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.*

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Virginia State Agricultural Sococty.

EXPERIMENTS

In ascertaining Damage done to Corn by cutting off Tops and pulling Fodder Twelve or Fourteen Days earlier than usual.

By Dr. R. Harrison, of Prince George.

[*Premium Twenty-five Dollars.*]

The following experiments were made in 1854 in order to ascertain the damage done by pulling blade fodder and cutting off tops—twelve rows from an acre in 1854, and fifteen in 1855. The corn was carefully shucked and weighed in a hopper, with patent balances. In 1854 this was attended to by Mr. James W. Collier for me, and the corn was weighed by myself in 1855. The ground selected for experiment was as near a uniform fertility as I could select. And the first fact demonstrated is, that even when this is the case, there is frequently a marked difference in production. This may be owing to difference in rows—some may possibly be more elevated and drier than others; some hands work the corn better than others; sometimes the same ploughman cultivates one row better than another. Again, there is sometimes an unequal stand of corn.

The second point I wished to demonstrate was, what damage was done to corn by cutting off the tops about 12 or 14 days earlier than usual. For I have long entertained the opinion, that as soon as the tassel has fructified the germ, and becomes dry, it has subserved all the valuable purposes of the vegetable economy, and its removal does no damage. Even when a limb is removed in the animal economy, corpulency is the general result. Again, I have frequently noticed, whenever a top has been blown down, the ear of corn is apt to be as large and as good as those adjoining. This year two of my neighbors cut their tops before the blades below were removed, and so did I in part, and neither of us have as yet ascertained any damage from the operation.

One Acre.—1854.

Six rows of corn, tops cut, and the blades left below the ear and never pulled, weighed, - - - -	810 lbs.
Six rows of corn, blades pulled when the tops in the other rows were cut, tops left to stand about ten days, then cut, corn weighed, - - -	766 lbs.

One Acre.—1855.

Five rows of corn, blades pulled 27th September, and tops cut a few days afterwards, weighed, October, - -	736 lbs.
Five rows of corn, tops cut 13th September, 14 days before the blades were pulled in the above experiment, -	790 lbs.
Five other rows, treated as the first five,	868 lbs.

This last experiment was not so satisfactory, as squirrels damaged the first and second rows, and therefore it is not accurate.

The third fact I wish to ascertain is, what damage arises from sowing peas among corn, and the following is the result:

Acre No. 1.

Five rows of corn sowed with peas later than usual, about one bushel to the acre, weighed, - - -	868 lbs.
Five rows, without peas, - -	787 lbs.
Five rows, with peas, - -	936 lbs.

Acre No. 2.

Five rows of corn, with peas, - -	860 lbs.
" without peas, -	910 lbs.
" with peas, - -	924 lbs.

Acre No. 3.

Five rows of corn, with peas, - -	998 lbs.
" without peas, -	1026 lbs
" with peas, - -	966 lbs

Acre No. 4.

Five rows of corn, with peas, - -	966 lbs.
" without peas, -	1008 lbs.
" with peas, - -	834 lbs.

I was much disappointed in the weight of the last five rows of corn.

In connection with this subject, I will state, the experiments commenced on the south, and the rows were taken consecutively, five rows with peas, five without, again five with peas; thus an opportunity is afforded of contrasting the five rows without peas with five rows with peas north and south. I deem it also expedient to mention, that the product of the peas was not equal to those sown earlier.

The following experiments were made in 1854, twelve rows making an acre.

2 rows of corn cut at usual time of pulling blades, each row weighed, - - -	126 lbs.	252 lbs.
4 rows, blades pulled to the top,	121	484 "
4 rows, blades pulled, tops cut the same time, - -	134	536 "
4 rows, blades left below the car, tops cut, - -	139	556 "

4 rows, blades pulled to the ear, tops cut at the expiration of 10 days,	142½	570 lbs.
4 rows, blades left on the whole stalk,	161	644 "
2 next rows cut up and shocked,	144	282 "
6 rows, blades pulled to the top,	88½	531 "
6 rows, all the blades left,	125⅝	754 "
1 row, blades pulled, tops cut 10 days afterwards,	90	
1 row, blades all left,	128	
1 row, blades pulled, tops left 10 days,	128	
1 row, blades all left,	142	
1 row, blades pulled, tops left 10 days,	114	
1 row, all the blades left,	122	

Another examination I made was to ascertain whether corn grew more at night than by day.

When the corn was very young, nights very cool, in June, I made several examinations. I ascertained the stalks that I cut down to the ground would scarcely grow at all during the night, but would grow about three-quarters of an inch the following day. This examination was made several times during June, no appreciable variation in the temperature of the atmosphere, and with similar results.

July 30, the corn grew day and night,	4⅜	inches.
July 31, " " "	4⅞	"
Aug. 1, " " "	5	"
" the corn grew at night,	1½	"
" the corn grew in the day,	3½	"
Aug. 2, the corn grew after a rain, day and night,	4⅞	"
" corn grew in the day,	3	"
" corn grew at night,	1⅝	"

Thus, it appears, the result conflicts with the popular error that corn grows more at night than by day.

The above experiments are respectfully submitted to the consideration of the State Agricultural Society.

Mt. Pleasant, Prince George, Va. ROBT. HARRISON, M. D.

REPORT ON ROCKLAND.

THE FARM OF R. B. HAXALL, IN ORANGE CO.

Published by request of the United Farmers' Club, of Orange, Culpeper and Madison counties.

Submitted 10th November, 1855.

[Before offering a report upon the farm of Mr. Haxall, which was examined by the club at their last meeting, it may be alike interesting and instructive to look back upon its condition a few years ago; and we are the more induced to do so, from a conviction that there are few if any farms in this or any other section which can present within that period so marked a change for the better.]

Upon one portion of this estate, that bought of Mr. Henshaw, efforts at improvement had been commenced, and for some years very sucessfully pursued, by its former proprietor. The portions subsequently acquired have, we believe, come into Mr. Haxall's possession in a most exhausted and neglected condition.

When Mr. Henshaw first commenced his improvements, nothing could have been more cheerless and discouraging than the general aspect of the place. The soil indeed had been originally good, but years of bad culture and continued cropping had thoroughly exhausted it. This had been followed by a period of almost total neglect; the hill lands were either naked galls, or were covered with thickets and briars, while the branch lands, which alone seemed to retain some fertility, were little else than undrained marshes; scarcely a spot upon the place promised an adequate return to the labours of the husbandman, whilst the whole afforded but a meagre subsistence to a few thriftless cattle usually summered thereon.

During the few years which Mr. Henshaw retained this farm he brought about a most decided change in its condition. The thickets to a great extent were removed, the galls healed, and much of the branch land reclaimed and put into profitable cultivation. Very great attention was given to manure, which was industriously collected and spread. In this important department, indeed, the former appears to have been more diligent than the present proprietor. Large quantities of lime were annually burnt and applied to the lands, and nothing probably contributed more to their rapid amelioration. Grass seeds were freely and very successfully sown, and plaster, that most powerful of all agents in the first stages of the improvement of our red lands, was liberally used. For these praiseworthy efforts Mr. Henshaw was very amply repaid. Several of his crops were very abundant, and good profits were realized, both on grass and winter fed cattle; and finally the land was resold at an advance of more than twenty dollars per acre over the price at which it had been bought.

In connection with the use of lime upon this place, it may be remarked that many are disposed to doubt its beneficial effects on the red lands of our S. W. Mountains; and it is contended by some that the land to which it was applied by Mr. Henshaw, though within the range, do not properly belong to this class. Chemical analysis claims indeed to find lime in such large quantities in this soil, that it would seem most improbable that a comparatively small addition could produce any very decided effect; yet we know that Mr. Henshaw attributed much of his success to the use of lime, nor are we aware that it was by any means confined to the soil of a greyish hue, of which there is a good deal on the place. One of this committee has used lime, not indeed in very large quantities, but on every variety of S. W. Mountain soil, and nowhere without a very marked benefit. Indeed there is no fertilizer, which, in our opinion, may be used with more safety or a more absolute certainty of remuneration.

The portion of the estate purchased of Mr. Henshaw certainly came into Mr. Haxall's possession in a very improving condition. The ameliorating process already so successfully introduced, has been continued thereon with constantly increasing zeal, and extended to the portions subsequently acquired. Should it be kept up a few years longer, it will not be too much to predict, that this will be found one of the best grassed and most highly improved farms in all Upper Virginia. Even now it is surpassed by few.

To one fact we will here call attention, as strikingly illustrative of the value of our red lands even in their most exhausted condition. As has already been seen, Mr. Henshaw must have been very fully repaid for the labor and capital expended by him-

self. Now it is stated by Mr. Haxall, that the whole place has yielded since his purchase full 6 per centum per annum on the entire outlay, and this without giving the farm any credit for its use as a summer residence for his family, or for the consumptions in meats and vegetables drawn therefrom during a sojourn of some five or six months. Thus it will be seen, that a farm has been rapidly advancing from a state of very great exhaustion to that of the highest improvement; and yet, all the time yielding more than the legal interest on the capital invested.

One other fact we will state, though not immediately connected with this farm. In a conversation recently had with a gentleman, who purchased a few years ago a very valuable estate in this county, he mentioned that his neat sales, during the present year, after charging the farm with all its legitimate expenses, would reach 15 per cent. on his whole investment; meaning thereby, everything paid for, land, negroes, farm stock and farming utensils; and excluding of course, pleasure carriages, pleasure horses and the household establishment generally, as in the former case, however, allowing no credit for family consumptions drawn from the farm. Could we estimate with accuracy the increased fertility of the soil (for this farm, like that of Mr. Haxall, is under an improving system,) and the increasing value of the slave property, the actual profits must very much exceed the large per cent. already named.

With such examples before us, (and others of similar import could be adduced,) the time for croaking ought surely to be passed, and it may with confidence be claimed that a well conducted Virginia farm offers now the very best investment for capital. These gentlemen are certainly entitled to our thanks for having thus clearly demonstrated the singular capacities of our soil.

Examination of the farm.—First field.—This had been in corn the present year, and the crop though fine was certainly not superior, probably not equal, to several in the neighbourhood. The lands were well drained, well cultivated, and in good condition. A small portion of this field had been sown in wheat, and the work was neatly done; we cannot, however, approve the practice of rolling the land immediately after seeding. Whilst it adds something to the apparent neatness, we can see no possible advantage, and in some respects we esteem it prejudicial. Rolling in late winter or early spring would certainly be far better. With the very flattering prospects for prices, and the general forwardness of the operations on the farm, we see no reason why the whole of this field might not with propriety have been sown in wheat. Extraordinary circumstances would justify the interruption of a system ordinarily the best, and indeed the practice which has of late grown so much in favor—that of following corn with oats, the same land to be stubbled for wheat—is we think of very doubtful propriety. At a period like the present, when one bushel of wheat equals in value some five or six of oats, wheat to be followed by wheat would surely be more profitable. If deemed more advisable, a single crop of grass might be intervened. Our experience, however, is not in unison with the prevailing opinion adverse to wheat stubble fallows.

Second field.—This field had been sown in grass, with very partial success. It was, we thought, altogether too naked to be left in its present condition till reached in regular rotation. Indeed we are disposed to question the policy of fixed rotations altogether. Few, if any, farms can be found with fields of uniform fertility, and common sense would seem to indicate that those of greater capacity should be most heavily taxed. Moreover, cases like the present, where an interruption of the rotation is absolutely necessary, must obviously be of very frequent occurrence.

Third field.—From a portion of this field wheat had been harvested this year, and the crop was reported to have been good. The whole is well set in grass. The draining herein is very defective, badly planned and badly executed.

Fourth and fith fields.—These fields are both well turfed. They presented a neat and cleanly appearnace, and were affording rich pasturage to the cattle,

Sixth field.—This field, situated on the summit of the S. W. Mountain range, is somewhat isolated, the woodland and the homestead intervening between it and the rest of the farm. It was in wheat, or an oat stubble fallow. This is the established system of the farm—as already indicated, we doubt its propriety. The land had been well prepared and the crop neatly seeded. The wheat was looking very well; we apprehend, however, that much of it had been sown too early; the attack of the Hessian fly was already to be seen, and it must since have suffered severely from the depredations of that insect.

Here, as on other parts of the farm, the loose rock, of which there is much, has been piled promiscuously on the land. This practice is considered very objectionable; a little extra exertion would remove them entirely; indeed the same force, with the aid of a few carts and horses, could haul them a short distance with even more expedition than they can pile them; they might be deposited at points where they could hereafter be used for fencing or covered ditches, and if such is not practicable they might at least be carried to land not intended to be cleared for cultivation Left in piles on the fields they continually interfere with the plough, making a thorough tilth of the soil impracticable; they are frequently scattered so that repiling becomes necessary at each cultivation; they soon become nurseries for briars and brambles, and thus give to the farm a slovenly aspect.

Stock.—The horned cattle examined were generally good, some of them were very fine. The fat cattle ready for market, the purchase of the last season, were alike remarkable for the fatness of the beef and the character of the animals. They were largely crossed with the short-horn breed, and whilst they are by far the most beautiful, we do not doubt that under the fine keep which they have here received they are likewise the most profitable, even at the high prices at which they have to be bought. It will, however, generally be found that animals of this character cannot be readily had even at an extra price. Grazing with them were a few very large oxen, intended to be fed for winter beef, a business of very doubtful profit at the present prices of grain. They were bought, however, when prices were not likely to range so high, and probably could not now be judiciously turned to any other use. Having been bought too at very moderate rates, they will no doubt afford some profit. The stock cattle purchased this season were altogether different from those of last; they were far inferior, both in size and character. This no doubt was a matter of necessity, not of choice. Like most other purchases of the season,

the price paid was much too high to leave a proper margin for the grazing profit. It is indeed barely sufficient to secure him from the danger of absolute loss.

The milch cows and younger cattle are entitled to our highest commendation. Largely crossed with Durham, Devon and Ayreshire, they are probably not equalled by any other herd in this section of our State. Would it not be more judicious, however, to confine himself to a single improved breed? We cannot understand the policy of this mixture. Several of the herd were thorough bred Devons, bought at high figures and much praised by the proprietor. We did not consider ourselves qualified to pass upon their merits. One cow of common breed was much admired for her milking qualities, and under the skilful breeding of Mr. Haxall, she may probably become the parent of a very useful family. The flock of sheep, which have been crossed for some years with Cotswold bucks, are now presenting the finely developed chests and symmetrical figures of that excellent breed. Notwithstanding all that has been said, and the predjudices aroused against them; notwithstanding the assertion of our friend of the Southern Planter, that in England they are eaten only by the laboring classes, we still consider them by far the most desirable sheep for our country. Their early maturity, fine size, and great propensity to fatten, bring them sooner to market, and render them more saleable than any other with which we are furnished. It may be that they are catering for a gross feeding people, but we have always found the heavier and fatter the carcass, the higher the price and more ready the sale to our butchers. Even in the fleece, the increased weight, compensates fully for the diminished price. Nor have we found that their bills of mortality, exceed those even of the fine wool flocks.

The only other stock seen were a few colts folds of the last spring. They were the get of Mr. Haxall's Morgan Stallion. They were altogether too young to be passed upon.

Homestead.—All the outbuildings erected by Mr. Haxall, are in very good taste. They contrast most favorably with those left by Mr. Henshaw, who indeed seems to have had little regard for appearances. This with the free use of white and yellow washes, impart to the place an air of neatness and comfort rarely to be found about a Virginia establishment. It is astonishing how much can be affected at a very trifling cost, by attention to such little matters, and it is equally surprising how totally they are neglected about most of our Virginia homesteads.

From the Southern Farmer.

SUFFOLK AND OTHER BREEDS OF SWINE.

