France and elsewhere, the conclusion is arrived at, that Europe will again require heavy supplies from this side of the Atlantic. The exports for the commercial year, ending 31st inst., will not reach 30,000,000 bushels, and we may safely rely for a demand the ensuing year equal to 25,000,000 bushels, to be supplied from a crop certainly not larger than the preceding one. If these inferences are correct, it is very improbable that prices will descend to the level which has been anticipated by some.

The deliveries of wheat into Richmond, since 1st July, have been largely in advance of those for the corresponding period of last year, and have tended in no small degree to the depression of the market. Prices, however, have succumbed no great deal, and at present writing, the range for the best qualities is \$1 50 @ \$1 60—only 20 cents below the fancy opening price.

The prospects of the corn crop were considerably brightened in the early part of August by copious rains, in all parts of the State, but the relief came too late for the forward corn, and we think that prices will rule relatively higher than for wheat during the season. It is worth 75 @ 80 cents per bushel in our market, at present.

Tobacco continues to command fine prices: The accounts from the West, in regard to the growing crop are very gloomy, and if verified will maintain the present range of prices.

Groceries are generally unchanged. Bacon has been fluctuating during the month, and the market closes rather heavily at 11½ @ 12 cents for sides, and 10½ @ 10¾ for shoulders—wholesale.

#### A CARD.

The time is at hand when members of the Virginia State Agricultural Society who design to assist in the inauguration of the representative principle in the government of the society should commence action. The new constitution provides, that the voters of each County, City and Town, shall be called together by proper public notice, to meet on the days of their respective County or Corporation Courts, in September or October, in each year, and at such hour and place as may be prescribed by the Executive Committee; and shall elect for each District by plurality of votes cast, for every fifty [the first fifty] members of the society therein, one Representative to the Farmers Assembly, and for every additional hundred numbers an additional Representative. The prescribed notice for calling the voters together has been given; the days of election in each of the several Districts have been designated; the commissioners to conduct the elections have been appointed; and all the instructions deemed necessary for the intelligent and proper discharge of their duties, have been furnished. It only remains now for the voters in the several districts to see to it, that this new feature, rendered by the unparalleled growth of the society, indispensably necessary to enable it to deliberate and act in an orderly and proper manner on matters of business, does not fail of its introduction by reason of their apathy or neglect. Let them at once, call out their ablest and best men as candidates for the post of representative, than which none more honorable could be assigned them, and let them be supported with a unanimity and generous confidence, commensurate with the dignity and importance of the trust, and we shall assuredly witness in the assemblage of the elected representatives of the Farmers of the State, a sample of the moral worth, intelligence and dignity of her sons, which more than all her varied and vast resources of wealth and power constitute the chief element of her greatness and the crowning glory of Virginia.

CH. B. WILLIAMS,  
Sec. Va. State Ag'l Society.

Editors throughout the State, who are respectfully requested to copy it into their papers.

#### ON THE VALUE OF CERTAIN HIGH PRICED FERTILIZERS.

From an excellent article on the above subject, by Prof. S. W. Johnson, of Yale College, published in the *Homestead*, we extract the following portion, regretting that we have not room for the whole.

In the part omitted is his statement where an analysis of a single specimen of Guano or Super Phosphate cannot be made for less than ten dollars. As our friends, Drs. Powell and Dove,

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get only twenty cents per ton, it is clear either that they analyze only one specimen out of one million pounds, which is not to be supposed as that would not be fair, or that they analyze imperfectly, which is an imputation on their "science," or that they lose \$9 20 on each analysis, which is a sacrifice they cannot submit to, or that they have a secret mode of analysis unknown to the rest of the scientific world. If it be this latter we will gladly make the Planter the medium of publishing so valuable a discovery, and of introducing our friends as public benefactors.

At the same time we tender Dr. Powell our columns to explain how the noted CHILIAN GUANO came to be endorsed to Messrs. Shields & Somerville as No. 1; and how the Mexican Guano which he analyzed for Crenshaw & Bro., which was erroneously marked *first rate* by the Baltimore Inspector, came to have the same mark put upon it here. We suppose by this he has had time to "look at his papers."

1st. What substances are to be regarded as important in costly manures? All the kinds of matter found in the plant are of course essential to its growth, and are all usefully applied to the soil in some cases, and generally speaking valuable for the soil in proportion as they are deficient in it. Scientifically speaking we cannot say that ammonia or phosphoric acid is more valuable to any plant than potash or lime is. All are indispensable, and as plant's food are equally valuable. Commercially viewed, however, their worth is very various, depending on their worth and demand for them, for other than agricultural purposes. In my humble opinion there are at most but three ingredients that deserve to be taken into account in estimating the value of any manufactured or imported fertilizer now in market which is sold as high or higher than one cent per pound. These are phosphoric acid, ammonia and potash. Everything else that has a fertilizing value can be cheaply obtained under proper name. If I want soda or chlorine, I buy common salt, an article whose purity I can judge by mere inspection; if I want sulphuric acid, gypsum supplies me, and so on. I incline to believe that potash too may well be left out of the account, because it is not generally deficient in soils, and therefore farmers generally cannot be expected to pay for it, and again it is usually present in very small quantities in concentrated fertilizers. The best guanos contains but one to 3 per cent of potash, and the inferior washed sorts usually less. Super-phosphates, *i. e.* bones or mineral phosphate treated with sulphuric acid, cannot if genuine be supposed to contain any potash of consequence. In other fertilizers it is not to be looked for, because potash in a nearly pure state

or even as raw material, wood-ashes, has a higher commercial value for technical than for agricultural purposes.

With ammonia and phosphoric acid the case is different. For them there is comparatively little demand except for agricultural use; besides they produce in the aggregate vastly greater good results as fertilizers than any other bodies, showing they are more generally deficient in the soil, and finally they are scarce and costly.

Commercially regarded, ammonia is the most costly fertilizer, next comes potash and then phosphoric acid. Agriculturally considered, ammonia is generally the most valuable, phosphoric acid next, and potash last.

Ammonia is worth about sixteen cents per pound. Its cheapest source at present is No. 1 Peruvian guano. A specimen I have lately examined contains six per cent of ready formed ammonia, and animal substances which, by decay readily yield nine per cent more, making a total of fifteen per cent. Taking guano at its present price of fifty-four dollars per ton, of two thousand pounds, one hundred pounds costs two dollars and seventy cents. If we admit that ammonia concentrates its whole value, then \$2.70 divided by 15 gives us 18 cents as the value of one pound of ammonia. If we allow the 15 per cent of phosphoric acid existing in this guano to come in to the estimate at two cents per pound, then we reduce the value of the ammonia to sixteen cents, (15 pounds phosphoric acid at 2 cents equals 30 cents, which subtracted from \$2.70 leave \$2.40, this divided by 15 gives the quotient.) In Sulphate of ammonia at 5½ cents per pound, or Chili Saltpetre at 5 cents, the ammonia costs about 27 cents a pound. Oil-cake is the only other commercial fertilizer readily yielding ammonia and in it the cost is I believe also about 25 cents per pound. In Germany it is very cheap and largely used as manure, especially the colza, or rape-cake which on account of its unpleasant taste is not suited for feeding. In unburnt or unboiled bones we have nitrogen sufficient to yield from four to six per cent of ammonia, but it decays very slowly unless they are steamed or composted, and this fact should reduce its value somewhat. The estimate given by Stockhardt reduced to the standard adopted here for actual or ready formed ammonia is 13 cents per pound. It is most convenient to speak of the nitrogen which exists in undecayed animal substances as ammonia because it passes into that body on decay. It is customary to designate it as potential in distinction from ready-formed or actual ammonia.