Messrs. Editors:—I have been requested by several gentlemen to state through the *Southern Farmer* the origin of the Suffolk breed of swine, and to give my experience in breeding the same, together with your call for weights and scales; but my answer has been deferred in order to obtain a cut of my premium improved Suffolk Boar, Emperor, 13 months old, gross weight 704 pounds on the first day's exhibition of our late Fair. Unfortunately, I am unable to procure the cut. I describe them as do Youatt and Dr. Bennett; the first, the best and most scientific breeder in England—the latter, in America. The County of Suffolk, in England, has long been celebrated for this breed of pigs, originating, it has been conjectured, from an early importation of Chinese Swine crossed upon the native county stock. There are no better breeds of swine found in England or America than the Improved Suffolk Swine; short legs, fine bone and hair, well formed, compact, easily kept, hardy, and well adapted to farmers of limited, as well as those of abundant means; weighing, from 6 to 9 months, 150 to 200 lbs. and from 9 to 18 months, 250 to 400 lbs. Practical breeders of swine keep steadily in view the following points: Short legs, fine bone, light offal; choosing that breed which makes the largest possible amount of meat in the shortest period of time, upon the smallest quantity of food consumed. And I emphatically say, without fear of contradiction, that no man, as a general rule, can make as much pork with pigs from 6 to 10 months of age, with the same amount of food consumed by the large breed of swine of any name, as can be made with the Improved Suffolk or Black Essex, (small breeds.) This has been fully and satisfactorily tested by myself within the last six months, for my own gratification and not for others, but from the solicitations of you, Messrs Editors.

It would be proper here to remark, and I wish it to be well understood by those who have *alone* the large breed of swine, that my remarks are not intended to depreciate these breeds in the estimation of the public, as I have been, and am now engaged in raising for sale all the large, as well as small stock of swine. But I deem it my duty to give to those making enquiries, my candid and truthful opinion, founded upon a practical experience of ten years' duration.

In order to test the fact more accurately, and to satisfy more fully those seeking for information in regard to the relative fatteniug qualities of the different breeds of hogs, I sent, on the 3d day of November last, to the distillery in Richmond, 7 shoats, consisting of two Chester County, two Woburn, one English Chester, one Irish Grazier, and one Suffolk, all of the same age and nearly the same weights, except the Suffolk, which was 12 days younger, and fourteen pounds lighter, to put in the same pen, fed *as usual there*, with nothing but swill, with the occasional addition of bituminous coal, to remain four months, at which time, weather permitting, I propose killing them.

In answer to your late call for weights and scales, you will find them below, as follows: 6 Suffolk pigs kept upon the sow 8 weeks, and fed during that time with boiled corn, and corn mush, weaned at the expiration of the 8 weeks, and fed exclusively for 4 months upon slops, killed one day before being six months old, and accurately weighed.

	Live weight.	Nett weight
No I. Spayed sow,	325 lbs	260 lbs.
No 2. " "	310 lbs	248 lbs.
☞ No 3. " "	298 lbs	240 lbs.
No 4. " barrow	275 lbs	210 lbs.
No 5. "	260 lbs	208 lbs.
☞ No 6. "	230 lbs	185 lbs.
Gross weight,	1698 Nett weight,	1351

Average gross weight each 283, Average nett weight each 225.

Average gain, daily, from farrowing, 1¾ pounds.

Those marked with the index Nos. 3 and 6, overweighing by the rule of deducting 1-5th; the other four weighed under it.

Stock sold since 1st Nov 1855.—One pair Suffolk's 13 months old, sold to Model Farm, $60
One pair Irish Grazers, 18 mo. old, 60
3 Suffolks six weeks old to gentleman in Halifax county, 35

1 Suffolk six weeks old to gentleman in Goochland, $10
3 Suffolks ten weeks old to a Company in Christiansburg, 35
1 Suffolk 6 weeks old to a gentleman in Petersburg, 12
2 Suffolk six weeks old to a gentleman at Dinwiddie C. H. 40

On hand an English Chester sow; weight 650 lbs., with an offer of $100 for her and pigs, besides other stock swine commanding in market from 50 to $75 each. Your readers may construe this as a *brag*, but such being the order of the day, I must keep it up, with a desire that you put the above in shipshape.

Yours Respectfully,
J. G. Turpin.

Cloverdale, near Petersburg.

OBSERVATIONS UPON HORN AIL.

Mr. Editor:—I submit to you the following remarks for publication, if you shall judge them worthy of a place in the columns of your valuable paper.

Upon examining the horns of cattle, suffering under diseases in a chronic form, or acute, in a congestive stage, we find a death-like coldness pervading them. This coldness is termed by farmers, quack farriers, and cow leches, Horn Ail. Is there a local disease of the horns, that requires local remedies applied to them? I answer in the negative. In assuming so decided a position so contrary to the ignorant and superstitious notions of the day, in regard to diseases of domestic animals, I shall probably awaken feelings of opposition and perhaps contempt, in the minds of the above named class of individuals. In adducing evidence to sustain the position that I have assumed, I shall endeavor to found my remarks upon truth, and true physiological principles, those laws of nature which govern the life and health of every living creature. The modus operandi of treating this disease, which is considered so formidable, by the non-medical, is not more curious than absurd; although enshrouded in clouds of mystery by the interested operator, every intelligent man can see, that it consists in acts of cruelty of the most barbarous nature, operations which are but relics of the dark ages, that have long since fallen into disuse, with all humane and scientific veterinary practitioners. An animal is taken sick, the cow doctor is sent for, he comes puffed up with the conciousness of his power,; with an air of the greatest importance he approaches the animal and applies his hand to the horns of the suffering creature, after a moment's silence he exclaims she's got the horn ail. A few remarks made upon the disease, although based upon self conceit and ignorance, are eagerly swallowed by the gaping spectators. He now commences preparations for an operation, termed the boring of the horns; this operation is performed with the most formidable of his instruments, a common gimblet, two or three turns of which instrument is sufficient to penetrate the cavity between the horny and oseous portion of the horn. On the gimblet penetrating this cavity or sinus, the operator announces to the bystanders that the horn is hollow. On withdrawing the gimblet, a small quantity of blood and thick mucus escapes, the horn is pronounced diseased, and according to the usual custom must be doctored. Again, in aged animals the bony structure within the horn often collapses or shrinks, a sinus is thus formed within the horn; by boring in a lateral direction the gimblet enters it. Here, again, the horn is pronounced hollow; beef brine or some other filthy compound is injected into the horn, perhaps some general medicine is administered upon the same antiphysiological principle, and the poor animal is left for nature to perform a cure, or die from the effects of such barbarous treatment. Abcesses will sometimes form in the frontal sinuses, the result of common catarrh, the gimblet may penetrate the sac containing the pus, which thus escapes, but if let alone it would finally escape through the nostrils, nature's own method of ridding itself of morbid matter, which is altogether an easier, safer, and much less barbarous way. Here, again, the horns are diseased, and should the animal recover, (which it would eventually without any interference,) the recovery is strangely attributed to the boring process. Horn ail is only a symptom of derangement, it is no more a disease of the horns than it is of the functions generally. Then, why attack the horns more than any other part that shows symptoms of decreased vital action? The extremities in many diseases are as cold as the horns, why not apply the piercing iron or use the gimblet upon them? It would be full as advantageous to the animal, and as likely to cure the disease. If there be an excess of vital action within or around the base of the horn, there must be a corresponding deficiency in some other part of the system; likewise, if there is inflammation of any of the internal organs, there must be a deficiency in the region of the horns, and extremities; can we equalize the circulation or relieve the engorged blood vessels of their contents by boring the horns, or by applying local remedies to them? All such attempts to cure disease must fail, for they are in direct opposition to the laws of nature, and an invitation to death to come and relieve the suffering animal of its pains. The horn will feel cold when there is an unequal

distribution of the blood. This is improperly termed horn-ail. It is no more a disease of the horns than it is of interrupted secretion, absorption, and finally the whole mucus membranes. The horns will also feel unnatural if there is a determination of blood to the head, as in phrenitis. Can we cure this awful malady, that takes from the animal all reason and renders it almost mad, by simply doctoring the horns? If we can cure diesase by raving against the sanative operations of nature, then the boring process will succeed in curing horn ail. This unequal distribution of the blood may result from allowing the animal to stand in his own excrement, or being exposed in cold damp situations, thereby contracting the external surface, and driving the circulation to the internal organs. By checking the insensible perspiration, we confine morbific matter within the system; from it abcesses are formed, sometimes in the udder, called garget, and at other times in the horns, called horn ail. It is a law of animal economy for pus to burrow towards the external surface, as on the udder, and be discharged, or to the mucus membranes as in those of the head, and be discharged by the nostrils, if not interrupted by the officious meddling of the gimblet farrier. In all cases where the horns and extremities are cold, the free use of counter-irritants or stimulating liniments, will invite action to them. If the animal is laboring under derangement of the digestive organs, diffusible stimulants must be given and all obstructions removed by aperients and injections if necessary. Endeavor to promote a healthy action through the whole system, give the animal nutricious food, allow plenty of clean soft water, and pure atmospherie air, and fulfil the above indications and horn ail will soon disappear.

A STUDENT.

NOTE. Our correspondent is right in the position he takes, and the views he gives upon the disease in cattle commonly called horn-ail.

Maine Farmer.

WHAT THE CENSUS SAYS ABOUT SHEEP,

AND A SHY AT THE TARIFF.

WISE men, theorists, have been in the habit of making many predictions, relative to the increase of sheep in this country, and from time to time foretold an utter prostration of the business of wool growing, by reason of its over-production. The increase of a flock where pains have been taken to develop the power of rapid re-production in the sheep, has led these men to found thereon great scales of production, which, when brought to the test of facts, have been found exceedingly defective.

A given flock, with proper care, will double itself easily every four years, and hence, in those countries or regions where it is profitable, the increase of sheep is at that rate. But in the United States there has been various causes in operation which materially affected the increase of flocks. For we find that by the census of 1840, there were 19,311,374, and in 1850 they had increased 21,723,220, being an increase of only 2,411,856, in ten years, whereas if the increase of sheep had been an object, the actual number would have exceeded forty millions. It is now extremely doubtful if the Census of 1860, will show as much of an increase as that of 1850. There has been a constant decrease in the old States where population and manufacturing is rapidly increasing, and where the facilities for reaching markets with farm products have been so much increased by railroads. Either grain or the dairy have taken the place of sheep, or where sheep are kept it is more for meat than wool, and hence there is no increase. But that the matter may be better understood, we give below, a table condensed from the Census.

Table showing the increase and decrease of sheep in the several States, from 1840 *to* 1850:

States.	Increase.	Decrease
Alabama,	108,637	
Arkansas,	49,105	
Connecticut,		229.281
Delaware,		12,744
Florida,	16,113	
Georgia,	293,328	
Illinois,	498,371	
Iowa,	134,606	
Kentucky,	94,051	
Louisiana,	12,000	
Maine,		197,687
Maryland,		80,020
Massachusetts,		189,575
Michigan,	647,817	
Mississippi,	176,572	
Missouri,	498,371	
New Hampshire,		242,634
New Jersey,		58,797
New York,		1,665,536
North Carolina,	56,970	
Ohio,	1,814,528	
Pennsylvania,	54,737	
Rhode Island,	46,000	
South Carolina,	53,000	
Tennessee,	69,998	
Vermont,		668,000
Virginia,	16,232	
Wisconsin,	121,000	
Total,	5,372,947	3,383,27

In the above table we have omit ed the States and Territories that had no numeration in 1840.

The decrease in this State has been going on steadily for the last ten years. In 1845, we had 6,443,865, while in 1850, only five years later, we had but 3,453,241. being within a small fraction a loss of 3,000,000. It is quite probable that the Census of this year will show less than 2,000,000, nor is there any thing that will ever again bring them back. By the foregoing table, which is very interesting, we discover that the sheep are rapidly increasing in the Western and South Western States; that they are finding the region most congenial for them, and for their profitable propagation and increase; and it is these regions that will ultimately be found the great wool growing States of the Union. The Southern States are

capable of sustaining all the sheep now found in the country, and not diminishing any of their present crops. The Southern and South Western States, exclusive of Texas and California, have an area alone 317,209,600 acres; whereof there is improved 94,942,052 acres, divided into 400,000 farms. Fifty sheep to each farm would absorb nearly every in the Union. As soon as the farmers in those States begin to understand the subject, and appreciate its importance, they will be the largest wool growers in the world.

Its a great mistake that it requires a cold climate to grow fine wool. It is the animal, and not the climate, that makes the wool. The Merino or Saxon will produce as fine wool in Georgia as in Maine, and as much of it. We have always felt a great interest in awakening the South to the importance of this subject, to them, and the whole country.

That our conjecture of the cause of the diminution of sheep as it regards our own State, is right, the Census shows. The decrease of cows was only 68,068 in the five years from 1845 to 1850, probably the number has been more than made up during the last five years, and the increase in horses and oxen and other cattle was only 184,666, and swine 566,092, while the increase in Rye, Corn, Oats and Barley, was 5,022,663 bushels; and in Cheese 12,991,437 pounds, and Butter 264,361 pounds. It is therefore evident that the increase of population, which was equal to nearly 100,000 per year for that period, displaces those animals which were the least desirable for human food or stood in the way of its profitable production.

We do not see any danger of an over production of wool for a generation at least. But we do see why it is that the manufacturing interest, situated mainly in New England and New York, where wool growing is no longer an object, has been so anxious to get the duty taken off from foreign wool. If those States, West and South, who now are and must constantly continue to be in an increasing degree, the great producers of wool, are willing to permit the protection, which they now possess in the tariff, to be taken away from them without some adequate remuneration, we have nothing more to say. As a state, we gain largely by admitting wool free, or only at nominal duty, provided the duty be continued on cloth.

We feel that we have now done our duty in reguard to the tariff, and shall hereafter leave it with those who have the most at stake.—P.

TOBACCO FAMINE IN FRANCE.

An unusual circumstance has created no little sensation at Bayonne. During the last few days there have been no segars nor tobacco for sale! The stock of the various dealers, and that of the depot became completely exhausted, owing, as was said, to the inundations having prevented the expected arrivals. The smokers grumbled bitterly, and then proceeded to purchase all the tobacco that could be found in the neighboring villages. The supply obtained was but scanty, and when it was exhausted messengers were despatched as far as Dax, by railway, a distance of seventy-five miles, to obtain a fresh store.

Galignani's Messenger.

MONEY.

The bank returns for the past three weeks indicate that the turn in market has been reached, and that money will now become rapidly abundant, reasoning from analogy. For this purpose it may be useful to look back at the state of affairs for three years. The Fall of 1853 was a period of very large exports of breadstuffs, nevertheless specie was actively exported, because the rate of money was high in England. The bank returns for August 5, 1853, showed a larger amount (97,899,617) of loans than ever before. We then described the state of the money market (vol. III. page 257,) as follows, July 30, 1853:

"The continued large importations have aided in producing a little more active demand for money on long paper but it was freely supplied at 6 months at 7@7¼, short paper easy at 6 per cent."

The banks then began to contract and continued to do so untill Nov. 12, when we had occasion to remark;

"The money market has become more easy this week, and good paper goes at 12 per cent., with good names less known, 15 and 18 per cent."

Money had doubled in value in this period, and the banks beginning then to expand, in 60 days the rate fell to 6 per cent. The course was as follows;

1853.	Loans.	Deposits.	Rate of Money	Sterling.	Bk of Eng. rate.
Aug. 6	$97,899,617	$40,994,568	6@7	8½@10	3½
Nov. 12	82,882,407	37,271,000	15@24	9 @ 9¾	5
Jan. 7	90,133,887	40,100,120	7@9	8½@ 9	5

This was the course of the market in a Fall when a great railroad revulsion had taken place, but when there was also an active export of breadstuffs. In 1854, a similar state of the money market occurred. August 5, when loans were at the highest ($93,723,141) we described the state of the market thus:

"Money is very abundant, and loans on government stocks are made as low as 4 per cent."

The contraction then commenced, and continued untill it reached to $80,703,637, when money was excessively dear. The deposits began then again to accumulate and the loans followed them, until the line was $90,850,030 in February, when money was again very easy. The course was as follows;

1854.	Loans.	Deposits.	Rate of Money	Sterling.	Bk. of Eng. Rate.
Aug. 5	$93,723,141	$57,582,455	5@6	8½@9¾	5½
Dec. 2	80,593,637	43,118,595	18@14	9 @9¾	5
Feb. 3	90,850,030	59,187,221	6@7	9½@9¾	5

This year, thus far, precisely the same course has been pursued; the loans reached their highest point Aug. 6, when we remarked:

"Money is more freely offered at 5 and 7 per cent., and the amount of paper offering is small."