The value of potash is difficult to estimate because it may vary exceedingly according to circumstances. Wood ashes are its chief sources; these are poor or rich in potash according to the kind of tree that yields them, and the soil on which it has grown. It may vary from 5 to 20 per cent. Stockhardt, who estimates the value

of ammonia at 19 cents, makes potash worth 4 cents per pound; the price of pot-ashes cannot serve as a guide for they are never used for agricultural purposes. Four cents is certainly high enough for this country if it is correct for Germany.

Phosphoric acid is reckoned by Stockhardt at 2 cents per lb., and I have used this estimate in allowing for the phosphoric acid in guano. Crushed bones sell at \$1.00 per 100 pounds and less. When they are fresh they contain about 5 per cent of potential ammonia, and 25 per cent of phosphoric acid, reckoning the former at 13 cents per pound, we account of 65 cents, leaving 35 cents as the value of 25 pounds of phosphoric acid. This gives a value of 1½ cents. When we consider the quantities of refuse phosphoric acid in the used up bone-black of the sugar refineries, and the cheaper price of boiled bones, we shall do injustice to the farmer rather than to the manufacturer, when we assume 1½ cents, as the value of acid per pound. The above refers to phosphoric acid when saturated with lime or magnesia and thus insoluble in water. Soluble phosphoric acid is of much greater value, from its greater rapidity of action. To convert 25 pounds of insoluble phosphoric acid, (bone earth phosphate,) into insoluble phosphoric acid, (super-phosphate,) requires 30 pounds of oil of vitriol; which at 2\* cents per pound, would make 25 pounds of soluble phosphoric acid, worth 25 to 60 cents, say \$1, or 4 cents per pound, cost of preparation included.

Prof. Hay in a paper on Super-phosphate of Lime in the *Journal of the Royal Agricultural Society of England*, vol. XII, 1851, rated phosphoric acid in the state of insoluble phosphate of lime at 3 cents per pound, and super-phosphate at 8½ cents, or double the prices I have been led to adopt. He calculated the latter however from the selling price of a commercial super-phosphate, which is obviously no criterion for the farmer.

It is plain that it is no easy matter to estimate the matter the value of a manure, since so many things influence our decisions, and I do not for a moment suppose that the prices these calculations have led me to, are strictly correct, but they doubtless are not very far from the truth and at all events may serve us in comparing the different fertilizers whose composition will be made known in future numbers of the *Home-stead*.

It is the duty of farmers themselves to institute such inquiries as may enable them to decide how much they can afford to pay per pound for these substances. This, it strikes me, is legitimate business for a State Agricultural Society.

Yale Analytical Laboratory, }  
May 20th, 1856. }

\* NOTE.—Sulphuric acid cannot be obtained in Richmond at that price.

## THE BEST PLOUGH.

Some time since we notified the class of inventors that a premium of twenty-five dollars would be offered for a plough to clean out water furrows and grade off their sides. In that paper we gave specifications of what the implement would be required to accomplish. It will prove exceedingly valuable to all who till stiff clay lands that require bedding, and, we think, will find a ready sale at a moderate price, if it comes up to the specifications.

As an aid to such as may be inclined to compete for this premium, we publish the following account of such an implement, which we have recently found in the third volume of *British Husbandry*, p. 131.

In addition to the common plough, Mr. Stickney possesses a most valuable one for the purpose of clearing out the furrows between the ridges, after the wheat crop has been sown and harrowed in; or, indeed, at any other period, when it is necessary to have the land as dry as possible. The manner in which he procured this implement shall be given in his own words. "I saw an account in an agricultural publication of a millwright going to visit a farmer.\* The farmer complained to him of the difficulty he had long experienced, in his strong and retentive soils, of clearing out his furrows between one land and another, of the clods and the crumbs of soil which fell back again after the operation of the common plough, and thereby obstructed the proper discharge of the water from his land. This statement excited my attention, for I had long experienced the same difficulty. The millwright requested the farmer to take a spade, and put a portion of the furrow exactly in the position he would wish the whole to be in; he did so—and the millwright soon produced an implement which performed the operation in a very expeditious and complete manner. I stated this circumstance to the Holderness Agricultural Society, one object of which is to introduce implements or machinery from a distance, of which we may have a good character, but which are unknown in our own neighbourhood. It was ordered by the society, tried by the members, and found to answer the character given of it; and it is now in the hands of many farmers in the Holderness district. I would not be without it for many times its cost, and I consider it to have greatly benefited my farm." This implement, called by Mr. Stickney, the "boat-plough," is not over-rated in value. It is so admirably constructed as to leave the land exactly in the form in which a

\* Farmer's Magazine, vol. vi, p. 200, contains the history of this plough, which was invented by the ingenious Mr. Gladstone of Castle Douglas, N. B.



good farmer would wish it to be laid; making a clear and distinct drain, with the smallest possible loss of land. It is drawn by two horses in line, both walking in the furrow. It is difficult to describe, because we have no other plough which bears the smallest resemblance to it; its form is that of a small boat cut off from gunwale to keel, six feet distance from the head. It is partly decked in the front. The keel, shod with iron, is five feet in length; and the extreme width of the planking is three feet eight inches, though the top is contracted to five feet two inches. The height of the side is two feet two inches, having a curve of three inches with its concavity outwards. The hales and beam resemble those of a common plough, the former are six feet ten inches, and the latter seven feet ten inches in length. Farmers, not within economical reach of the inventor, might procure the implement from "Mr. William Stamford, millwright, Burton Pidsea, near Hedon," who has made them for Mr. Stickney and others; the price is supposed to be about 3*l.* 10*s.* delivered at Hull; and it should be accompanied by the simple sledge which Mr. Stickney uses for removing it from one field to another. This plough has been particularly noticed, because the reporter is of opinion that it is valuable and but little known; and that if its merits were understood it would soon be used in all the clay districts in the kingdom. Mr. Stickney has had a similar one made upon a larger scale, to which he attaches four horses, for the purpose of forming the surface-drains ("grips") across the ridges, which it effects in the same excellent manner and to a very considerable depth. A man follows with a tool, for the purpose of spreading the mold raised on the sides equally over the land.