The bank contraction then set in and continued until November 17, when the value of money was very high, ranging 15 and 25 per cent., since then it has gradually become more easy, as follows:

1855.	Loans.	Deposits.	Rate of Money	Sterling.	Bk. of Eng. Rate.
Aug. 5	$100,118,567	$65,846,923	5@7	9@9½	*3½
Nov 17	92,029,920	53,618,361	18@24	8½@9	5½
Dec. 8	93,189,803	55,474,133	9@12	8@8¾	6

The exports of specie this year have been less than for the last, and it would seem that we are now (since the 1st of December,) in that expansive course which has so uniformly resulted in abundance of money in January The exports of specie from Boston have been as follows:

EXPORTS OF SPECIE FROM BOSTON.

	1853.	1854.	1855.
January	$8,527 50	$421,548 11	$298,735 00
February	425,000 00	78,993 09	613,791 47
March	21,943 50	551,455 34	1,329,282 26
April	166,907 53	483,594 00	1,574,737 55
May	463,430 98	694,022 53	1,865,541 24
June	672,630 28	1,168,170 54	1,741,815 27
July	613,319 00	351,498 33	1,733,634 50
August	246,775 14	997,392 69	1,624,726 99
September	509,345 60	943,423 97	1,095,831 96
October	788,345 54	587,077 30	1,178,217 95
November	593,709 13	940,512 72	878,571 13
December	1,253,583 68	195,836 29	..
	$5,763,517 88	7,413,437 32	14,534,935 32

The total for 1855 does not include any shipments for the month of December, and we accordingly annex a comparative summary of the specie exports for eleven months from Jan. 1st for the four years, from which it will be seen that the total for 1855 is twice as large as the total for the corresponding months in 1854, and more than three times as large as that for 1853:

From Jan. 1st to Dec. 1st, 1855	$14,534,935 32
Same time 1854	7,217,601 03
Same time 1853	4,509,934 20
Same time 1852	3,097,287 42

The monthly exports from New York have been as follows:

EXPORTS OF SPECIE FROM NEW YORK.

	1852.	1853.	1854.	1855.
January	$2,868,958	747,679	1,846,000	257,0 0
February	3,551,543	1,121,020	560,000	2,124,000
March	611,994	592,470	1,466,000	2,299,000
April	260,266	767,056	3,470,000	3,313,000
May	1,834,892	2,162,467	3,652,000	5,320,000
June	3,555,355	3,264,282	5,168,000	3,8 2,000
July	2,971,499	3,924,612	2,922,000	2,923,000
August	2,935,833	1,183,973	4,648,000	2,600,000
Sept.	2,122,492	1,244,192	6,547,000	1,831,000
October	2,452,301	4,767,972	4,359,000	1,188,000
Nov.	809,813	3,855,775	3,338,000	1,012,000
Dec.	1,180,305	3,131,851	61,146	..
Total	$25,096,255	26,753,356	37,167,146	26,588,000

The exports both from Boston and New York have diminished this year. It is to be observed, however, that the banks are more influenced by the practical fact of the withdrawal of deposits (or more properly "bank balances,") from them than by any other fact, even the specie export, and that the withdrawal of these deposits is uniformly at the same period:

BANK DEPOSITS FOR THREE YEARS.

	1853.	1854.	1855.
August 5	$97,899,617	58,179,954	65,846,923
September 5	91,741,338	56,447,741	62,340,941
October 5	90,149,540	51,480,376	56,632,452
November 5	83,092,630	43,507,961	53,538,969
Decline	14,805,987	14,771,993	12,307,954
December 8	85,824,756	46,737,098	55,474,133
Rise from lowest point	$2,732,126	3,299,137	1,935,164

The figures for 1853 are in gross, the "clearings" not being deducted, as in the two following years.

Last year the deposits continued to rise until February 17, when they were $59,187,233, and there remained until July. How far they are this year to rise remains to be seen. The chances are that they will go high.

The exports of specie have been very large and the supplies of bills will increase until March, as usual. It follows that, with the sales of produce, the "balances" here on Western and Southern account will increase. If circumstances abroad should increase the demand for, and raise the price of gold, it cannot reduce by much the supply of money on the seaboard. Should the Bank of France continue to pay specie, and, consequently, to create a demand for it, specie will continue to go, in all probability, at low rates of exchange.—*N. Y. Economist.*

For the Southern Planter.

In the October No. of the Southern Planter is an essay over the signature of "A Jefferson Farmer," commenting upon my remarks in a previous number on Dr. Baldwin's premiums. This writer, though he considers my remarks as "arrogant and vulgar," has condescended to notice them, and has endeavored to enlighten me on some of the subjects alluded to, for which I shall certainly feel under great obligations to him. He asks this question—"Pray, Mr. Taylor, do you not know the difference between decomposition and putrefaction?" I had supposed I did, but I must confess I was no prepared for the very lucid, learned, concise and satisfactory explanation given by "A Jefferson Farmer" himself. Listen, ye who are searching for knowledge "in the jargon of the schools, and the Don Quixotism of chemical agriculture," and learn how plainly and how explicitly the question has been disposed of. "Now if Mr. T., (and I suppose if any other person will do it, it will be as well,) will take a brick and place it in a wet cool vault or cave, he will find it will ultimately crumble into humus. This is putrefaction and a fertilizer. If the brick is resolved in its original elements, silex, lime, &c., he will find that neither of these elements, separate or combined *in* the brick, is a fertilizer—this is decomposition." Now while I express my *entire satisfaction* with this definition, I would just suggest to the writer, that as all the readers of the Planter may not so readily understand the subject, whether he had not better be a little more explicit, and say where the brick must be put to "be resolved into its original elements," whether in a "cool" damp dark place, or on the surface of the ground, and whether the "brick" should be hard burnt or not. For should any one undertake to make "a fertilizer" for themselves this information might be important, as we read that recent travellers have dug bricks out of the ruins of Babylon and Ninevah, from "cool" damp places, where they have lain for thousands of years, and have not yet putrefied. And for the satisfaction of enquirers, just state a little more fully the real difference between a "brick" crumbling to pieces in a "vault or cave," or crumbling to pieces in any other place, as well as the length of time required. This might be of great importance in our cities, where brick-makers have refuse brick on hand that does not readily sell.

Look out! ye who are pretending to teach "agricultural chemistry," such men I mean as Drs. Stewart, Higgins and Dana: the fiat has been proclaimed by a "A Jefferson Farmer," "that the old fogies in agriculture must back out. Dr. B. started with declaring the science of agricultural chemistry a humbug." So you had better look around you, and not be following a humbug any longer.

But to be serious. On my asserting that I had known sulphate of lime greatly to increase the crop of wheat and clover, "A Jefferson Farmer" replies—"So too, Mr. Taylor, you have seen a fellow who drinks whiskey freely, swell up and grow fat as a bear, but did the whiskey feed or stimulate his appetite?" This creeping out of "a corner" without facing the fact, is so similar to some of Dr. Baldwin's evasion, that it might lead to a suspicion of one origin to both. The truth is, that sulphate of lime is a constituent of clover, and it will not grow in a soil destitute of that mineral unless it be applied, and being so it is the food of the plant and not merely a stimulant. If this be true, and it must be admitted by all who follow the "Baconian method of building his theories on facts," what then becomes of Dr. Baldwin's assertion, "that nothing can be the food of plants but the residue of putrefaction?"

"A Jefferson Farmer" thinks that Dr. Baldwin has not time to be "answering writers, many of whom evidently write before they think." A modest insinuation, truly, but I will not say that it is not in "good taste," or is "arrogant" or "vulgar." But this I will say, he has written what he could not have thought twice of before he did write, or he would not have said that "Mr. T. and other great writers assume most conveniently the negative position, and flare up because they are asked respectfully to prove it." The truth is, I have never *been asked* to prove it, and therefore could never have flared up. The writer must have been dreaming.

He then goes on and gives the Dr.'s theory, what "feeds plants," and what will yield "no nutriment;" considers this all "very simple," and from "actual experiment," "he then infers that the same chemical action has taken place," &c. (is not this bordering on agricultural chemistry,) and then advises his "brother farmers" what to do, to obtain the best results. And then goes on, "this is all very simple—and all he asks is for them to try it. If he is right he has made a great and sublime discovery."

It seems to me that "A Jefferson Farmer's" opinion of the merits of Dr. Baldwin's "sublime discovery," is very similar to what we often see in our country. Many a man has bothered his brains in inventing something he hopes will prove a "sublime discovery," but

on presenting his models at the Patent Office, finds to his sorrow that the same thing has been done before. Dr. Baldwin's practice is to get a heavy stand of clover on his land, and let it stand for a couple of years or so, and afterwards plough in deeply. This has been recommended for thousands of years; even Xenophon recommended green plants to be ploughed into the soil, and even that crops should be raised for that purpose, for these he says, "enrich the soil as much as dung." And yet after all the recommendations given since that time by the ablest agricultural writers down to the present day, this "Jefferson Farmer" supposes that the Doctor has made "a sublime discovery," and is determined that, "if no other man bless him, my blessing shall be on his head."

YARDLEY TAYLOR.

THE CLOVER SEED CROP.

We have, on a previous occasion, stated that great anxiety exists in reference to the fate of the growing crop of clover-seed in this State and Indiana. We have made every exertion to ascertain what has been the fate of the crop, and are sorry to announce that it has proven almost an entire failure.

We have letters from various points in this State and Indiana; some of them say there will be a little, but fully two-thirds of our correspondents say the crop in each of their localities is an entire failure. The after-growth was very luxuriant, too much so to yield well; but the wet weather cast it down, and it partially rotted on the ground before it was cut, as a general thing, and after it was cut, the weather so injured the remaining seed that it could not be saved, except in comparatively few instances. We feel perfectly satisfied in saying that the entire amount secured in this State cannot be more than one-fourth the average crop; and the same may be said of Indiana.

The stock of old seed in this market is exceedingly light, and is in a few hands.

By the last steamer from England we are advised that the crop in that island is a total failure; and in London, Baring says, an active demand has arisen for old. We have no authentic intelligence as regards the crop in the eastern States, but we are disposed to believe, from what little information we have received, that it is better than it is in the Western States.

The stock of old seed in New York is said to be a moderate one.—*Price Current, Cincinnati.*

ORIGIN OF VARIOUS TREES, PLANTS AND SHRUBS.

Wheat was brought from the central tableland of Thibet, where its representative yet exists as a grass, with small, mealy seeds.

Rye exists wild in Siberia.

Oats wild in North Africa.

Barley exists wild in the mountains of Himalaya.

Millet, one species is a native of India, another of Egypt and Abyssinia.

Maize was brought from America.

Canary Seed from the Canary Islands.

Rice from South Africa, whence it was taken to India, and thence to Europe and America.

Peas are of an unknown origin.

Lentils grow wild on the shores of the Mediterranean.

Vetches are natives of Germany.

Chick-Pea was brought from the south of Europe.

The Garden-Bean from the East Indies.

The Horse-Bean from the Caspian Sea.

Rape-Seed and Cabbage grow wild in Sicily and Naples.

The Poppy was brought from the East.

The Sunflower from Peru.

The Lupin from the Levant.

Flax or Linseed is, to Southern Europe, a weed in the ordinary grain crops.

The Nettle is a native of Europe.

Woad is a native of Europe.

Madder came from the East.

Dyer's Weed grows in Southern Germany.

Safflower came from Egypt.

Dill is an Eastern plant.

Hops, Mustard and Caraway Seed come to perfection as wild plants in Germany.

Anise was brought from Egypt and the East Archipelago.

IMPORTANCE OF SHELTER FOR LAND.

Nahant is on the edge of Boston harbor, six or eight miles from the city, and connected with the main land at Lynn by a mere sand-beach. It extends into the sea in a south-easterly direction, is quite narrow—not over half a mile in width, we should think, where Mr. Tudor's cultivated grounds are situated—and receiving the full sweep of the easterly winds, which carry the salt spray half way to the opposite shore. The soil, generally, is thin and rocks protrude everywhere. On the easterly side they stand in their naked majesty, where they have stood and breasted the battling waves through many decades of passing time. The promontory is rock-bound at every point, and probably was at some time as bare of soil as the rocks which stand at the

base of the banks and receive the first shock of the ever-returning waters.

In such a poverty of soil, and with such visitations of fierce winds and salt water, it may well be conceived that vegetation would be slow, meagre, and of the scantiest kind. Yet, in such a place, *Science* and *Industry* have triumphed over every obstacle, and made the almost barren rock to blossom as the rose! Fields of corn and waving grain, trees of various climes, fruits, flowers, shrubbery and rich lawns, now meet the eye, where only desolation held sway but a few years ago.

Mr. Tudor found that trees, even those of a hardy character, would not grow, or scarcely live, swept, twisted, and coated by the salt carried in the sea vapor upon the powerful ocean winds, and he set himself to work to protect them.

In order to effect this, he resorted to an expedient, perhaps never before employed, and one which has so far *changed the climate* of the locality, as to enable him to rear tender plants and produce fruits, scarcely attainable in sheltered spots several miles in the interior, or one or two degrees further south.

Around one garden he has erected fences from ten to twenty feet in height, made of common laths nailed to strong cross-pieces, and leaving interstices about two inches in width between them. Around another garden the fence is brick, the brick being made of only half the usual thickness; the first five or six feet in height of the fence is close, and the upper portion full of holes about two inches square.—These fences so break and sift the winds as to deprive them of all power either of straining the trees, or of conveying the salt vapors to their foliage. At the same time the temperature is so changed, that several degrees of difference in the heat and cold may be noticed between the inside and outside of the enclosure. Frost penetrates three or four times as low into the ground outside as it does inside. In a cold day, there is a genial, summer-like atmosphere in the garden, when out of it, November winds may howl along the coast with icy breath.

Under this change of temperature Mr. Tudor has succeeded in clothing the surface with rich varieties of plants, and giving all that part of the promontory a most attractive appearance. Pear trees, only transplated four years, were about the highest fences, and loaded with fruit. There we saw several of the Northern Spy apple trees fruited in perfection, tender raspberries, and nearly all fruits found in our best gardens. In all, Mr Tudor has set *ten thousand* trees among the rocks and on the handful of soil which he could come at where he desired to plant; so that now the strong currents being broken and evaporation in a measure retarded, vegetation will spring into life spontaneously, and trees of a less hardy character than those he commenced with will succeed.—*New England Farmer.*

For the Southern Planter.

AGRICULTURAL EDUCATION.

I have just read with the liveliest gratification an esssay in "the Southern Farmer" on "Agricultural Education;" and along with it the proceedings of the Union Agricultural Society, in which it is proposed to petition the General Assembly for funds to endow an agricultural school in connection with their model farm at Petersburg. The Petersburgers are noble fellows, and work in a good cause with a wholesouled energy, which is worthy of all praise. I greatly admire their spirit, and if I had a vote in the matter it should not go unrewarded in some way. However, in the present stage of agricultural education in Virginia, and the embarrassed condition of the State's finances, I doubt the wisdom of granting the petition at this time, for reasons which I very respectfully submit to the consideration of the friends of agricultural education in the Union Society, and elsewhere.

1. The expense of an agricultural school, on the plan proposed by the petitioners, would be larger compared with the results expected than would be necessary to obtain better results in another way. To put an agricultural school into successful operation on the Model Farm of the Union Society, supposing the farm itself to be given to the State, would most probably exceed the sum of $85,000. Such a school could not succeed without at least three professors, one of Practical Husbandry—one of Chemistry, analytical and agricultural—and a third of Natural Philosophy, including Zoology, Botany and Meteorology. This would be a very limited scale of instruction—less than this would not deserve the name of agricultural education. Three competent professors could not be obtained for less than $3000, which is the interest on $50,000. Lodgings would have to be provided for the students, which would cost on the lowest computation $15,000, and lecture-rooms, laboratory, apparatus, library, &c., would require $20,000, which items summed up make $85,000. In addition to this a superintendent of the Model Farm would be necessary. He is paid now a salary of $1000. I do not include this because I suppose the Union Society intends to defray that expense still. If they do not, we must add to the $85,000 a sum

which will yield an interest of $1000, which will swell the prime outlay to over $100,000 on the part of the State. Now this is a larger sum than the Legislature ought to appropriate to any new scheme of agricultural education, until it be clearly shown that no better and cheaper plan can be devised. It ought not to be objected to the above calculation that the principal is taken instead of the annual interest as the basis of the expenses, because whatever sum the Legislature may give will be an increase of the State debt. In other words, the State must borrow the money, or issue State bonds for it.