**EXPERIMENT ON THE ELEMENTARY PRINCIPLES OF MANURE AS APPLIED TO THE GROWTH OF WHEAT.**

Such is the title of the last contribution to agricultural knowledge from the pen of the late PHILIP PUSEY, editor of the Journal of Royal Ag. Society, Eng. In addition to the inherent value of the facts reported, and of the inferences deducible therefrom, somewhat of a melancholy interest will be felt by some in perusing this report, on account of its being the last communication to his agricultural brethren by one who held such a high place in the esteem of the public.

In this brief article we shall submit to our readers all the more important items of the original report, in a much condensed form.

The experiment was made on a field of eight acres, set apart from common cultivation for the purpose of accurate experi-

ment. The soil was of no great depth, resting upon marble rock, and was exhausted by five previous crops of grain grown in succession to an extent as to be an accurate test of artificial manures. Mr. PUSEY thought that the most interesting use that could be made of it might consist in the separate application of those elements which are supposed to constitute conjointly the efficacy of farm-yard manure, and separately to act as fertilizers of the soil.

These elements, according to the received theory of agricultural science, may be comprised under four heads: 1. Nitrogenous substances; 2. Phosphorous; 3. Alkalis and principally Potash; and 4, That which constitutes the bulk of farm-yard manure, the strawy matter, or, in chemical language, carbon.

The nitrogenous matter employed was nitrate of soda, which has been proved to be tantamount to ammonia for agricultural purposes.

The experiment was made by drilling separately superphosphate and peat-charcoal with wheat in the autumn, and top-dressing a portion of each lot in the spring with the nitrate of soda. The fourth element, potash, was also applied in the spring.

The question of the efficacy of the superphosphate on wheat, seemed to be especially interesting because of its vigorous efficacy when applied singly to the growth of turnips.

The result of the trial is given in the following table:

Quantity of Manure per Acre.	Bushels of Wheat per Acre.	Ditto with a top dressing of 170 lbs. of Nitrate per Acre.
4 cwt. of Superphosphate,	7	19½
6 cwt. of Peat-charcoal,	8½	18
No application,	7½	19 3-10

From the result of this experiment Mr. P. thought it evident that the superphosphate, though all important for roots, had done nothing for the wheat, even on such very poor and exhausted soil, on which the efficacy of concentrated fertilizers is most easily discernible. The charcoal would appear in the first column to have done something, but as that result was not confirmed by the combined trial, the difference was very probably accidental.

The fourth element, potash, was tried by top-dressing an acre of wheat with 1

cwt. of pearl-ash; but it was evidently inoperative on the crop. So much so that separate thrashing was deemed unnecessary.

As far, then, as we can rely on this experiment, carefully made with soil duly prepared by previous exhaustion, it testifies, as Mr. P. remarks, that the only element of farm-yard manure required by wheat is nitrogen, as contained either in nitric acid or in ammonia. If this be true in an exhausted soil, where the plant can only find its other elements in the soil as it gradually crumbles down, or in the atmosphere, it must be still more true in practical farming, where they will be supplied ordinarily by manures applied to the other crops of each course.

As to one element of farm-yard manure—the woody or carbonaceous matter—the experiment is not conclusive, because, as remarked by Mr. P., though carbon applied as charcoal did not operate on wheat, the woody or strawy carbonaceous matter contained in ordinary manure, being more easily decomposed, might be operative.

In this experiment the produce is very low. This was owing to the gradual impoverishment of a naturally poor soil by a succession of grain crops, aided by the cutting winds of a harsh spring, which had almost blown the plants out of the soil, and rendered them almost invisible in May. In a more sheltered part of the same field the result was much better.

The *negative* results of this experiment go so far to prove the inefficiency of certain chemical elements of manure on the growth of the wheat-plant. Its *positive* result goes to prove the benefit of nitrogenous applications, and of top-dressing as one mode of applying such substances. Top-dressing is, probably, deserving of more frequent trials in ordinary practice.—*Country Gentleman*.

#### THE PREMIUM LIST OF THE STATE AGRICULTURAL FAIR OF SOUTH CAROLINA.

The State Fair, as will be seen by repeated notices published, will take place in this city on the 11th day of November, and four days following. The Premium List, which we publish in condensed type in this number, will be found as comprehensive as that of any other institution of the kind in the Southern States. The Executive Committee had hoped that but few objects of interest had been omitted in this

list; but they do not flatter themselves that it is as complete and perfect in every particular as it should be. In token of this consideration, they beg all those who have animals and articles, of superior value, to present them at the Fair, and they may come under the general head of meritorious entries, entitled to special notice and reward. If a liberal and generous spirit of rivalry, is thus manifested, it will enable the Committee the more readily to perceive what they have omitted, and the experience which they will glean will be practically useful to them in the future. Our friends who have articles not specially enumerated in the prize list, must reflect that we are not all perfect, and that the Committee are novices in this matter, and only hope to be thoroughly versed in their vocation when there is nothing more that is new to be offered in competition. Let any one in South Carolina and the adjacent States who has anything worth presenting do so. State pride should induce our own people to do so, and a laudable emulation to excel should prompt our neighbors to enter the field where the prizes are of no contemptible order. Let the studs of the South make our Fair Grounds a second Olympia. Let lowing herds and bleating flocks testify that our people have still some pastoral tastes obtaining amongst them. Let the golden harvests of our grain fields and the fleecy staples of our commercial vitality evidence that our agricultural energy is effective and elevating in its influence, and tending to a prosperity in the future, which will scatter abundance over the land. Let the handiwork of the mechanic testify that labor and mind must toil together. The manufactured products of our busy spindles; the ponderous castings of the sons of Tubal Cain; the life-throbbing engine, will all find room for a fair comparison, test and trial.

We look with much interest to the Ladies of the State, and hope they will fill up the extensive Hall and Galleries, which will be in readiness to receive the tasty products of their skill and handiwork. Let all enter the lists with the proper kind of rivalry, and we will venture a prediction that the first FAIR of "The State Agricultural Society" will be a success, and the precursor of many successively brilliant and improving to all the interests of the South.—*Columbia, S. C., Agriculturist*.



*From the Rural American.*

### GOOD AND BAD PLASTERING.

MR. EDITOR:—A rainy day, and one of the delays incident to Western travelling, give me an opportunity to write a few lines for publication. It was my good fortune to meet with a copy of your excellent paper here; and as it abounded in timely hints on various subjects, I thought I would forward to you a few notions of my own on plastering. Don't think, sir, that I am joking with you, and am bent on plastering anybody with praises they don't deserve. I wish to speak of *bona fide* plastering, with mortar made of good sand and lime, and perhaps a little hair, for sake of consistency.

Why, Sir, let me ask, is it that we have such poor plastering now-a-days throughout the country? With whom does the fault lie? From my own observation—and that has been extensive—I think that mechanics, especially in the country, put on their lath too closely together. Their object, I suppose, is to save material; for a very thin coat of mortar serves to cover such lathing.