2. It is highly important that the farmer should be thoroughly instructed in all branches of science, and not in those only which immediately relate to his profession. To attain this end, in the way proposed in the Petersburg petition, would require that our sons should first go through the expense of a college course, and then attend the agricultural school. This would not only enhance the expense of education, but look like a step backwards, until the reputation of the school should be established by successful operation, and agriculture instead of being elevated to the level of the other learned professions, would still seem to be underrated, and would be despised by the ambitious youths of the country. This might be avoided, I admit, by adding to the three professors above proposed four or five others to teach Mathematics, Languages, Mental Science and the other branches of a complete education. But this would double the outlay of money by the State.

3. There are very numerous and almost indispensable branches of science necessary to a complete system of Agricultural Education, which could not be embraced in a course taught by only three professors, as the veterinary art —comparative anatomy—animal and vegetable physiology—levelling and surveying—the history and literature of agriculture—and some branches of municipal law, besides others which I need not mention. If the farmer is to be the best educated man in the community, we must have ampler means of instruction than can be afforded by a school on the scale proposed. I hope it will not be said or thought by any that such a school will *do for a beginning*. Farmers ought to know that a bad beginning rarely if ever makes a good ending in matters agricultural, and such will be found to be the case as well in the education of the farmer as in the operations of the farm. If we would have agricultural education on a scale commensurate with its importance, we must lay the foundations of it broad and deep, that when the structure grows to its full height it may not topple and fall.

4. The plan proposed by the Union Society is sectional, and though there is no section of the Commonwealth, which, in my opinion, so well deserves such a bounty from the State as the Southside, yet a great subject, like agricultural education, should be free from every feature of sectionality. If the Petersburg school be established this year, the Northsiders will want one like it next year; the year after the Valley will ask for one, and then our trans-Alleghany brothers will put in their claims. Thus we shall have four agricultural schools of an inferior grade, at an outlay of near half a million of dollars, and all of them together not affording a complete course of agricultural instruction. To do the thing that way would be in exact keeping with the previous history of Virginia legislation on works of great public interest. Children when very young sometimes believe that two halves will make a whole, and one might almost believe, on looking at the works of public improvement in Virginia, that there had been grown up children in her councils who could not divest themselves of the same childish notion. Thus we see a canal made at enormous expense half way to the Ohio River, and a rail road as long in the same direction, and then the makers stand in stupid amazement that the two halves have not reached the wealth of the great Mississippi valley. So the legislatures of the State have made many half rail-roads in divers quarters, and now when all the State's money and credit are consumed in such dimidial propensities, the country is whining because no two of the halves make a whole. Thus will it be with sectional schools of agriculture, if we begin by endowing one at Petersburg. We shall have the halves and quarters distributed over the State with very recondite grographical skill—and all the parts taken together will not make a whole. Now I beg the noble Petersburgers, who with $20,000 have done more than the State Agricultural Society has done with $50,000, to consider the danger to a complete system of agricultural education by starting in this sectional and half-way style. I am sure they wish well to the cause, and would not throw obstacles in its way. In my humble opinion, an agricultural school on a cheap and limited scale, would be a false move in the present condition of agricultural improvement, and would end in mischief to a great cause, which all wise and good men have much at heart, and none. I verily believe, more than the liberal Southsiders.

5. My last objection to the proposed pl is, that the desired object can be better accom

plished, on a larger scale, at less expense, and without any appearance of sectionalism, by simply establishing a Professorship of Practical Agriculture at the University of Va. There the buildings, library, lecture-rooms and apparatus are already provided, and all the branches of a complete agricultural education are taught *now*, except practical husbandry, and some few branches of minor importance, which, by a slight alteration of the existing professorships, may be easily taught. A single professor to teach the Practice of Agriculture, with a salary but little larger than the Union Society now gives the superintendant of their model farm, and with the slight modification of the existing schools above alluded to, would give us an agricultural school equal to any in Europe in the extent of the subjects taught, and fully commensurate with the importance of agricultural education. This may be done by an annual outlay of $1,500, or the interest on $25,000, which would be only one fourth of the amount required to put the school at Petersburg into operation. This thing may be done in this way *immediately*, without waiting to put up buildings, get apparatus, &c., and should the plan fail, it can be abandoned without having incurred any other expenses than the annual appropriation for the professor's salary, whereas if the Petersburg scheme is adopted, and fails, all the outlay in buildings, library, &c., will be a dead loss to the State. But I do not like to speak of failure. It cannot fail, if it is done right.

ALL SIDES.

Communications to the Virginia State Agricultural Society.

SHEEP IN THE VALLEY OF VIRGINIA.

BY S. F. CHRISTIAN, OF AUGUSTA.

[*Premium Twenty Dollars.*]

Having given my personal consideration and attention, during the last ten years, to wool-growing as an incident of agriculture, I submit a short, practical essay, treating of my experience and practice in sheep husbandry in the Valley of Virginia.

The Valley possesses important natural advantages for the production of fine wool and mutton. The soil is based principally upon limestone and blue-slate, with sufficient admixture of sand, to produce in perfection all the cereals and the various grasses best suited to the sustenance and development of stock. The climate is favorable, obtaining a happy medium of temperature throughout the year, and the purest water gushes in copious streams from a thousand hills. The face of the country being well diversified with rolling hills and winding vales, with craggy cliffs and mountain sides, with frequent intervals of forest and field and meadow, presents, just that condition most congenial to the habits and nature of the sheep.

In establishing a flock for this locality—wool being the primary object, guided by some experience with Bakewell, Cotswold, Saxon, and Spanish merinos, I preferred the last as best adapted in character and constitution for improvement and profit, under the circumstances of this country. Accordingly I selected in three different States at the North, thirty head of Paular and Guadaloupe merino; choosing them from three distinct families, and since carefully numbering and registering them and their decendants, after the suggestion in Morrell's American Shepherd, page 279.

Selecting one hundred and fifty of the finest ewes from the common breeds of the country, I put with them a fine Cotswold ram, and with the ewes from this crop I put a merino ram; and with all the subsequent female progeny continued to put full blood merinos.

The Cotswold ram, in the first generation, was used to give form and size; though now, for that purpose the Oxford Down (a new breed) would be preferable as having a form still more symmetrical, and a fleece approximating nearer in quality to the merino. All the buck lambs from these several crosses were, as weathers, at the age of two years, fatted and sold for the shambles.

About the last week in October my rams are put with the ewes in the proportion of three rams to one hundred ewes, and remain together until about the middle of December following. They are then separated, the rams and wethers forming one flock; the breeding ewes another, and a third is composed of the young ewes which were taken from their dams during the preceding August. On the approach of winter the several flocks are put in fields, inclosing each a portion of woodland. The forest trees furnish for our climate a sufficient and also the most acceptable shelter to the sheep; to test this I have had good open sheds prepared in the fields, but the sheep leaving the sheds invariably sought shelter among the trees from every approaching storm of sleet or snow.

The box rack is the most convenient and economical for feeding. Hay, corn-fodder, and oatstraw, furnish their winter food, and the foddering season usually lasts for four months. Green food occasionally through the winter, is of very great advantage. Indeed, could a sufficient supply in any way be obtained for the whole year, it would be far better than any other. In this climate some grain might be sowed with this object. In north Mississippi

for several years I kept, a flock of Saxon Merinos grazing almost the entire winter upon fields of rye sown in the standing corn and cotton at the last working of the crops. The sheep throve remarkably well, and were wintered with far less trouble and expense than if kept on dry food, and the wool was manifestly finer in fibre and softer to the touch. Of this latter particular I was fully assured by having preserved samples of wool for successive years from several sheep when wintered on green food, to compare with samples from the same and similar sheep, when fed exclusively on dry food. M. R. Cockrill, Esq. of Tennessee, from whose celebrated flock my sheep had been obtained, also experimented in this matter with similar results.

In the Valley of Virginia, where showers are frequent, and dews and frosts heavy, sheep may do without other water, though they always thrive best and build up better constitutions when having free access to fresh running water.

The lambs are dropped through the month of April About the first week in May is the time in which they should be penned, docked, and castrated. This is best done in the mode recommended in Morrell's American Shepherd, p. 174.

The wool I have washed upon the sheep's back and about the 20th of May, or as soon thereafter as the weather and water become sufficiently warm. The most convenient plan with me, is to drive the flock to a neighboring mill pond, to be washed in the "trunk" which conveys the water to the mill From a pen built against the trunk the sheep are taken by a person, standing beside the trunk, and plunged in the water till washed; then being passed up stream to another hand, the wool is rinsed and the sheep given over to the herdsman, who takes them to a clean grass-sod, where their fleeces will not be soiled. Three good hands may thus wash about four hundred sheep in one day. After four days of dry weather, the shearing may be commenced. The fleeces should be rolled up separately, inside out, and packed for marketing, in sacks holding each about twenty-five fleeces.

At this time I examine the sheep very closely in order to mark and turn out for fattening all the runts, and those in any way inferior for breeders. Thus the flock is soon and permanently improved The common course, however, with many farmers in this region, is to keep all their sheep together throughout the year, and when mutton is wanted for the table in the spring, to select the fattest and best formed, which is usually the youngest and best of the ewes; thus leaving the ill-formed and lean kind for the propagation of their flock. Nor is it wonderful, physiologically considered, that in a few years they discover that their flock is "running out," and find it necessary to buy up a new stock for a fresh start. Hence, too, the common fallacy that sheep will not do well if kept long on the same farm.

In grazing through the summer, I very frequently change the sheep from field to field; otherwise, the grass becomes tainted and they will not relish or improve upon it. They should be salted twice a week, upon the ground; a little wood ash mixed with the salt is very beneficial. Sheep thrive best upon a variety of herbage, and eat much vegetation that large cattle refuse. Their manure is very valuable as a fertilizer.

It is a common complaint that sheep injure pasture land by grazing too close. Sheep are constituted by nature to graze closer than cattle, and if kept too long upon the same pasture field will of course injure it; they have only to be moved before the grass is cropped too close. The custom with too many farmers is to graze a field with cattle and horses until there no longer crops enough exist to support life; then to turn in the sheep, who are thus forced for a living to nip it to the roots, to the serious injury of the proprietor's pasture, and their own disparagement. If sheep were fairly treated, and judiciously managed, they will actually improve land more and injure it less than other stock; a fair experiment will so demonstrate.

For several years by grazing both cattle and sheep, I have had opportunity to compare the relative profits. On a fair account kept with each for my own satisfaction, it appeared that the sheep yield about 25 *per cent.* more profit upon the capital invested than did the cattle—and this without including a large proportional sum from the sale of select rams for breeders.

The average price obtained for my wool during the three last preceding seasons, is forty-nine cents per pound, for that sold in Virginia. The average weight of fleece in the entire flock of thorough-bred Merinos, is something over five pounds per head, washed upon the sheep. The expense of keeping the Spanish Merino is astonishingly little.

Sheep are the only domestic animals that yield both food and clothing for men. Their flesh is very easy of digestion, wholesome and nutricious, and is universally esteemed by epicures. Their wool is an article of prime necessity for use both by day and by night. The demand for home consumption far exceeds

the supply, and many millions of pounds are brought from abroad, while no other country possesses more favorable facilities for sheep husbandry than our own Valley of Virginia.

Respectfully submitted.

S. F. Christian.

From the Country Farmer.

EXHAUSTION OF THE SOIL.

"There is, on an average, about one fourth of a pound of potash to every one hundred pounds of soil, and about one eighth of a pound of phosphoric acid, and one sixteenth of a pound of sulphuric acid. If the potatoes and the tops are continually removed from the soil, it will soon exhaust the potash; if the wheat and straw are removed, it will soon exhaust the phosphate of lime; if corn and the stalks, it will soon exhaust the sulphuric acid. Unless there is a rotation, or the material that the plant requires, supplied from abroad, your crops will soon run out, though the soil may continue rich for other plants."

An acre of soil twelve inches deep would weigh, say 1,600 tons. According to the above figures, it would contain 8000 lbs of potash, 4000 lbs. of phosphoric acid, and 2000 lbs. of sulphuric acid. Estimating that potatoes contain 20 per cent of dry matter, and that 4 per cent. of this is ash, and that half of the ash is potash, we only remove in a crop of 250 bushels, 60 lbs. of potash. Say that the tops contain 20 lbs. more, and we have potash enough in an acre of soil to produce a crop of 250 bushels of potatoes, each year for a century!

A crop of wheat of 30 bushels per acre, contains about 26 lbs. of ash, and half of this say is phosphoric acid. Allowing that the straw, chaff, &c., contain 7 lbs. more, we remove from the soil in a crop of wheat of 30 bushels per acre, 20 lbs. of phosphoric acid. According to the above estimate, then, an acre of soil contains sufficient phosphoric acid to produce annually a crop of wheat and straw of 30 bushels per acre *for two hundred years!*

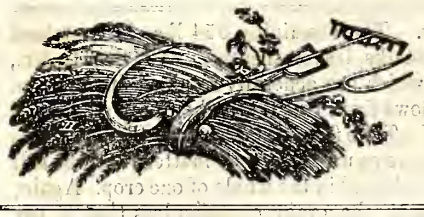
We will pursue the calculation no farther. The writer of the paragraph quoted above, selected out the crops and elements best suited for his purpose; but it will be seen that even according to his own estimate there is sufficient potash and phosphoric acid in the soil to give the present wicked generation all the potatoes and wheat they may need.

But let us take another view of the subject. No intelligent farmer removes all the potatoes *and tops*, all the wheat, straw and chaff, and all the corn, stalks, &c., from his farm. According to Dr. Salisbury, a crop of corn of 75 bushels per acre removes from the soil 600 lbs. of mineral matter; but the grain contains only 46 lbs. The remaining 554 lbs. is contained in the stalks, leaves, sheaths, husks, tassels, &c., all of which are generally retained on the farm. It follows from this that, when only the grain is sold off the farm, it takes more than 13 crops to remove as much mineral matter from the soil as is contained in the whole of one crop. Again, the ash of the grain contains less than 3 per cent. of sulphuric acid, so that the 46 lbs. of ash in 75 bushels of corn contains less than a pound and a half of sulphuric acid, and, thus, if as is estimated, an acre of soil contains 2000 lbs. of sulphuric acid, we have sufficient for an annual crop of 75 bushels per acre for fifteen hundred years!

Intelligent wheat growers seldom sell their straw, or chaff, and frequently consume on the farm nearly as much bran, shorts, &c., as is sent to market with the grain. In the Natural History of New York, part V., it is stated that a crop of wheat, in Western New-York, of thirty bushels per acre, including straw, chaff, &c., removes from the soil 144 lbs. of mineral matter. Genesee wheat usually yields about 80 per cent. of flour. This flour contains only 0.7 per cent. of mineral matter, while fine middlings contain 4 per cent. Coarse middlings, 5½; shorts, 8; and bran, 8½ per cent. It follows from this that, out of the 144 lbs. of mineral matter in the crop of wheat, less than 10 lbs. is contained in the flour. The remaining 134 lbs. is found in the straw, chaff, bran, shorts, &c. Even, however, if none of the shorts is returned to the farm, the 30 bushels of grain remove from the soil only 26 lbs. of mineral matter; and it would take more than five crops to remove as much mineral matter as one crop contains. Allowing that half the ash of wheat is phosphoric acid, 30 bushels remove only 13 lbs. from the soil, and if the soil contains 4000 lbs. it will take 307 crops of 30 bushels each to exhaust it.

We commend these facts to the consideration of the writer of the paragraph we have quoted. If his estimates are correct; if the soil contains as much potash, phosphoric acid and sulphur as he states, we need have few fears of waking up some morning to find all the precious elements of crops departed from our soils forever.