Now, as an honest mechanic myself, I protest against such work, and for the following reasons:

1. When laths are nailed very close together—and I have often seen them only an eighth of an inch apart—there is no room left for the mortar to form a clinch.

2. What little clinch is formed, is in most cases destroyed by the swelling of the lathe caused by the dampness of the mortar, which cuts the clinch off. And then, when the walls become dry, the lath shrinks and the clinch is consequently broken, and the wall is more or less cracked.

Now what is the remedy for all this? I will venture a few suggestions: First, get good  $1\frac{1}{2}$  inch, or  $1\frac{1}{2}$  inch sawed lath, about one-fourth of an inch thick, nailed on with fine three-penny Fall River lath nails, put on about three-eighths to one-fourth of an inch apart, or so that you can put the end of your forefinger between each lath. Then take one part of fresh lump lime to two parts of clean, sharp sand, and a sufficient quantity of long cattle's hair; let them be well mixed and slaked, and then cover your lath with one good coat of the above, well crowded in; then scratch or broom the same, and let it get thoroughly dry. Afterwards, take one part of fresh lump lime

to three parts of clean, sharp sand, with a suitable portion of short cattle's hair mixed, for a second coat. Lay this on straight and smooth, and properly hand-plastered. When nearly dry, take a little slaked lime and trowel your walls down smooth. They will then be ready for whitewashing and papering. They will remain firm and smooth for many years.

I advise all *rural Americans* and city Americans likewise, to try this plan, and I know they will approve of it. The universal Yankee nation in some things is altogether too fast; and not the least so, in building its walls. At another time I may say something about laying foundations; but just now, I speak of walls. Let them be built slowly, honestly, and firmly; they will then bear examination, and they will last. But, dropping all figure, let me close by insisting that laths should be put on wide enough to ensure a good clinch, and that the mortar be put on as I have said. Of two evils, give me wide lathing and poor mortar, rather than good mortar and close lathing.

Yours, Respectfully,

GEO. R. JAQUES.

St. Joseph, Mich., June. 1856.

### PORTABLE CIDER MILLS.

I wish, through the medium of your excellent publication, to solicit attention to one of the most important labor-saving inventions of the age—the *portable cider mill*, by the assistance of which a man and a boy may make seven barrels of cider in a day, and do it with an ease and neatness not attainable by the use of any other mechanism in use. This mill does not crush the apples, as is done by the nut mills, or the mills having cylinders and driven under horse power. It rasps or grates the fruit into a soft pulaceous mass, which renders the expression of the juice a matter of comparative ease to the operator, and enables him with the greatest ease, to secure all the cider the fruit contains—the pomace, after the operation of pressing, presenting an appearance of dryness which indicates the perfect efficiency of the apparatus used. It is shown from repeated tests that this mill will save at least two barrels of cider in seven, and that the liquor expressed is much clearer than that produced by the old-fashioned mills, as no straw is used, and no extraneous matter introduced by the process, either before or after pressing. By

the observance of proper care in picking the fruit, cleansing the mill and apparatus, and in properly preparing the casks for the reception of the cider, a very superior article may be produced, and one which will be drinkable without that contortion of the facial muscles too generally produced by "old orchard."

Every farmer should manufacture a sufficiency of cider for domestic use. There is always a portion of the apple crop that can be much more economically employed in the manufacture of cider, than in any other way. Vinegar is an important article, and more or less of it is required, annually, in every family. The best vinegar is made of cider, if we except that from wine, which, though always superior in quality, is yet too expensive to be employed for ordinary purposes.—*Germantown Telegraph.*

THE CORN CROP—SELECTING SEED.

This crop is becoming annually of more importance in this country. A writer in the *Ohio Farmer* shows, that, while the production of wheat, rye, and oats has relatively decreased in proportion to the population of the country to the amount of 46,000,000 bushels, Indian corn has relatively increased to the amount of 61,000,000 bushels. He goes on to say:

These facts are conclusive of a great agricultural principle: that in our country, Indian corn is the great cereal staple, and that with grass it must be the great basis of future production, both in regard to men and animals.

But while we discover this fact in our country, we discover that precisely the reverse is the case in other countries. Indian corn is *not* the staple of any country out of America. The necessary consequence of this is, that, as the wants of Europe for breadstuffs increase, they must be supplied with the only staple article of grain which America can afford to send—that is, Indian corn. This is one of the inevitable results of the state of civilization and commerce which has grown up in the last half century. The effect of that condition of things is *gradual* but *certain*. Prior to 1845, we exported scarcely any Indian corn to Europe, either in bulk or in pork or whiskey, which are but the equivalents of corn. With the Irish famine commenced the era of Indian corn exportation. Leaving the years 1846-'7-'8 out of view, the increase of corn exportation has been gradual but regular. We give below the average export of corn and pork in 1837-'8-'9 and the average of the same articles in 1852-'3-'4:

Average export of Corn in 1837-'8-'9, bushels	- - - - -	902,000
Average value of Pork, Lard, and Bacon, in 1837-'8-'9,	- - - - -	\$1,538,368

Average amount of Corn exported in bulk and pork in 1837-'8-'9,	-	3,266,948
Average amount of Corn exported in 1852-'3-'4,	- - - - -	7,892,000
Average value of Pork, Lard, and Bacon, exported in 1852-'3-'4,	-	\$5,682,000
Average amount of Corn exported in bulk and pork in 1852-'3-'4,	-	14,960,495

We see by the above table that the average amount of Indian corn exported to Europe has increased nearly five-fold in eighteen years. It doubles in about seven years, leaving out the great increase occasioned by such contingencies as the Irish famine. Such is the condition of Europe, however, that this increase will now proceed with accelerated velocity. There can be no doubt that the period is not far off when we shall export in bulk and in pork, beef, lard, and tallow, more than *one hundred millions of bushels of corn per annum*, and when this export and that of wheat, oats, and rye, will be more valuable than that of cotton, rice, and sugar.

It is impossible to overestimate the importance of the corn crop to this country, and he is doing an injury to the nation who so manages his land as to make it incapable of profitably producing this crop.

It is gratifying to see that the quantity which an acre of ground will produce is being demonstrated to be greater than could have been believed possible a few years ago; yet the average yield does not keep pace with these demonstrations. The reason of this is generally that but little advance is made by the mass of farmers on the old method of preparing the ground and cultivation, but probably the most common cause is the total neglect to select the very best corn for seed. The too common practice is to go or send to the crib at planting time, and either take at random or select the best ears in reach for planting. We conceive the careful selection of seed corn to be one of the most important steps toward an increased average yield per acre, and we are satisfied that any one who will select their seed carefully, for a few seasons, will agree with us in that opinion.

Farmers in this vicinity will probably recollect that for the last five years Mr. Wm. Barnhill, of Oldham county, has taken the first premium for corn, at the Eminence fairs, and those who have had an opportunity of seeing his corn will agree with the judges as to its merits. The following extract from a private letter of this gentleman, published in the *Commercial Review*, will show how he produces this valuable variety:

By diligent care and judgment applied in selecting seed through the husking and feeding season for twelve years, the writer has produced a variety, as he conceives, well suited to the South and West. This variety of corn is a rich golden yellow; the ears are of good medium size, and over the usual length; the grain broad, full, and deep, with a very small tender cob, and yields equal to any corn I have ever seen. It is well suited to all kinds of stock, especially hogs and

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cattle, as it will endure a greater amount of exposure to inclement weather than any corn I have grown, keeping well in the shock through the entire winter.

This corn does not grow as tall as some other varieties; therefore it will admit of closer planting; matures from ten days to two weeks earlier than any other corn that grows as large—an important item with farmers who wish to sow small grain on corn land.

It will be seen that this is not the work of a single season, but the profit and satisfaction will annually repay the little extra care and labor.

A Virginia farmer, in sending some fine corn to the Agricultural Office at Washington, says: "I have for twenty years saved for seed the top year of the stalks that bear two or three ears a piece, and have in this manner improved the corn."

A writer in the *Soil of the South* says: "When I commence pulling my corn, I select two of my most trusty fellows, and we go to the best spots of corn, and we select from the stalks of corn which have two years upon them. We take the largest and best-filled ear; where both ears are large we take both. And, if we find a stalk with one ear unusually large, we take that. We take corn thus selected, slip shuck it, and tie two ears together and swing them across a stick and hang them up in the roof of some house, where the corn will be kept dry until spring. When I want seed corn for planting, I have it taken down and shucked. I examine every ear myself, both as to color and soundness, as well as shape of grain. If I am pleased with it, I then, with a hatchet, cut off the small end, sap one-third of the ear, the balance I have planted. I do not believe, candidly, that I have one rotten ear on an average in a thousand; whether it is attributable to my mode of culture or of selecting my seed corn, or to both, I will not say, but what I have stated is emphatically true."

This personal attention to the selection of seed is of no little importance.

A good time to select seed corn is when the corn is cut up in the fall; direct the hands to leave all standing that have two or more large ears low down on the stalk, and all single ears if very large and very low down, or any other peculiarity you may wish. These remain standing in the field, and, when the corn is shucked from the shock, select a sufficient number of the best of that left standing, and cut them off with a portion of the stalk and hang them up to the rafters of the crib till wanted. This is the easiest method of securing the choice ears of a field, and we think the thorough ripening secured by leaving them standing after the other corn is cut is an object to be desired. The growing of corn is too much of a routine. Every farmer should have some experiment going on in this or some other crop, and follow it up from year to year. In this way some valuable results might be attained. We give the following as an example

of what may be done with but little trouble, and to show the effect of different manures. The same experiment should be repeated for several years to make it reliable. It will not do to depend upon the results of a single season. There are several other interesting questions in regard to this crop on which we want light:

EXPERIMENTS IN GROWING INDIAN CORN.—At the late meeting of the Oneida County Agricultural Society, a premium of \$15 was awarded to Mr. H. H. Eastman, of Marshall, for a series of experiments with different manures in the culture of Indian corn. We subjoin the statement furnished the society by Mr. Eastman:

Different kinds of manures used.	Manures how applied.	Quantity of manures used.	Weight of produce in the ear.	Rate per acre.
			Lbs. Oz. Bu.	Lbs.
No manure -			30 8	52 50
Compost* -	In hill.	Half shovelful.	48	82 68
"* -	Top hill.	"	25	43 15
Quick lime -	In hill.	Half handful.	38 8	57 68
" -	Top hill.	"	30	52 50
Gypsum -	In hill.	"	36	62 16
" -	Top hill.	"	33	57 13
Ashes - - -	In hill.	Small handful.	30 12	53 10
" - - -	Top hill.	"	38 8	66 38
Equal parts lime, gypsum and ashes - - -	In hill.	"	32 4	55 52
" - - -	Top hill.	"	35 8	61 25
Guano† -	In hill.	Table spoonful.	20	34 40
" - - -	Top hill.	"	33 8	57 63
Guano and Super-phosphate of Lime‡ - -	In hill.	Do. of each.	51 4	88 41
" - - -	Top hill.	"	37	63 67
Super-phosphate of Lime§ - - -	In hill.	Table spoonful.	37 8	64 57
Lime - - -	Top hill.	"	45	77 55
Equal parts poudrette, super-phosphate of lime and guano   - -	In hill.	"	43	74 23
" - - -	Top hill.	"	33 8	57 63
Poudrette -	In hill.	Handful.	41 12	72 11
Night-soil composted	In hill.	Double handful.	33 4	57 33
Hog manure	"	"	49	84 19
Unfermented horse manure - - -	"	Half shovelful.	39 12	68 49
" - - -	Top hill.	"	28	48 28
Hen manure	In hill.	Handful.	48	82 68
Carb. of lime	"	"	42	72 42
No manure -			32	55 32

\* Composted 4 muck, 4 hog manure, 1 lime and 1 ashes.

† Intermixed with soil. Seed injured.

‡ Super-phosphate on seed; Guano on outer edge of hills.

§ In contact with the seed.

|| Intermixed with the soil.

The above experiment consists of 28 rows, and 40 hills in each row. The ground was green sward, plowed early in the spring, about 5 inches deep, harrowed thoroughly, and marked out into rows two ways at 8 angles, 3 feet apart each

way. Planted the 12th of May with a "white flint" variety of corn. The cultivation of the growing crop consisted mostly in the use of the cultivator, which was run through between the rows four times alternately in different directions—with one slight hoeing only with the hand hoe. Soil, gravelly loam. I calculate the cost of cultivation, not including cost of manure nor interest of land, at about \$13 per acre. The corn stood upon the hill till killed by the frost, when it was husked, each row separately, and weighed in the ear, allowing 70 pounds to the bushel.

*Louisville Journal.*]

H. H. EASTMAN.

### CHLORIDE OF LIME AS A REMEDY FOR SMUT.

Omitting a good deal of the article we extract below from the *British Farmers' Magazine* for want of room, we come at once to the remedy proposed for smut in wheat. We shall shortly publish the rest of the piece, which is very interesting, and relates more immediately to the nature and cause of smut.

\* \* \* \* \*

No circumstance in their history is so well established as the fact that if healthy seed be sown, which had been mixed with the spores of either bunt or smut, the ears of the future plants will be found to be affected with these blights respectively, and also that if (what we may call) infected seed be either carefully cleaned from the adhering spores of the blight, or steeped in some chemical solution which will kill the spores, but not the seed, the plants will in due time bear healthy ears. The latter of these processes is what farmers call pickling or dressing the seed, and the solution employed is generally known by the name of the wheat-steep. As the *uredo segetum*, or dust-brand (that which is most prevalent in oats, barley, and bere) is, for the most part, dispersed before the crop ripens, steeps are for the most part useless. The *uredo caries*, or bunt, on the other hand, remains in the ear, and will, if it exists in the field and be thrashed with the general crop, most surely contaminate the grain. It is, therefore, for the purpose of preventing this form of the blight that these steeps are most generally employed.