We would just observe that the idea, embodied in the latter part of the paragraph, has no foundation in fact. If a soil is *exhausted* of potash, or of phosphoric acid, it will not "continue rich for other crops." Not a plant that we commonly cultivate, can grow upon soil destitute of any of the mineral elements of plants.



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OVERSEERS.

A good deal of consultation, at various times, with some of the best farmers of the State, some observation, and some experience, both pleasant and bitter, has given us impressions in the matter of overseers, which we will now communicate to our friends for what they are worth.

If, as Von Thaer tells us, "the practice of Agriculture is composed of an infinite number of different occupations, each of which appears easy in itself but is the more difficult to execute, inasmuch, as they frequently seem to interfere with and run counter to one another," if, "in order to regulate them according to the circumstances and powers that are at our disposal so that no single one shall be neglected, but each performed properly and in its due order, there is required the greatest attention; activity without anxiety; promptitude without precipitation; a care of the whole united to the strictest attention to the most minute details; a judicious appreciation of all that is more or less necessary; and of that which belongs to different periods of time; an unremitting perseverance in whatever is undertaken, but which, however, does not lead to the neglect of more pressing duties; a prudent estimate of the value of labour and of time, so as to employ them to the best advantage;" if so intricate a combination of the circumstances which always encompass the proprietor of an estate demands a corresponding combination of qualities for their complete control, then it is evident that the overseer on a Southern plantation, like the steward of an English estate, requires the same combination in hardly a less degree. He is to the plantation what the mate is to the merchantman, and if he does not understand so well the principles of navigation, and is not entitled to the control of the ship, he must, nevertheless, be able to guide the vessel, to command the sailors, to manage the cargo and to keep every thing ship shape, and to exemplify the subordination which it is his duty to enforce on others.

Though all the duties of an overseer relate to the owner of an estate, yet, for convenience in discussion, they may be divided into, 1, His duties to the master; 2, to the negroes; 3, to the animals and implements; 4, to the crops; and, 5, to the land itself.

The overseer has rights, too, as well as duties, which we shall not neglect to notice incidentally.

1. Subordination to the master is the first of an overseer's duties. Many of them think, and we have heard of their saying, that the master shall not do so and so with them. They thereby intend to define the limits of their obedience. Whether this originated in the wretched custom, that once prevailed extensively, of giving an overseer a share of the crops, and leaving him to make them in his own way; whether it arises from a morbid feeling of manliness, or from a sense of social inferiority which suspects a foe in every man of higher rank or greater wealth, this recusancy is a great mistake.

The overseer who consents to serve an employer that he thinks will treat him as a menial, wants respect for himself and cannot, therefore, command it from others. His entrance upon such service is a voluntary degradation which no amount of after rebellion can efface, to which, indeed, rebellion must add the additional fault of faithlessness to his contract; for it cannot be supposed that he would be employed if he should announce beforehand that he reserved the privilege of insubordination. A man who enters an army agrees to obey implicitly and without question the order of his superior: the chain of authority binds every man, from the privates to the generals; but it never

occurs to the proudest of them that he surrenders the very manhood which leads him to the cannon's mouth, when he gives up his freedom of action and does automatically every bidding of another. The very fact, if it exists, that his superior in rank is his inferior in worth or capacity, but increases the merit of submission by proving the subordinate equally a man in fortitude and in action. Subordination is not subjection: it is founded in the necessity of the case, not the whim of the master—in principle, and not in temper. For the same reason that the husband is allowed to rule the wife, the master must rule the overseer. There cannot be two heads; and he who owns the property, bears all its burthens, and takes all its risks and responsibilities, must have the entire control, and a discretion of delegating it in such way and proportion as may suit himself. On it depends not only the arrangement of details and the consistency of plan, but especially the subjection of the negro, the freedom from infinite trouble and vexation with him, and often the life of either overseer or negro, or both, and the future happiness and success of the overseer himself, and the welfare of his family. He may rely on it that no proprietor, with a proper sense of his rights and obligations, will surrender this condition; and if pride or temper will not permit him to accept it cheerfully and to the full extent, he had better not undertake the business of an overseer, for he will find it full of annoyance.

Nor does subordination to authority imply submission to rudeness. If we were all of us anxious to deserve courtesy rather than eager to enforce it, we would have more of it. In the long run, every man's deportment secures him such consideration as he deserves, and those who mean to earn a good name need not fear "the proud man's scorn." A gentleman, or a man of proper feelings, will treat all around him with the respect and kindness which is their due, and there is every reason why he should so deport himself towards his overseer. It may chance that amid the anxieties of business, a rude word or an angry comment may, at times, escape him, just as the overseer, at times, gives way to a similar infirmity; but in the main he will be considerate. If the overseer deserves it, he will look on him as a man entitled to civility, and will set him the example of good behaviour. It is the readiest mode by which he can secure the same demeanour; and his interest, if not his amiability, will prompt him to keep on the best terms with one to whom so much is confided. If it does not, better part than quarrel. But civility is, in fact, so far the rule, that most overseers, we are sorry to say, are spoiled, and very few live more than two, or at most three years, with the same employer. A disposition to avoid angry and unpleasant colloquies, and to overlook faults and tolerate relaxation from rules, to concede privileges, to submit to small abuses of administration and usurpations of power, in those who seem, in the main, to have our interest at heart, is generally carried so far that in the time specified the overseer is turned off, and a new one runs the same course of indulgence to the same end. For this the owner is as much to blame as the overseer. He forgets that it is in the very nature of agents to abuse trusts; lawyers, the most elevated class of agents in the community, require watching and pushing, as much as any others; and it should not occasion great surprise or blame if a lower class yields to even greater temptations, under a relaxation of discipline.

We have dwelt at some length on this point, because here is the beginning of much of the evil that results from the relation we are treating of.

Another duty of an overseer is, fidelity to the interests of his employer, and an entire devotion of his thoughts and time to them. Of his own free will he has sold them to him for one year, and as an honest man he must stand to his bargain. He has contracted to manage, under such guidance as he may receive, just as a prudent man would manage for himself; to be diligent in the execution of his trust; and to give strict personal attention to the whole management of the farm. In order to do this properly he must be rarely absent from home, and never without his employer's permission, if for so long a period as a whole day. There is reason in this requirement, or it would not be so often stipulated. Every man accustomed to manage labour, whether black or white, in the field or the factory, knows that the presence of a superintendent is indispensable. When an overseer is absent the master must take his place, or the work will be badly done, if done at all; the stock will be neglected, pilfering, both from the barn, the corn house, and the stable, will be carried on, with little or no possibility of detection; and a hundred things will go wrong, incurring loss of time, money, and temper, causing many times irreparable injury, and frequently calling for discipline—ever painful to a properly constituted character—which might have been avoided by staying at home. We have heard that Richard Sampson of Goochland, the best farmer in Virginia, himself once an overseer, and happily still living to illustrate his past and present calling, and to show what overseers may become, was once asked how many days in the year a farmer ought to stay at home. He replied, "three hundred and sixty-five." This answer, not meant to be taken literally, shows his idea of the necessity of constant presence and supervision.

We do not mean that an overseer shall stay always at home, enjoying none of the advantages or pleasures of visiting or social intercourse, and reaping none of the fruits of interchange of views. Few proprietors are so unreasonable or so blind to their own interests as to deny all relaxation to their overseers.

They know that if he visits proper places and people he will be improved alike in his energy and his capacity. But they also know that a regular attendance at court, at musters, at warrant tryings, at sales, is a serious evil, and a practice which not only impairs the overseer's carefulness but lowers his standing.

As a part of bis fidelity, an overseer owes it to his employer to give bim tbe benefit of whatever experience or knowledge or even theory he may have on any branch of his business, and to state frankly whatever views he may entertain in reference to the profit, practicability or conduct of a given enterprise. Few proprietors are so stupid or self willed, and fewer still so uncivil, as not to listen to the respectful suggestions of an overseer. For ourselves, we can say with truth that much of what we know of the practice of an art, in which candor, even more than modesty, counsels us to make small pretension to skill--has been derived from daily conference with overseers. Though uneducated, often bigotted, and averse to change, because instinct teaches them that when they leave the beaten track of practice they have no compass to guide them through the wilds of theory, yet they have commonly an amount of shrewd sense, and a happy knack of raising difficulties that often baffle the more cultivated employer and saves him many a fall from a freshly mounted hobby. But when tbe advice is given the duty is accomplished. Often it prevails; occasionally it is rejected, sometimes when the overseer knows it ought not to be. A retired merchant, for instance, or other affluent man of business, takes a fancy to show us all how to farm, and with conceit enough to blind him to his blunders, and capital to bear him harmless through their consequences, he goes, heedless of advice or remonstrance, straight forward to certain loss. Very naturally this vexes an overseer conscious of superior skill and judgment. But in this, as in all other cases of difference of opinion, what matters it to him? Let him remember that be is not a guardian but an agent, that his duty is discharged when his views are given, and that it is a mistake to fancy himself—as so many affect to do—"responsible" for what happens. Responsibility does not attach at all. If loss results he does not bear it either in money or "reputation." Every proprietor will easily recollect that for once he blames his overseer for bad advice, he blames him fifty times for faults of execution, where, indeed, the fault most frequently lies. The "reputation" of an overseer depends more on obedience to his employer's orders than in carrying out his own plans, and he will always be best recommended who is readiest to do his employer's bidding, and most willing to sacrifice his own preferences, or convictions even, to the will of him whom he has consented to serve, and cannot thwart without a breach of contract. But let him have no fear that he will not be heeded when he gives good advice. If his employer is a man of sense he will take it and be thankful; if he is a fool, the sooner they part the better.

Fidelity also involves a vigilant regard to the character of the master so far as the overseer's dealings in his behalf may affect it. It is frequently his business to make sales and contracts, and he should always remember that he must not, in any such case, make statements which the proprietor would not sanction or which would reflect injuriously on his fair name. A reputation for integrity is worth more than money in a mere pecuniary point of view, not to mention higher considerations; and if it were not, there is always a risk in such cases of legal difficulties; for, as an agent, he subjects his principal to all the laws which apply to this relation. The master, too, has no guarantee that if tbe overseer will cheat *for* him he will not also cheat *against* him, for his own interest is naturally nearer to him than an employer's can be. We knew an instance in which an overseer complained that his employer was too honest in his dealings ever to make money, and that overseer was subsequently discharged for dishonesty. If an employer, as is sometimes the case, so far forgets what is due to himself as to require his overseer to do things of this kind which fear of legal or social consequences forbids his doing personally, the overseer ought to decline it if it costs him his place.

Integrity, civility and sobriety are duties which an overseer owes to himself as much as to his employer. His integrity is frequently tempted by an opportunity to take small advantages, which are rarely undiscovered, but are either overlooked, from their insignificance, or from a reluctance to expose them, or which are treasured up against a day of reckoning, or go to swell the aggregate of impositions and indulgencies which, ultimately, induce a separation. If certain "privileges," as they are called, are allowed him, such as raising a pig, raising fowls on shares, having a truck patch, &c., he should be careful not to extend them a hair's breadth beyond the limit allowed. Sooner or later he will be found out, and one illicit act will lead to a suspicion of others. Nor is the suspicion always ill founded, for it is a very common fault in overseers thus to deviate from the rigid letter of the contract, which is the rule of honesty, and one against which they should be particularly cautioned and guarded. There is a great deal of truth, for instance, in the saying of that waggish gentleman, the late Byrd Willis, of Fredericksburg, that "there is always a quarrel between the mistress and the overseer about the overseer's cow." We have known an overseer whose cow was fed on meal, when corn was scarce and worth five dollars, and not another cow on the plantation got a dust of it. The excuse that the cow did not give milk enough for the family contained the truth, but it was his business to state the fact to the employer. As tending to establish confidence and good will, one would think that the increased pleasure in the intercourse of the parties ought to be a sufficient stimulus to rigid honesty.

Hardly less necessary is a respectful demeanor. We do not here mean to argue the question as one of difference in rank and station, though there is that difference, nineteen times in twenty, nor to assume that the overseer on *that* account owes anything to a man, who he may think is elevated above him by birth, or fortune, or an unjust Providence. Such distinctions generally assert and vindicate themselves, and whoever resents them kicks against the pricks. In the policy of plantation management it is a matter of common sense, not social usage. The negro very justly regards the overseer as his master's deputy, nothing more, and he does not, and should not, admit any imperative authority over him except as thus derived. Always jealous of the exercise of this authority, his manners to the overseer are guaged by the manners of the overseer to his master; and if he sees him rudely treated he will not only resent it, for he loves his master, but he will imitate it and justify the imitation by example. True, the overseer may compel the negro to treat him with respect, but it will be at the cost of much trouble, and possibly at the risk of serious rencontres. We do not suppose him to be afraid of these; very few of them are or need be; but we think him too

humane, too reasonable, too sensitive to his own interests, to undermine his own authority, with those consequences likely to result; from a foolish idea that he is thereby proving his manliness. And we maintain, therefore, that an overseer who is not habitually respectful to his employer, has too much temper or too little sense for the business, and ought not to be employed. If he feels aggrieved at any time it is more manly, as well as more judicious, frankly to say so. If he do this coolly and in good temper, he will generally get a proper explanation. If he shall not, he has the same recourse with men similarly situated in other walks of life. At all events let him not think to redress his wrong by pouting and sulkiness.

Sobriety is so necessary that we should hardly do more than name it in the catalogue of an overseer's duties, if we had not known some good managers ruined by drink, and some sad mistakes made by employing and endeavoring to reform them. The excuse is the arduous labors they undergo, which sometimes entices them to purchase a moment's energy by a glass of grog, and the lassitude they feel at times, which, depriving them of appetite for dinner, when they come to that meal, heated and exhausted from the field, provokes them to a similar indulgence. This, or earlier dissipation, is the foundation of a habit which many other men have laid in the same way, and which in some constitutions works ruin of health and character. We will not say we are convinced that it is better for all men not to drink; but it is imperatively required of those who *love it* that they should never touch a drop. It is unnecessary to tell how drink corrupts the whole man by weakening his power to resist temptations, which beset us all, or how the drunkard will lie, steal, murder, how he will let his family starve and rot. We speak of it as a matter of duty to another. What right has a man who sells me his time to impair its value by excess? to ruin his character which I have bought? to teach my negroes the worst vice they can possess, because it is the parent of all vices, when I employed him to set them good examples? to expose my property, which he was hired to protect, to their and others' pillage, by carousing abroad or lying dead drunk at home? to excite them to mutiny by inspiring them with that contempt for him which I have taught them to feel for all drunkards? to give up the control of himself, so that in a mood of petulance he may correct them for a presumed delinquency, or in a moment of frenzy take their lives for fancied insolence?

We have, as we have said, known some prime overseers ruined by drink; and we have also known efforts to reform them, prompted by a sense of their value if they would keep sober, or a feeling of kindness to them, or sympathy for their families. We have known them to pledge their words that they would never offend again. But we regret to say that the cases of reform are too rare to encourage a repetition of the effort, or a reliance on such a pledge. When the master is absent from home, or even sometimes when he has just stepped out of the way, the overseer will be tempted and fall. It will be discovered. Confidence, and with it all comfort in the connection, will be destroyed, and one cannot even trust the overseer from home, or leave home one's self, without anxiety. It is best to have nothing to do with the man who drinks, even though the habit goes no further than an occasional "frolic." Though he may have the kindest feelings for him, and the strongest desire to serve his family, justice to himself, and still more justice to his negroes, requires of the master that such a man should be discharged. He knows that he is doing wrong; the disgrace he is bringing on himself, his wife and his children, stares him full in the face, and if this does not give him principle and resolution to refrain, all other means will most probably fail. He has been false to himself, he will be false to every one else; and if humanity move us still to attempt his reform self preservation tells us not to put him in authority.

[*To be continued.*]

WANTED, A GOOD FURROW CLEANER.

Some of the best wheat lands in Maryland and Virginia are extremely flat. They are what are called by Dr. Higgins in his first report on the soils of Maryland, white oak or pipe clay soils. From the extreme fineness of division of its particles, this soil is eminently absorbent of rain water—it rarely suffers from the water of springs or subterranean currents—and it is indispensable to successful cropping that it should be well drained by surface drains. For this purpose it requires ditches, and a number of drains, called water furrows, bed furrows, alleys or grips, which are made by the plough in finishing each bed or ridge. These drains are, or should be, completed with a large three or four horse plough running twice in each furrow, and the clods that fall in after this operation be taken out with the shovel. But one objection to this mode of doing the work is that it makes and leaves a shoulder, or abrupt furrow slice lying on the edge of the bed throughout its whole length, sometimes almost perpendicular but always overhanging the water furrow more or less, and constantly falling back into it by its own weight, or washed in by rains, or heaved in by frost. This fills up or clogs the drain and requires constant watching and working to keep it clear by shovelling out the impediment.

Another great objection to this mode of making water furrows is that they form so many ruts over which a reaper must jolt, or into which it must chuck, to the great discomfort of the raker, and at great risk of clogging or breaking the machine.

Assuming that the labor of "striking back," or drawing away this toppling furrow slice to a proper grade with the hoe, is too great, if done effectively, we would enquire of all who read this if there be no plan for doing it by horse power. Suppose the water furrow shall be left by the plough eight or ten inches deep by twenty inches wide at top, could not an implement with two mould boards, perhaps with an extra wing on each mould board, and the whole adjustable to greater or less width of furrow, be contrived to do the work? The mould boards and wings, if they are attached, should be sloped on the under side from the bottom of the furrow to only enough width at the ends to give them strength so as to grade the dirt by wasting it gradually on the bed. The distance from tip to tip should not be less than four feet, which would slope the furrow slice something less than two feet on each side of the bed. As no deepening of the furrow is re-

quired by such an implement, and could not indeed be done by it without too much stress on a team even of four horses, it need not have a share or any cutting arrangement whatever, but only something, a shoe, or slider, or perhaps a roller, of five or six inches tread for the attachment of the mould board.

One thing to be guarded against would be a tendency to collect the dirt in front; another would be a liability to ride on the top of the furrow slices instead of grading them from the bottom. This last might be obviated by a wheel under the end of the beam and by proper weight given in the construction.

It is expected that the State Agricultural Society will offer a premium for such an implement, and inventors may rely on it, it will pay very well to make a good one.

VIRGINIA FARMER.

This is the title of a new agricultural paper which has been started in Harrisonburg, edited by Wm. G. Stevens, also editor and proprietor of the "Rockingham Register." The paper is a large quarto of eight pages, published monthly at the low price of fifty cents per annum, payable always in advance, or gratis to the punctual subscribers to the Rockingham Register.

Mr. Stevens promises contributions regularly from the best farmers in Rockingham. If they will contribute, he will have a very fine paper from that source alone, as some of the most intelligent and practical farmers we have ever known were from that county, and we have no doubt there are many more like them.

THE SOUTHERN FARMER.

We see, and have accidentally omitted to notice the fact before, that Messrs. Pleasants & Nicol have associated Mr. A. C. Morton of Petersburg with themselves in the conduct of "The Southern Farmer." Success to the trio.

FINE IRISH POTATOES.

We received a few days ago, from Mr. Cary A. Anderson of Charlotte, a keg of very fine Irish potatoes. Unfortunately for us they were badly frosted. But we are as thankful for the kindness which prompted the donor to send them, as if they came in first rate condition.

We learn that a factory has been established in the City of Petersburg for the purpose of manufacturing the Reaping Machine patented by Robt. J. Morrison, Esq. of this City. A model of this machine was exhibited at the late State Agricultural Fair. It attracted the attention of thousands of our best farmers, and received the commendation of the Committee on Reapers. The report of this committee was published in the December number of this paper. Those who desire to purchase this implement should without delay address Messrs. W. E. Morrison & Moore, Petersburg, whose advertisement will appear in the next number of this paper.

PROPORTIONS OF FINE-WOOLED SHEEP.

The following, by W. D. Dickinson, which we find in the Wool Grower, gives a simple rule for ascertaining the proportions of fine-wooled sheep:

"In breeding sheep for wool, we should also pay some attention to form, which is of much more importance than size, so far as its adaptation and value for mutton is concerned. If a Merino sheep measures from the withers to the root of the tail, and from the withers to the nose, and likewise from the withers down the foreleg to the hoof, alike; and the three lengths put together, or three times the length from the withers to the root of the tail, being put around the sheep lengthways, passing the string under the neck and around the thighs, and the sheep is broad enough to fill the string, it may be considered a very just proportioned animal."

SONGS OF THE POULTRY YARD.

Now that poultry-keeping has become as fashionable as crochet, and every well-regulated young lady keeps her Cochin Chinas in preference to a canary, we may naturally expect the mania will soon affect the inspiration of our lyric writers. We are convinced, indeed, that songs for the poultry yard will be counted very shortly with the wants of the age; and will soon supplant those senseless, "*Will-you-love-me-then-as-now's*," with which the sentimental school has too long afflicted us. We are therefore tempted to anticipate the national demand, and supply at once a specimen, which any poultry-minded maiden has our full permission to inscribes in her album—supposing that exploded nuisance can be anywhere found extant:

Air—"*Lesbia hath a Beaming Eye.*"

Lesbia hath some Cochin Chi-
na fowls of most superior breeding,
Every one too fat to fly,
So constantly she keeps them feeding.
Daily wakened by their crows,
At some precocious hour she rises,
And while their breakfast forth she throws
Her pet she thus apostrophizes:
"O my Cochin China dear—
(I mean expensive)—Cochin China;
Most hens lay
One egg a day,
But you lay *two*, my Cochin China!"

[*London Punch.*

CORN AND COB MEAL.

Much is said about the virtues of cob meal, and from some articles which we find in the papers, one might infer that about all the value of corn was in the cob. There are about seven pounds of cobs to a bushel of corn. At the very best it cannot be worth more than so many pounds of straw. But to make it at all available it must be ground, and the grinding costs extra. This is not all. Corn meal, if not cooked should be ground very fine for all kinds of stock; especially our Northern yellow varieties. If the cob be ground with it no miller will take pains to grind it fine, for the toil does not pay. For the purpose then, of saving some seven pounds of straw the feeder of cob meal pays a pretty large sum in the loss, by extra toll and coarse grinding.—*Country Gent.*

CHEAP DRAINS.

In reading your paper and other works on agriculture, I often find articles on blind draining. My brother and I having made an experiment on our farm, in the town of Wales, Erie county, New York, I am willing to give your readers a description of our drain. and the result after a lapse of more than twelve years test, it being laid down in the years of 1839 and 1840.

Our land was a retentive subsoil, and on such soil only would I recommend this kind of drain. We dug our ditch of sufficient width at the bottom, to admit a common round shovel, and from 20 to 22 inches deep, with moderately sloping sides. Then commencing at the upper end, we laid a common hemlock, basswood or other slab, from 10 to 20 inches in width, with the sawed side downward, and the upper edge reclining against the side of the ditch so as to form a triangular throat between the slab and the side and bottom of the drain. We covered the irregular portions of the slabs with other pieces and chinked with turf. We placed the slabs end to end, the same as tile are laid, and were careful to keep the throat clear as we advanced. We formed openings from the surface wherever desirable, with open drains or dead furrows leading to them, all of which continued to work well at the time I visited the farm in 1852.

I think this is the cheapest mode of draining that I have ever seen, and that it will be as lasting as any other blind drain. In sections of country where lumber and slabs are plenty, farmers would do well to under-drain every wet portion of their plow-land, as the expenses of slabs could not exceed five cents per rod, and the first crop would nearly or quite pay the whole expense. J. WILBUR.

Bemis Heights, N. Y.

Capt. George Kephart purchased a track of land in Loudoun county, four years ago, which cost him $5 per acre; from a field of this land containing 100 acres, last fall he got 400 bbls. of corn, worth at that time $5 per barrel. After cutting the corn he put in wheat, sowing two tons of guano on it, which yielded him 2100 bushels and some pounds, last harvest, worth $2 per bushel. In two years, on this field, which cost four years ago five hundred dollars, he got upwards of $6,200.

WILL FARMERS READ AND WRITE?

We do not know that we can furnish a better reference to the editorial we wrote on New Year's Day than the following, which we publish, letter and all, from our friend Geo. C. Gilmer, of Albemarle. It is an appeal which is stronger than any that we can make—it is a call from a Farmer upon his fellows for information, not a petition from an Editor interested for copy. Will they heed the call?

INGLEWOOD, January 1st, 1856.

For years I have been well convinced, the Farming community could be greatly improved and benefitted if each and every cultivator of the soil would write out a plan for him to pursue, describing the kind and strength of soil, the condition of his farm, its size, and what kind and strength of labor to be used; what quantity and kind of manures; how and of what and when made, and how used; what kinds of crops; when and how the lands were prepared, and seeded; how cultivated, when and how saved; what their yield; the amount of profit or loss on each crop, and the condition of the soil after each; the kind of stock kept, how kept, with what cost, also their profit and loss, with notes each night of the manner and mode of conducting the farming operations, clearly pointing out every advantage and disadvantage, in each and every operation of the farm; also, of all new caught ideas which might suggest themselves, or be suggested by others, during the year, which should be spliced on at the proper time, and for the proper crop in the next year's operations. By pursuing a course of this kind in a few years he would secure to himself a better system of easy and correct thinking, and for himself one of the very best farming journals the world could furnish him, and after a little practice would be a most pleasant way of spending much of the odds and ends of time otherwise spent either in napping, smoking, drinking, or idling, complaining of poor crops, desperate seasons, hard times, and wishing I was, I know where, and I know who was with me; I wish I had and I know what, and I know who could give me! A journal thus properly kept would often be a far richer legacy than is too often left our inexperienced and unbusiness trained boys in the way of broad acres of impoverished old fields and broken down nappy heads. Well do I know if my father had pursued such a plan it would have been invaluable to me, (for he was in many things a most excellent farmer,) or if I had adopted such a plan in early life, it would have saved me the trouble, expense and mortification of committing many an error, and I would have been a far better farmer twenty years ago than I am now, and a richer and more comfortable man than ever my fancy pictures out I may be twenty years hence. Under such impressions as these, you cannot be surprised that I should on this day resolve to commence a course from which I anticipate such handsome results to myself, and so much better for the sons I hope to succeed me.

Farming.—What is farming? How poorly understood is this most important branch of human pursuits even in this enlightened age; what a vague idea must our forefathers have had of its complex operations, when the pre-

vailing idea existed that the weakest mind of their weak progeny was the most suitable chap to conduct that branch of human pursuit which was and is and ever must be the grand and only basis upon which all the other beautiful superstructures of Law, Medicine and Divinity could furnish. Then it was any booby could make a farmer; and then it was only necessary to have his little wits aided by just a smattering of arithmetick up to the single rule of three, and sometimes to know how to write, but oftener just to know how to read his name. Thus weak and more weakly equipped, he was ushered out upon the great profession upon the succes of which the prosperity and even subsistence of the whole world depended, and who can wonder under such a corps of engineers, this so important branch of human subsistence dropped to so low an ebb, but the rather who does not wonder that from such an ebb it has thus rapidly rose and rose and risen, until its mighty waves have reached that beautiful and magnificent height from which it now looks down upon each and every other profession as though it was as much the God of them all, as it most certainly is the support of them all. Now how has this mighty change been so speedily and beautifully wrought? Why by necessity, the great and almost universal mother of inventions. Under the routine of the old fashion farming, this great country of ours, now the grand granary from which almost every country is partly fed, would just now be engulfed in one general famine. Then the pittance, so hardly yet so scantily scraped from our barren fields, was sensibly felt by the other proud professions to such a degree that our crowded bar of proud and pennyless lawyers were almost starving in an almost hopeless expectancy of the first fifteen shilling feet. The haughty carrier of the filthy pill box, was often harder ridden after by the poor and contemptible constable of the parish, than by an urgent messenger for assistanec to the afflicted. The humble divine too felt it, in the rough manner in which his poor pittance was meagerly dealt out to him, in such small, broken doses, as to render it doubtful whether or not his soul and body could much longer be entangled by their alliance on so small an allotment. Thus a mutual and general pressure upon all and every class of mankind coerced each and all to put their wits in motion to ferret out the great why and wherefores of this sad and saddening state of affairs. The earth was thought by heaven itself to be cursed. Things could not thus get on; an important screw was loose some where; it was searched for, and, sir, it was soon found out. It lay in the simple misapplication of the strength of mind in our country. Instead of being at the pinnacle it should have been at the pedestal. Things rapidly changed under the beautiful change of places. The lawyer withdrew from his starving position at the bar. The white handed pill carrier dropped his well worn buckskin whiteners, and the pressed divine was starved into a more close and prayerful reading of the Good Book, which plainly says man shall live by the sweat of his brow, and each and all betook themselves to the plough, fulfilling that good old adage, "he who would thrive must himself either hold or drive."

Thus it has been found, mind was as absolutely requisite to conduct the complicated affairs of successful agriculture, as for any other pursuit of man, and as mind is as absolutely necessary, so is education and training as absolutely requisite for agricultural pursuits as for any other trade or profession of man. But for the studying of others' writings, what would our great Marshall have been? But for the reading of notes, books, &c. of other doctors for ages gone by, what would the first Physicians of our country now be? So as reading is thus necessary for the highest success of other callings, it is equally so for the perfect understanding and fully carrying out the minute and highly successful opperations of the farm. Now to raise agriculture to its proper height, over its other dependants, we must apply mind, and that mind must have reading. Where is this reading to come from? Surely not from the agricultural Editors alone. No, not so; they have truly done much good, and they are still laboring on, doing all the good they can, yet it is a slow coach concern for the present state of excited Young America, and Editors may do much, and they may do all they can, and they never can render their paper what agricultural papers should be. A few lawyers, sparsely scattered all over the earth, could never have raised the Law to its present high standard, nor could a few Physicians, thus located, writing of the diseases of their section, have raised the science of Medicine to its present position. Then how can a few Agricultural Editors, thus sparsely scattered, writing of agriculture in their respective portions, raise agriculture to what it can and should be? No! this mighty work can be accomplished alone by the might of many men combined. Medical periodicals are written for from all over the country, giving a full description of the diseases within each Doctor's own practice the remedies used, and its effects. Now the boundary of a Physician's practice is to him just what a farmer's plantation is to him. His patients, the farmer's crops; his pills, blisters, drops, injections, are

just as the Farmer's guano, manures, draining, cultivation, &c., and as it is necessary for physicians all over the country thus to write of their practice for the successful healing of mankind, is it not equally so that we Farmers should thus write of our doings for the successful feeding of mankind? I think it is at least worth a trial; so, Farmers of Virginia, let us hie to the work and help our friend Ruffin to raise our Virginia Planter to what it can and should be. The Virginia Farmers can, they alon can do it. Every Farmer in Virginia should take it, and every farmer should write twelve pieces a year for it, out of which I think friend Ruffin could make a most magnificent paper. In such a mass, there would be much dross, no doubt, but our Editor being relieved from so much writing would soon become such an adept in selecting, that he would sort it over about as easy and as correctly as one of our very best managers would select the best from the lugs of an equal size pile of tobacco, and in a few years the lug portion of our writings would be a far better article than our best now. So, friend Ruffin, please be at your post in time to make a good selection from the immense mass of matter which I hope will accumulate upon you from every part of our good old State, and please be mindful to give it to us in rather better time than the middle or last of the month for which it is intended, for if an agricultural paper is worth any thing, it certainly must be worth more for the month for which it is written than for the next. So as the Farmers are herein called upon to apply more steam in the great cause, please set us a good example by pressing on a double portion of steam until you have fully worked up the drowsy one at fault in some or all your departments. Do your duty, and you may do much to urge us on to do ours.

Your Friend,

GEO. C GILMER.

JANUARY 11th, 1856.