I before mentioned that some of the grains may escape being broken in the operation of thrashing. These may readily be removed by simply steeping the seed in water, when the affected grains will be found to rise to the surface. Many of the blighted grains must have been broken and their contents mixed with the seed. It then becomes necessary to destroy their vitality. This has been done by various means.

In Kent, the practice has prevailed of immersing the seed for a short time in very hot water, a method found to answer the purpose admirably in the hands of an experienced person. Lime, blue-stone, or corrosive sublimate dissolved in water, stale urine, and white arsenic, have been all used, to which may be added sulphate of soda and quick-lime—a dressing highly recommended by a French commission which inquired and reported on the subject.

Whatever may be the efficacy of the other dressings enumerated, there ought to be but one opinion as to the inadvisability of employing for this purpose so active a poison as arsenic. The French commission to which I before alluded, found it to be by no means so efficacious as other substances of a more innocent nature; while it has been ascertained that the flesh of birds destroyed by picking the grain out of the ground has been rendered poisonous, and if eaten would certainly produce serious effects.

In the course of my examination, some years since, of this subject, it occurred to me to apply a solution of chloride of lime to the spores of the bunt fungus, and watch the effect produced. The offensive smell, so characteristic of the fungus, was immediately destroyed, and after a few hours the spores were ruptured and disorganized.

These facts encouraged me to try the effect of the chloride of lime solution, when applied as a wheat-steep, and at the same time to compare it with that which had been so much praised by the French commission before alluded to—namely, sulphate of soda and quick-lime. I instituted with the consent of the council of this Society,\* at their Botanic Garden, the experiment which I shall now describe.

I procured 4 lbs. of the finest and cleanest wheat seed, 1 lb. of which I set apart without any preparation: the remaining three parts I mixed equally with a large quantity of the spores of the bunt fungus, until the whole was rendered a uniform brown color. One pound of this infected seed I then steeped for two hours in a solution of chloride of lime, (made by mixing for two hours 1 lb. of the chloride to one gallon of water) and dried it by sifting fine sand over it. Another pound of the infected seed I steeped for two hours in a saturated solution of Glauber's salts, when it was removed from the solution and dried by sifting over it a little fresh-slaked quick-lime. The fourth pound of seed (which was infected by the bunt) was not subjected to any treatment. These four parcels of seed were then sown in four separate, but contiguous, plots of ground. No difference was observable in the period of sprouting or germination of the seed, but the result of the experiment, which was most striking while the crop was standing, may be thus stated:—

\* The above paper was read before the sectional meeting of the Royal Dublin Society, on the evening of the 30th of November last.



Plot 1.	Plot 2.	Plot 3.	Plot 4.
Sown with one pound of clean undressed seed.	Sown with one pound of same seed infected with bunt fungus, and steeped in saturated solution of chloride of lime.	Sown with one pound of same seed infected with bunt, and steeped in saturated solution of sulphate of soda, and dried with quick-lime sprinkled over it.	Sown with one pound of same seed infected with bunt and undressed.

The number of ears contained in the produce of each plot were counted, and the number of sound and smutted ears ascertained. In the same manner the number of straws deprived of the ears in 1 lb. weight was ascertained. The following was the result:—

Plot.	Total No. of ears in 1 lb. weight.	No. of sound ears in 1 lb. weight.	No. of smutted ears in 1 lb. weight.	No. of straws in 1 lb. weight.
1	336	336	None.	234
2	364	362	2	268
3	632	352	320	278
4	700	360	340	330

The result of this experiment warrants us in drawing the following conclusions:—

1. That wheat seed infected with bunt fungus, and sown, produces plants the grain of which is filled with a similar fungus.

2. That the presence of the fungus is injurious to the straw as well as destructive to the grain.

3. That the steeping seed infected with the bunt fungus in certain chemical solutions more or less prevents the production of the fungus in the seed of the future plants.

4. That steeping the infected seed in a saturated solution of Glauber's salts, and afterwards drying it with quick-lime, has but little effect in preventing the production of the fungus in the future plants.

5. That steeping the infected seed in a solution of chloride of lime is nearly a specific in preventing the production of the bunt fungus in the future plants, and very much more effectual for this purpose than the solution of Glauber's salts and drying with quick-lime.

Since the date of this experiment, the chloride of lime solution has been used as a wheat steep by several agriculturists in different parts of the country, with the same satisfactory results; and in confirmation of this statement, I take the present opportunity of reading to the meeting a few communications I have received upon the subject.

The method of using the chloride of lime as a wheat steep is as follows:—Make a solution by mixing one pound of fresh chloride of lime in one gallon of water, frequently stirring them with a *stick* in a *wooden* vessel for two hours. Throw the seed intended to be steeped in a large quantity of water, frequently stirring it, and removing all the swimming grains. Shere off the water, and then pour over the seed a sufficient quantity of the chloride of lime solution to cover it, allowing it to remain for two hours. Then pour off the solution, which may be again used, and dry the seed with fine dry sand, peat mould, lime, or any drying powdery substance; it is then fit for sowing.

With regard to the prevention of the true smut, the *uredo segetum*, unfortunately we know of no method so efficacious as those used for the prevention of the bunt fungus. This arises from its early dispersion, and the consequent contamination of the ground. In cases where there is reason to suspect that the soil is infected by the spores of the smut, the only practical method of proceeding is to treat it largely with stale urine or quick-lime, and to avoid cropping the land with grain for two or three years, as I have observed that the spores lose their power of germinating if long kept.

As some of this fungus may be found in a perfectly ripe crop of corn, especially of barley, it is desirable that the seed should be steeped similarly to that of the wheat. This will undoubtedly destroy any of the spores that may adhere to the seed.—*Farmer's Magazine.*

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LIST OF PAYMENTS,  
From 1st July to 30th August, inclusive.