Friend Ruffin.—Dear sir: Enclosed I send you an article, out of which, if any good can come, you can use it, otherwise place it among the rubbish of your office. I do not write that I may be read in the public prints; it is a labor for me to write at all, and when I write it is more to stimulate others than to make a poor show of myself. I truly feel a deep interest in the improvement of Virginia Agriculture, and have deeply regretted to see how hard the farmers are to be stimulated to a more spirited and general effort to do their part to raise the Planter to one of the very first papers of the age. It can be done, but the Farmers of Virginia alone can do it. *You can't do it, nor can any one man on earth do it* A good agricultural paper never has nor never can be made by the mightiest effort of any one man; it must be done by the might of many mighty men united. Now it certainly is the interest and should be felt to be the duty of every farmer to take and to write an article or something once a month for the Planter. It would soon become an easy and a pleasant task, by which the very best notions of the Virginia Farmers could be chronicled for each month in the paper of that month, which would soon render our Planter all any one could ask as an almost perfect guide to the young, and a great instructor to the old farmer. Now can't this be brought about by your calling upon them in a note for information upon something for the next month? I think it might do some good. If Mr. Churchman of Augusta could be induced to give us the plan by which he has so improved his estates, his mode of using lime, &c., or the gentleman who used lime in so small a quantity as one bushel per acre to keep off joint worm and fly with so good an effect, and they would be thankfully received by many if not all.

Most truly, your friend,

G. C. GILMER.

EXPERIMENTS—LABOR SAVING—HOG FATTENING.

DECEMBER 20th, 1856.

Friend Ruffin—The last time I saw you, you asked after my promised piece upon my experiments with lime upon the last wheat crop. I informed you, that I had written a hurried article on the subject in reply to some enquiries of Mr. Jerr. Morton's of Culpepper, whom I requested, (if any good could be derived by the public from its appearance in your columns,) to send it to you. If he did not send it, I must of course conclude, in his good judgment there was no good in it. If he did send it, then I of course must conclude* in your judgment his good opinion of it was at fault. Thus it is, my dear sir, why I have not troubled you with another article upon the effects of lime upon wheat, which however condemned by Mr. Morton, or you, was entirely satisfactory to me, both upon the wheat crop and upon the grass seeded upon the wheat crop, on which it shows most gloriously at present. I shall make this winter and spring far more extensive experiments with lime, (having an abundance of it) upon my wheat crop, tobacco, oats, corn and grasses, and have set apart a flat of land in corn

*We can assure our friend that we have not received his account of experiments with lime, and that we shall be glad to pass an opinion on it.

this year, well known to be the poorest portion of my farm, on which I mean to spread lime, and sow in peas, then fallow in the pea crop, and sow wheat next fall with plaster. Adjoining I shall try a lot likewise with oats, and one with buck wheat; the remainder I hope to guano with diffcrent quantities and seed in wheat. These experiments will be accurately made as to cost and time, for my own satisfaction, and if in my opinion, any good could result to my brethren of the plough, trying after the cheapest and best way to heavy cropping, by its being made known through your paper, I will try my hand again with you, and if again condemned, I will thenceforward in silence profit by my own experiments until the public shall be awakened to their results by my commission merchant's crying out, in the streets of your city, How on earth has Gilmer so increased his crops?

I am fond of experimenting in a small way, and more so of reading the experiments of others, for they are always more or less expensive and always troublesome, and it does seem to me, if more articles of the kind could find their way through your paper to the public, the public would be vastly improved and your labors greatly lessened. There is scarcely any farmer who does not know something, even if it be to him quite a trivial matter, which might, if generally known, prove to be a great matter to the mass. I well remember when quite a boy going with my father to an adjoining neighbor's We had to pass where his old servant was feeding hogs, and saw him smearing tar upon some rubbing posts. My father asked why he did that. The old negro replied, that's the way we keep off lice.* My father asked his old friend if it was effectual He replied it was. My father from that day dispensed with his old fashioned way of catching the hog and sucaring him with cream and lamp black, and I never knew him to have a lousy hog afterwards. I have kept it up, and have never had licc upon my hogs. This is a small matter, yct how much time would it save in the State if every man knew it, and any man who will try it will never abandon it.

My neighbor, one of the most business men I ever knew of his age, and one of the very best farmers of his age in the country, complained that with an abundance of hands he could not house more than fifty barrels of corn to a wagon in a day, the pens of corn not being more than fifty yards from the crib. I told him I had housed over a hundred with only three hands. I use guano bags. Fill up three bags, raise them from the wagon to the upper door, from which a thick plank is laid to the joist on the backside, on which the man walks and empties out the bags evenly all over the house, which makes it necessary to handle but once; saves the tiresome see-sawing of the bulk, and in fact saves a great deal of most tiresome labor, and all the shattering of the corn. "My soul," said my friend, "if I had thought of that, it would have saved me three days work with all my teams and hands." Now he works about twenty hands, and three or four carts and wagons; a great saving to him. What an immensity of labor might it not save the State; yet it is a very small matter.

I was invited by this same friend to inspect the great improvements he was making on an adjoining farm of his, which had been turned out by its former owner for thirty or forty years. He was clearing up the swamps by grubbing up every thing—some of the sapplings twenty to thirty feet high—and was opening the most beautiful and effectual ditch I ever saw. I noticed two men grubbing at the roots of a large young walnut tree, his overseer trying to push it, to see, I first supposed, which way the roots lay. My friend stepped up to help him shake. I then found they were trying to shove it down. I told him it would take those men half an hour to dig it down, yet I could get it down in half a minute. His overseer stared at me as if to see whether I was drunk or a fool. I told his man to cut me the longest pole he could handle, with a limb at the large end to hook on to the upper limbs; then pull it; he did so, and down came the tree at once. "Well," said my friend, "this little thing would have saved me the labor of two men each day since I have been cleaning up this creek;" yet this is a very small matter, and if generally known how much labor would it save throughout Virginia.

Last year demanded the most close shaving in feeding all sorts of stock I have ever seen, and it put me to my wit's end to keep from buying corn. At Buckeyeland last spring I found my shoats were too much crowded for their amount of feed, so I took a portion of them to my late purchase, which place had to be supported from Buckeyeland, and of course feed was scarcer if possible there then here. They were kept at first on the slops from my kitchen, until my patch of cymblins and pumpkins and fruit came on; then they had these articles boiled by a little girl and fed out by my feeder night and morn, and the only "symptoms" of grain they had was the *meal husk from my bread*, until the roasting ears were too old,

†We know by the remarkable result of an experiment we made several years ago, of which we published an account in the Planter some time since, that the very best, as well as least troublesome remedy for lice on hogs is *tar* on trees, posts or logs. They will rub it on for themselves.

then their allowanee* was one ear a piece per day, boiled with the feed Until we commenced gathering corn, they ran in a field with my other stock, and were fat all the time, as you may guess from their weight when killed. There were eight of them: the first, an open sow, weighed 370 pounds, the next 262, and the eight averaged 207½ pounds—six of them, open sows, which were my heaviest hogs—none of which were over fourteen months old. Now my pork at Buckeyeland, which cost me much more and of the same stock and age, only averaged 134½ lbs. The little matter of cymblins and pumpkins and fruit boiled made this marvellous difference; yet how few will try it. I have written of these small matters, hoping to elicit from abler farmers something of more importance By the bye, where is our old friend X ex-farmer of Berkeley? From his article I have gained much, and would like to know who he is that I might thank him. Can't you rouse him to another effort, for the good of his needy yet grateful Brothers of the Plough? If you have nothing better for the public, you can give it to them, *yet I am not one of those who think because I have written you must publish it.* With mine, always do as you think best, and I shall always be content. The hard roasting ears were always boiled with the fruit or vegetables for my hogs.

Yours, truly,

GEO. C. GILMER.

INGLEWOOD, Albemarle Co., Va.

*A plan we have followed for some years with the hogs we have fattened, usually four, to an average weight of 250 pounds, has been to give them every stalk from which the roasting ear has been pulled—worth nothing if allowed to stand, it is worth then—at the period when most filled with sacharine matter for the supply of the ear—as much as the matured ear would be.

PRINCIPLE OF BREEDING, OR CROSSING SO AS TO OBTAIN A FIXITY OF TYPE.

In a recent number of the Journal of the Royal Agricultural Society of England, we find some original views on the above subject in an essay by M. Malingie-Nouel, President of the Agricultural Society of Loire et Cher in France, which are well worthy the attention of those wishing to improve their stock.

To *get* up and *establish* new characteristics in a breed of animals is a work of anxious years of effort; requiring the very nicest observation and experiment. A single false step may undo the work of years, and there is no school in which skill and success is attainable but in that of actual individual experience. It can neither be taught in books nor be acquired from another, and as our author has remarked, can only be executed by a man like Richard Goord, the founder of the new Kent breed of sheep, who commenees when very young, and lives, like him, eighty-six years.

There is one point in crossing animals on which he lays great stress, and is so obvious as to excite wonder that it has been lost sight of, viz: "that the prineiple of antiquity or purity of race is what has most influence on crosses," or, in other words, that where fixity of type has resulted as a consequence of great antiquity of the breed, the impress in the offspring will be stronger from that side than where the breed is comparatively of recent origin. A farmer wishing to secure for his herd the fine milking qualities of the Alderney, would be far more likely to secure his object by breeding his Alderney bull to a common cow, or one of no distinct breed, than if he was to select a Devon cow, or even a pure Durham. The common cow having no fixed and determined characteristics of form or quality to counteract the impress of the type, the influence of the mother on the offspring would be weaker than that of the father. He illustrates the principle by the motion of a projectile, say a common ball, whose velocity is obtained not merely in proportion to the propelling force, but also to the resistance of the medium (air or water for example) through which the body is driven. If there were no resistance on the side of the mother, the complete effect would be realized by the reproduction of the improving type, and the influence of the sire would be stronger, the purer and more ancient the race might be.

These principles he has applied most successfully to improve the French breeds of sheep, which for various causes had greatly deteriorated, and as they were of great antiquity with very strongly developed character, supposing the above principles to be correct, his entire success is most remarkable. In reference to it he says: "It appeared then that in order to untie the Gordian knot whose threads I have traced, inasmuch as one could not increase the purity and antiquity of the blood of the rams (I purposely repeat the first principles of the problem to be solved,) one must diminish the resisting power, namely the purity and antiquity of the ewes. With a view to this new experiment, one must procure English rams of the purest and most ancient race, and unite with them French ewes of modern breeds, or rather of mixed blood forming no distinct breed at all. It is easier than one might have supposed to combine these conditions. On the one hand, I selected some of the finest rams of the New Kent Breed, regenerated by Goord. On the other hand, we find in France many border counties lying between distinct breeds,

in which district it is easy to find flocks participating in the two neighboring races. Thus, on the borders of Berry and La Sologne one meets with flocks originally sprung from a mixture of the two distinct races that are established in those two provinces. Among these then I chose such animals as seemed least defective, approaching, in fact, the nearest to, or rather departing the least from, the form which I wished ultimately to produce. These I united with animals of another breed, picking out the best I could find on the borders of La Beauce and Touraine, which blended the Tourangelle and native Merino blood of those other two districts. From this mixture was obtained an offspring combining the four races of Berry, Sologne, Touraine, and Merino, without decided character, without fixity, with little intrinsic merit certainly, but possessing the advantage of being used to our climate and management, and bringing to bear on the new breed to be formed, an influence almost annihilated by the multiplicity of its component elements.

"Now, what happens when one puts such mixed-blood ewes to a pure New Kent ram? One obtains a lamb containing fifty hundredths of the purest and most ancient English blood, with twelve and a half hundredths of four different French races, which are individually lost in the preponderance of English blood, and disappear almost entirely, leaving the improving type in the ascendant. The influence, in fact, of this type was so decided and so predominant, that all the lambs produced strikingly resembled each other, and even Englishmen took them for animals of their own country. But, what was still more decisive, when these young ewes and rams were put together, they produced lambs closely resembling themselves, without any marked return to the features of the old French races from which the grandmother ewes were derived. Some slight traces only might perhaps be detected here and there by an experienced eye. Even these, however, soon disappeared, such animals as showed them being carefully weeded out of the breeding flock. This may certainly be called '*fixing a breed*,' when it becomes every year more capable of reproducing itself with uniform and marked features. Such was my secret, which, however, has been made no secret at all, but has been declared from the first in my entries at the shows of Poissy and Versailles. Such is the origin of the La Charmoise breed of sheep.

"We have already seen how important it is that you should not infuse into a new breed more than fifty per cent. of English blood, if you would preserve the French constitution, which alone suits the circumstances in which they have to pass their lives. The Charmoise breed not exceeding that proportion does retain the hardiness of a pure French race; the lambs are reared as easily as those of any French breed, getting over the summer just as easily; neither then nor later do they suffer more than our native breeds from heat or from drought.

"The mixed-blood mothers had been formed from breeds in general small, and possessing the usual qualities of small breeds, delicacy of shape, smallness of the head and the bony structure, temperance as to food. The Merinoes alone had not these valuable qualities, but they entered in the proportion of 25 per cent. only into the mothers, and consequently of 12½ per cent. only into the offspring. Their disadvantage, too, in these respects, was compensated by their influence on the fleece.

"I may here remark that, in founding a breed, it is far better to choose ewes from small breeds, with the qualities already mentioned, than from breeds that are strongly timbered, bony, coarse, greedy, like those of northern and western France, which I tried myself, to my own heavy loss. Accordingly as fine or coarse ewes are used, so in proportion do the offspring show that coarse or fine character difficult to describe for a writer, but easy to perceive for a connoisseur."

The Charmoise breed of sheep have taken prizes whenever they have been shown at Versailles or Poissy. Ph. Pusey, who translated the essay from the French, concludes by saying that, as a farther confirmation of the truth of these views, he was informed by the late Lord Spencer that he had observed that the worse bred the female is, the more likely is the offspring to resemble a well bred sire, and that he should practically prefer a cow of no breed to an indifferent pure bred cow for a good thorough bred bull. The principle, however, has never been so thoroughly carried out as in the above experiments at La Charmoise, which throws some light on one of the most mysterious of all physiological problems, the renewal of the features of parents in the reproduction of animals.—*Farm Journal.*

EARLY CUCUMBER.

George W. Mordecai, Esq., of Raleigh, N. C., has had cucumbers on his table, raised in his garden for more than a month. The process of raising them is very simple and easy, and any of our housekeepers might, by a little trouble and care, provide themselves with similar delicacies. Make a hot-bed, by raising a heap of unrotted stable manure four feet high

above the earth, fill any number of small boxes, 8x10 inches, with rich garden mould, in which plant the seed in a hill, sink them in the manure, so as to leave the top of the boxes only an inch above the top of the heap, then put a glass frame over the top of the boxes, and the work is complete. The frame should be 12 inches deep, and as long and broad as desired, and made as tight as possible. Every warm day, or whenever the air is not so cold as to injure the plants, the top of the frame should be raised to admit air, and to water and stir the plants. The heat of the manure, in the process of decomposition, keeps them growing. There are so few of our citizens who give themselves any trouble to provide the luxuries of the garden, that we have been tempted to make this statement, *pro bono publico*—in the hope that many may be induced to follow the example set before them. Cabbage, lettuce, melons, and almost any kind of vegetables may be raised, early, in the same way.—*Arator.*

Poll Evil in Horses.—For the benefit of those who have or may hereafter have horses that have poll evil or fistula, I would say, don't sell the animal for a trifle, or give him away; but cure him sound and well. I care not how long it has been running, it can be cured with one dime; yes, one dime's worth of muriatic acid will cure the worst case of old poll evil. First, wash the sore well with strong soap suds, then drop eight or ten drops of the acid in it twice a day, until it has the appearance of a fresh wound; after which, it should be washed clean with suds made from castile soap, and left to heal, which it will quickly do if the acid has been used long enough; but if it does not get well, apply the acid again until it does cure, for it is a sure remedy, and will not fail if it is applied until the diseased flesh is all burnt out.

Prairie Farmer.

THE POWER OF DIFFERENT SOILS TO RETAIN WATER.

An experiment which any one may try for himself, will show much plainer than words the relative power possessed by different kinds of soils to retain water and its dissolved contents. Put on a paper filter (strainer) half an ounce of dry pulverized clay, and on another half an ounce of sand. Pour water over each, and weigh them as soon as the filtration has ceased. The clay will weigh three-eighths of an ounce, and the sand only one-eighth of an ounce, more than before. With very coarse sand, the increase in weight will be still less. Clay is insoluble in water, but, sponge-like, it can retain a large quantity of it. Hence the importance of underdraining cold, wet soils, in order to render them warmer and dryer.