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 :

C. Middleton, Jan 1857	1 00	J G Guthrie, July 1857	1 00	Mrs C B Boston, do	4 00
Jno White, Jan 1857	1 00	P G Ellen, Jan 1857	1 00	H Harris, do	2 25
T G Bumpass, June 1857	1 00	Jeff Flippo, Jan 1857	2 25	M R Harrell, do	13 50
Dr Jno Butler, July 1857	6 00	G Moseley, Jan 1857	1 00	G Knight, July 1857	1 00
W T Samuel, July 1857	3 50	J E Robertson, July 1856	1 25	D S Cowles, do	1 00
H St Geo Harris, July 1856	1 00	Thos Rollins, do	1 25	L G Waddell, do	1 00
H B Miller, Jan 1857	1 00	A H Perkins, Oct 1856	2 00	W Turpin, Sep 1856	2 50
J C Thom, Jan 1858	2 00	W Taylor, Sept 1856	3 75	W J Harris, Jan 1857	1 00
Jas M. Harris, Jan 1857	4 75	Jas Hayslett, March 1856	2 50	H E Shore, July 1857	1 00
W Meredith, July 1857	1 00	B Wood, Jan 1858	5 00	S Scott, Jan 1857	1 00
A & T Pringle, July 1857	1 00	T O Rogers, July 1856	5 00	J M Hurst, do	1 00
J H Montague, Jan 1857	2 75	John Currie, May 1857	1 00	J C S McDowell, July 1857	1 00
M B Carrington, Jan 1858	2 00	Dr E Brown, July 1857	1 00	W E Martin, Jan 1857	2 25
Jos W Twyman, July 1856	2 50	J S Horner, August 1856	1 00	S S Bradford, June 1858	4 00
Chs Williams, July 1856	1 00	B Grant, do	3 00	Geo L Bayne	
Josh White, July 1857	2 00	W H Brawn, Jan 1856	2 50	G A Wood,	
A Temple, Jan 1857	4 25	J H Lacy, July 1859	5 00	C O Lipscomb,	
F G Bridges, Jan 1857	1 00	R C Robbins, Jan 1857	1 00	W H Eubank,	
A L Carter, July 1857	1 00	E J Thurston, July 1857	1 00	R H Williams,	
H L Jeffress, Jan 1857	1 00	Thos Horden, Jan 1857	1 00	W B Purcell,	
T L Walker, July 1856	5 00	W R Nelson, do	1 00	W H Pettus,	July 1857 10 00
J A Mercedith, Jan 1857	3 00	W W Browne, July 1857	1 00	T B Purcell,	
R A Lorton, Jan 1857	1 00	R L Walker, Jan 1858	5 00	R E Knight,	
Jas W Grayson, July 1856	5 00	Col W Keer, Jan 1857	2 00	W S Dupree,	
Jno A Parker, July 1856	7 50	John Ellet, July 1857	1 00	Jos L Watkins,	
Wm Jeter, July 1856	5 00	A Dudley, Oct 1859	6 00	R. Lipscomb,	
Wm H Harrison, Jan 1859	3 00	Jas Long, Dec 1856	2 50	P L Lipscomb,	
Dr H N Coleman, July 1857	3 50	S T McClintuk, Jan 1857	2 50	J M Sublett, Jan 1857	4 75
M B Brown, Jan 1857	2 25	J B K Taylor, July 1857	2 25	Wm Payne, Sr. do	1 00
Jos Briggs, May 1856	5 00	R L Jefferson, July 1856	2 50	W E Walkop, do	2 25
A B Davidson, Jan 1857	1 00	W T Wooten, Jan 1857	1 00	B W Fitzgerald, do	1 00
Thos J Adams, July 1857	1 00	H J Venable, do	1 00	W T Smith, July 1857	6 00
Jas T Jones, Jan 1857	1 00	G S Harper, do	1 00	Dr A B Hooe, Jan 1860	5 00
W Wheeler, Jan 1857	1 00	W H Venable, do	1 00	W W Michaux, July 1858	5 75
A A Walton, Jan 1857	12 00	B F Terry, do	1 00	R J Gilliam, July 1856	10 50
H M Fowlkes, Jan 1857	2 25	H F Morton, do	1 00	T F Wingfield, Jan 1857	1 00
Thos Green, July 1857	5 00	J F Rice, do	1 00	Jacob Warwick, do	3 50
Geo M Green, April 1856	2 50	R C Anderson, Oct 1856	2 25	R Boulware, Jan 1855	1 00
T W Downer, July 1857	1 00	H S Guthrie, July 1857	3 50	John A Mosby, April 1857	1 00
S P Ryland, Jan 1857	1 00	P S Smithson, May 1857	1 00	R M Stevenson, July do	1 00
Jas Calhoun, Jan 1857	2 75	W W Bondurant, Jan 1857	2 25	P Slaughter, Jan do	1 00
S T Stuart, Jan 1857	3 00	E W Scott, do	1 00	Jas A Walker, July do	1 00
John Walker, May 1857	1 00	A Watson, do	1 00	Jas A Bruce, August do	1 00
Jos Fuqua, Sept 1856	3 50	J Walker, do	1 00	E Goss, Jan do	6 00
E Flood, Jan 1856	2 25	Jos Blanton, April 1857	2 25	John Shuey, August 1856	1 33
W A Ford, Jan 1856	4 75	W A Armistead, do	1 00	A C Hartman, Jan'y 1854	2 00
J B Glover, Sept 1856	4 75	P H Jackson, Jan 1857	1 00	H K Burgwyn, do	5 00
C Y Horsely, Sep 1856	6 00	J A Dalby, do	1 00	C Warwick, July 1857	1 00
G Moseley, Jan 1856	1 00	E N Price, do	1 00	Jas Bunch, Sep 1854	2 00
G W Kyle, Jan 1856	1 00	J H C Leach, do	1 00	R Anderson, Jan 1857	2 00
W M Mosely, Jan 1856	4 75	H A Clarke, April 1857	2 25	Wm P Dabney, July 1857	4 00
T H Sharp, Sep 1856	3 50	Jno A Scott, Jan do	1 00	Ro Martin, March do	2 25
F B Scruggs, Jan 1856	2 25	T D Richardson, Ap do	1 00	J T Hie, July do	1 00
G C Vaughan, Jan 1856	1 00	S B Scott, Jan do	1 00	A J Richardson, Jan do	3 50
J F Dickinson, Jan 1857	2 00	C E Redd, do do	1 00	Mrs J W Todd, July do	1 00
Thos L Page, Jan 1857	1 00	E F Redd, May do	1 00	Isaac Medley, July 1856	4 37
A J Carper, Jan 1857	1 00	W T Harvey, Jan do	2 25	Jas Magruder, do	5 00
S B Gibbons, July 1856	1 75	E Hughes, do do	2 00	Thos W Jones, do	2 50
S B Atwill, Jan 1857	1 00	T D Edmunds, do do	2 25	D A Smith, Sep 1857	3 50
W Patrick, Jan 1857	3 25	T B Booth, July do	1 00	E F Potts, July 1857	1 00
J E Williams, Jan 1859	3 00	T F Wilson, June do	1 00	T K Miller, do	1 00
A B Duncan, July 1857	1 00	Dr M Banister, July do	1 00	Sam'l Hancock, Jan 1857	2 25
G H Geiger, July 1857	4 75	R R Duval, Jan 1860	5 00	W S Coons,	2 00
W H Huxall, Aug 1856	3 83	A Wren, April 1857	2 00	Win Doswell, July 1856	3 75
N Cocks, Sep 1855	1 00	J B Harvie, July 1857	2 25	J Sinclair, Sr. Jan 1857	2 00
W Walton, July 1857	1 00	S Patrick, Jan 1858	2 00	S C Harper, July 1857	4 75
J W Stone, Jan 1860	5 00	Jas Y Harris, July 1857	1 00	Geo L Bayne, do	1 00
G Campbell, Jan 1857	1 00	E Chewning, do	2 25	Miss S Nicholas, Sept 1859	5 00
A Shepperd, May 1855	1 00	L L Holladay, July 1856	3 50	G M Terrell, Sept 1857	1 00
Jos Sneed, Sep 1857	3 50	J B McClelland, July 1855	5 00	T J Randolph, Jr., Jan 1857	2 50
Jno G Hughes, Sep 1856	3 75	Wm Frazier, July 1857	1 00	Geo W Macon, July 1857	1 00
Ro H Vest, Jan 1857	1 00	Wm A Love, May 1857	1 00	P Sowell, Sept 1857	1 00
S S Griffin, Jan 1857	1 00	C Jones, Nov 1859	5 00	T W Keesee, Sept 1856	2 70
F W Epes, July 1857	1 00	James P White, Jan 1857	1 00	G H Dohyng, July 1856	1 50

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J H Har  
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H R Woodhouse, Jan 1857	5 00	D H Hatton, Dec 1857	1 00	Calvin Carden, do	1 00
W S Payne, July 1856	5 00	Miles C Selden, Jan 1862	8 00	A M Stratton, June 1857	1 00
Mansfield King, July 1857	1 00	H P Pope, July 1856	4 06	W G Morton, Jan 1857	3 75
Philip Edge, do	2 25	A Hunley, Sept 1856	3 54	Geo W Key, do	1 00
J H Hammond, June 1857	1 00	C H Page, July 1857	1 00	Jos Johnson, do	2 25
P R Berkeley, Jan do	2 00	T C Beytop, Jan 1857	1 00	G W Booker, July 1856	5 25
N W Harris, Jan 1858	2 00	C W Montague, Jan 1857	2 00	P S Roler, July 1857	2 25
Jas W Conway, Jan 1857	1 25	Jas Miller, July 1857	1 00	T J Preston, Jan 1858	5 00
R H Carr, July 1857	3 50	W T Taliaterro, Sept 1857	1 00	R C Jones, do	3 00
J T Early, Jan 1857	2 00	E Brummell, Jan 1857	1 75	Ro Moseley, do	3 00
F W Battaile, Jan 1857	2 00	L M Coleman, Jan 1857	1 00	S S Satchell, do	2 00
Ro Sterrett, July 1855	2 60	Miss V L Harrison, July 1857	1 00	W C Jones, Jan 1857	2 25
Dr J B Kirby, July 1857	1 00	H N Pendleton, do	1 00	J V McGahey, July 1857	2 25
T B Lipscomb, do	1 00	G H Pendleton, do	1 00	Benj Estes, August 1857	5 00
J A Fleet, Jan 1857	1 00				

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Sept 1856—1y

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Sept 1856—1y

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Bouquets tastefully arranged.

Sept 1856—1y

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Prof. J. C. ENGELBRECHT, Principal Instructor in Music.

Mr. & Mrs. H. W. SHEFFEY, Heads of the Family.

The next Session of this Institution will commence on Wednesday, the 24th of September. The Officers named above will be aided by an efficient corps of Teachers.

Renewed efforts will be made to sustain the high character the Institute enjoys, and to enlarge the sphere of its usefulness.

The large and commodious additional building now in the course of construction will afford increased facilities for the comfort of the pupils, and the systematic arrangement of the classes, especially in the departments of Music and French.

The institute, situated in one of the healthiest portions of the State, is well established in the confidence of its friends and patrons in Virginia and Maryland. The number of pupils from Louisiana, Alabama, and in the Southern and Western States is steadily increasing.

Pupils from a distance can remain during vacation in the family of Mr. Sheffey.

The discipline is strict, yet parental. The course of study is comprehensive and thorough, embracing the various branches of an English education, the Ancient and Modern Languages, Music, Drawing, &c.

Additional facilities will be afforded for acquiring a thorough knowledge of the French language.

Terms:—Board and English tuition per Session, \$200; Music, the Languages, Drawing, and Painting extra.

Registers, containing full particulars, will be sent on application to Rev. R. H. PHILLIPS, or HUGH W. SHEFFEY,

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House Builders and Carpenters,

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Sash, Blinds and Doors, of all varieties. Stairs, Handrails, Porches, Verandahs, Balconies.

Cornices, Cornice Mouldings and Brackets of all sizes and patterns. Mouldings of all descriptions.

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They will make estimates for work to plans furnished them, and deliver it at their factory at the estimated prices. Orders respectfully solicited.

September 1856—1y

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**Broadcast Grain and Guano Sower.**

We confidently recommend this Machine to Farmers. Having but little machinery, it is durable and easily kept in order, and sows regularly any quantity of grain or guano desired. Frank Ruffin, Esq., Editor of the Southern Planter, thus comments on it:

"We are so perfectly convinced of its great value in efficient working capacity, cheapness, durability and simplicity of construction, that we do not hesitate to recommend it to the public—a thing which it is known we do not often venture upon. Again, one horse works the machine with perfect ease. It sows a breadth to ten feet as fast as a horse can walk, and carrying two bushels at a time, does not require as many stoppages as are necessary by a man who seeds by hand. The seeding, too, is entirely independent of the wind, and done with us as well during very high winds, which prevailed most of the time, as during a calm, because the seed are delivered so close to the ground.—We not only recommend the machine to every farmer, but urge them to buy it, not on Mr. Seymour's account, who is nothing to us, but on their own."

THOS. BRANCH & SONS,  
Agents for Petersburg.

Sept—2t

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ON TUESDAY the 23d September, 1856, at 12 o'clock, M., at Cobham's Depot, Albemarle Co. Va., I will sell at public auction, a tract of land, containing about 630 acres, about 170 acres of it are cleared, the rest is original forest and very heavily timbered, and all adapted to the growth of Wheat, Corn and Tobacco. It lies within a mile and a half of Cobham Depot and Lindsay's T. O. on the Virginia Central Railroad, about 15 miles from Charlottesville and the University, (the best wood market in the State) and five miles from the Green Springs. This land is a part of the estate of my late father, Dr. Mann Page, and adjoins Hon. Wm. C. Rives, the estate of James Lindsay, C. H. Page, &c., in one of the best neighborhoods in the State, convenient to Episcopal, Presbyterian and Baptist churches, post offices, &c. There are no buildings on the land.

TERMS.—One-fourth cash—the balance in 1, 2 and 3 years. For the deferred payments, bonds bearing interest, secured by deed of trust on the land.

Further information may be had by application to C. H. Page, who will show the land, Lindsay's T. O., or the subscriber at Lynchburg, Va.

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Sept 1856—1y

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