Again: expose an ounce of thoroughly dried clay to the air for some weeks, when it will be found to have gained in weight. This increase in weight results from the absorption of water, carbonic acid and ammonia. The smell will convince you of the presence of ammonia. Or more satisfactory still, mix it thoroughly with quick lime and a few drops of water, when the smell of ammonia (or hartshorn) will be distinctly perceived. By this experiment is seen the utility of exposing clayey soils to the action of the frosts of winter, by throwing it up in ridges and letting it remain till spring; but the full benefit of that, or any other mode of tillage and pulverization, cannot be realized without systematic and efficient drainage.

From the Southern Cultivator.

FOR FARMERS—ONE ACRE OF LAND.

Messrs. Editors:—If you think the following worthy of a place in the columns of your valuable journal, insert it for the benefit of its numerous readers:

4.840 square yards is *exactly* one acre, neither more nor less, but the very thing itself.

69.57 yards square, or 69 yards and 20½ inches each way, is nearly one acre.

208.71 feet square, or 208 feet and 8½ inches each way, is nearly one acre.

2,504½ inches square is one acre nearly.

A piece of land 10 by 484 yards; or 20 by 242 yards; or 30 by 161¼ yards; or 40 by 121 yards; or 50 by 96 4-5 yards; or 60 by 80 2-3 yards; or 70 by 69 1-7 yards; or 80 by 60½ yards; or 90 by 57 7-9 yards; or 100 by 48 2-5 yards, is exactly one acre, neither more or less.

Yours, respectfully,

Selkirk, S. C., Sept., 1855. A. L. McC.

HIGH PRICE.

Judge Christian recently sold twenty-seven acres of land near Williamsburg, for $100 per acre. A good price. The purchaser, however, disposed of it at a great profit for building lots, which are shortly to be improved.

SALE OF DURHAM CATTLE.

We are glad to learn that our friend Dr. Daniel B. Saunders, of Wythe county, has lately sold three bull calves, two six months old, the other five months old, for the sum of $475. This looks like a high price for calves but is not for such as are to be found in the Doctor's herd.

PAYMENTS TO THE SOUTHERN PLANTER,

From 1st to 31st January inclusive..

A Brown, Janua '57, 1 00
G J Kelley, Jaua '57, 2 00
W Massie, Janua '57, 1 00
T J Blake, Janua '57, 1 00
F M Carter, Janu. '56, 2 50
W A Bonner, Jan '56, 2 50
S M Baker, July '56, 1 00
Mrs N Cross, Jan '57, 1 00
Col Alex Fleet, Jan '57, 3 00
Jas E Gates, Jan '57, 1 00
J F Childrey, Jan '57, 1 00
J Higgins, Jan '57, 1 00
A Edwards, Jan '57, 1 00
G W Clibourn, Apr '59, 5 00
J Brownley, Jan '57, 1 00
W L Carter, June '56, 1 00
J T Carter, June '56, 1 00
G B Tyler, June '56, 1 00
Dr A W Gray, Jun '56, 1 00
C Bayly, January '57, 1 00
J A Buckner, July '57, 1 00
R H Pollard, Jan '57, 2 00
S L Pidgeon, Jan '57, 1 00
Jno Glenn, Jan '57, 1 00
J C Rntherford, Jan '57, 3 00
A C Tardy, Jan '57, 1 00
T T Goodwin, Jan '57, 1 00
Jas Y Jones, Jan '57, 1 00
WT Brittingham, Jan 56 1 00
C G Alexander, Jan '57, 1 00
M H Effinger, June '56, 1 00
A B Duncan, July '56, 1 00
H L Plummer, Jan '57, 1 00
Jno Parker, Jan '57, 1 00
R Rowzee, Jan '57, 1 00
Jas McDonald, Jan '57, 1 00
Ro Campbell, Jan '57, 1 00
Dr J R Taylor, Jan '57, 2 00
B H Lax, Jan '57, 1 00
W T Walters, Jan '57, 1 00
C D Jones, Nov '56, 2 00
J A Herring, July '56, 1 00
E J Gresham, Jan '57 1 00
B L Holladay, Jan '57, 2 00
Jas R Holladay, Jan '57, 1 00
Geo H Toler, Apr '56, 1 00
F Jackson, Jan '57, 1 00
A Aldridge, Jan '57, 1 00
J G Cason, Jan '57, 2 00
S Carter, Jan '57, 1 00
W B Smith, Jan '57, 1 00
W M Watkins, Sep '56, 1 00
C D Crockett, Jan '57, 1 00
B Land, Jan '57, 1 00
Jno R Barnes, Jan '57, 2 00
J J Burroughs, Dec '56, 2 00
E Burroughs, Feb '57, 1 00
N P Howard, Jan '57, 1 00
Colin Clarke, Jan '57, 1 00
G H Brown, July '56, 1 00
BW Richardson, Ja '57, 1 00
Ro S Bell, Jan '57, 1 00
J Newbold, Jan '57, 1 00
Jas W Morris, Jan '57, 1 00
R R Puryear, Feb '57, 1 00
E G Bagley, Jan '57, 1 00
G C Beale, Jan '57, 1 00
W J Weir, Jan '57, 1 00
R H Poore, Jan '57, 1 00
W J Cheatham, Jan '57, 1 00
H D Taliaferro, Jan '57, 2 50
E McCormick, July '56, 4 00
J W Hupnicutt, Jan '57, 1 25
O B Finney, Jan '57, 1 00
Isaac Henkle, Jan '57, 1 00
C W Clarke, Jan '57, 4 00
L M King, July '55, 2 00
Sidney King, Jan '56, 1 00
J S Cowan, Jan '56, 1 00
L O Byars, Jan '56, 1 00
Dr B F Eppes, Jan '57, 1 00
Jno P Goodwin, Jan " 2 00
B F Wingfield, Jan " 1 00
Jno Wingfield, " '57, 1 00
M R Disosway, Jan " 1 00
H W Field, Jan " 1 00
T J Eppes, Jan '58, 2 00
R BCharmichael, Ja '57, 1 00
D A Anderson, Jan '57, 1 00
Jas Utz, Jan '57, 1 00
A M Field, Jan '57, 1 50
J L Hoff, Jan '57, 1 50
R Stokes, Aug '56, 1 00
M A Wilcox, Jan '56, 2 50
Dr W Cain, Jan '56, 1 50
Thos R Cain, Jul '57, 1 50
W J Dupuy, Jul '56, 1 00
N King, Jan '57, 1 00
H M Hutcheson, Ja '57, 1 00
L W T Wickam, Ja '57, 1 00
G W Price, Jan '57, 1 00
Jas P Whiting, Jan '57, 1 00
N Goldsborough, Ja '57, 2 00
Jno Winfield, Jan '57, 1 00
R F Pritchett, Mar '56, 2 00
Pog' Library, Jan '56, 1 00
E R F Packer, Jan '56, 2 00
R F Dillard, Jan '57, 2 00
T G Tucker, Jan '60, 5 00
Thos Carroll, Jan '57, 2 25
T H Carter, Jan '57, 1 00
S T Chandler, Jan '57, 1 00
G W Clarke, Jan '57, 1 00
B Boykin, Jan '57, 1 00
F Fitzgerald, Jan '57, 1 00
M Myers, Jan '57, 2 00
H E Weston, Jan '57, 2 00
P B Jones, Jan '57, 1 50
R H Allen, Jan '57, 2 00
R M Garnett, Jan '57, 1 00
Jno H Small, Jan '58, 5 00
J Williamson, Sep '56, 2 00
T F Haskins, Apr '56, 1 25
T J Hughes, Jan '57, 1 00
W H Sims, Jan '57, 3 50
G T Cralle, Jan '57, 1 00
R G Grigg, Jan '57, 3 00
W E Taylor, Jan '57, 1 00
G Booker, Jan '60, 5 00
H Lewis, Jan '56, 2 00
N Mason, sr, '56, 6 25
Jas Lindsay, Jan '57, 1 00
W Cowherd, Jan '57, 1 00
W W Garrett, Jan '57, 2 00
H G Richardson, " '56, 1 00
M Utz Jan '57, 1 00
WM Connolly, Jan '57, 1 25
Jas Arnold, Jan '57, 1 00
W G Rogers, Jan '57, 1 00
H A Sydnor, " " 2 00
W A Christian, " " 1 00
G C Smith, " " 2 00
R H Harwood, " " 1 00
L C Botts, " " 1 00
Geo Field, " " 1 00
Jas W Butler, Sept '56, 1 00
J Chesnut, Jr, Jul '57, 5 00
B Lewis, Jan " 5 00
J R Jones, Mar " 1 00
W T Mason, Jan " 1 00
L J Palmer, Oct '56, 1 00
A R L Keeling, Feb '57, 2 25
A Warden, January 1856, $1 00
B H Brightwell, January 1856, 1 00
D B Flippin, January 1856, 2 50
T D Richardson, April 1856, 1 00
W D Ranson, January 1857, 1 00
W D Mansfield, January 1857, 1 00
M T Hughes, April 1856, 1 25
R C Mason, March 1857, 3 50
R Stringfellow, January 1857, 1 00
Jas H Jameson, June 1856, 1 00
R G Wood, January 1857, 1 00
W C Davis, July 1856, 2 50
T T Withers, January 1857, 1 00
W Haskins, January 1857, 4 00
B J Worsham, January 1857, 1 00
G Hanes, January 1857, 1 00
M Kirtley, January 1857, 2 00
H B M Richardson, January 1857, 9 75
J M Waller, January 1857, 1 00
W S Dance, January 1857, 1 00
W Henderson, January 1857, 1 00
L M Powell, January 1856, 1 25
G R Rogers, July 1856, 1 00
W H Simmons, September 1856, 1 00
B R Wilson, January 1856, 2 50
Jos Turner, January 1857, 1 00
O S Jewett, January 1857, 1 00
W Felton, January 1857, 1 00
A S Brent, January 1857, 1 00
Jno Hargrove, January 1857, 2 25
Jos Jessee, July 1856, 1 00
Jno T Anderson, January 1857, 1 00
R J Gaines, January 1856, 2 50
Ro Moore, January 1857, 4 00
J T Hamner, January 1856, 1 00
A D Alexander, January 1856 1 25
S Biglow, January 1857, 2 25
R D Baskervill, Jauuary 1857, 6 00
A Joyner, January 1857, 1 00
W Meredith, January 1856, 2 50
Jas McAden, January 1856, 1 50
A Trevillian, January 1856, 1 00
T B Montague, January 1857, 1 00
T G Catlett, January 1856, 1 00
J M Pearce, January 1856, 1 00
E P White, January 1857, 1 87
Dr W Lewis July 1856, 3 75
Samuel Cooke, March 1857, 1 00
E A Morrison, January 1857, 3 50
J H Mettert, January 1856, 2 00
G W Richardson, February 1856, 2 00
Geo Hairston, July 1855, 1 00
Geo Terry, January 1857, 1 00
Ewd Terry, January 1856, 1 00
B H Barnes, July 1856, 1 00
A Temple, July 1856, 3 00
E S Acree, January 1857, 2 50
R W Bragg, January 1857, 2 00
Jos Phillips, January 1857, 1 00
G H Burwell, January 1857, 1 00
T Pratt, January 1862, 5 00
W Crawford, January 1857, 1 00
P P Nalle, January 1857, 1 00
Sam Willson, January 1857, } 6 67
Maj J Brooks, " "
H B Jones, " "
Zach Johnston, " "
Jno Willson, " "
Jas C Wilson, " "
J J M Bride, " "
Geo W Houston, " "
H J Brown, February 1856, 1 46
Mrs S A Brown, January 1857, 1 00
George Hairston, July 1855, 1 00
Ewd Terry, January 1856, 1 00
H J Brown, February 1856, 1 46

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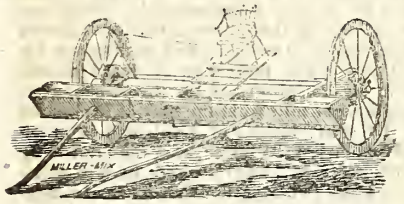

SEYMOUR'S IMPROVED PATENT

BROADCAST SOWING MACHINE.

THIS Machine was patented in 1845, and ten years have proved it to be unequalled in the United States, for the purposes for which it is designed.

It has but very little machinery, hence, when well made, it is very durable. It is capable of performing as follows: It sows correctly (and any desired quantity per acre,) all the various kinds of grain and seed commonly sown by farmers, from peas to the smallest seeds (Clover and Timothy mixed,) if desired, and all the fertilizers or manures of a dusty nature, which are so nearly reduced to a powder that the largest particles will pass through an aperture which will let through peas or corn, or which, having once been ground or made fine, and become lumpy by exposure, as plaster frequently does, can readily be reduced to powder by the action of the "plaster rod," which is a kind of coarse sheet iron saw, which is used in the machine, for distributing all such manures.

It is capable of dusting every inch of ground on an acre of land with less than half a bushel of plaster, and thirty or forty bushels of lime may be thus evenly applied to the same amount of land. It sows ten feet wide, and any narrower breadth may be sown at pleasure, merely with a "rod" with only teeth enough on to sow the breadth desired. It has received the highest recommendations from many hundreds of the best farmers of our country and received twelve premiums from Agricultural Societies, besides the Highest Prize and Diploma at the trial of Agricultural Implements, held at Geneva, July, 1852.

[The following is from the "Albany Cultivator, of June, 1848, by the Editor, L. Tucker.]

"This Cut represents Seymour's Sowing Machine, advertised in our last. It has been extensively used in Western New York, and is much approved. We saw many acres of various kinds of grain on the farm of John Delafield, Esq., near Geneva, last season, which had been sown with this Machine, and we never saw grain stand more evenly on the ground. Mr. Delafield assured us he could sow anything—lime, plaster, poudrette, guano, &c., or any seed, from grass seed to peas, or Indian corn, with perfect exactness, graduating the quantity per acre to a pint."

[Extract from an Address of the Hon. Geo. Geddes, before the Onondaga Co. Ag. Soc., 1854.]

The sowing of plaster by hand is a very unpleasant piece of hard work, and it is by far the best economy to useone of Seymour's machines. With these machines the plaster is evenly distributed over the whole ground, and for this reason a smaller quantity of plaster is required to touch every part of the surface.

[From Ed. Southern Planter, Va., April, 1855]

SEYMOUR'S PATENT BROADCASTING MACHINE.—We again call the attention of our subscribers to this Machine. Since the last number of the Planter was published we have sowed with it one hundred acres in oats, and they are now up. We never had a crop so well seeded or that promised better.

As to the quantity of work it will do, we can only state our own experience. One horse works the machine with perfect ease, it being no heavier than a single gig. The driver, in our case, was so engaged that he could not get to the work sooner than an hour by sun, and had to leave it about the same time in the evening. We had four three-horse harrows in the field and a three-horse plough to sweep the water furrows. The land required only one harrowing to get it in order, the tilth upon the fall and winter ploughing being remarkably fine. Dividing the work of preceding and following the Machine, as occasion required, so as to keep all the work well up together, we found that it was perfectly able to keep ahead of them. It sows a breadth of 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 with a man who seeds by hand and can carry a much less supply with him. The seeding, too, is entirely independent of the wind, and was 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, therefore, to every farmer, but we urge them to buy it, not on Mr. Seymour's account, who is nothing to us, but on their own.

ALBEMARLE, VA., MARCH 7, 1855.

I purchased one of Mr. Seymour's Plaster Sowers in 1854, and it was used by myself and a neighbor in sowing thirty or forty tons of Plaster. I purchased another in the Fall of 1854, and I am now using both. One hand with an ordinary horse can sow, without difficulty, twenty to twenty-five acres a day. The distribution is as perfect as possible. I am certain that every square inch of an acre was dusted by one third of a bushel. My neighbor Mr. F. K. Nelson thinks he effected it with one peck. I cannot speak too highly of this machine as a plaster sower. It sows timothy seed and clover. I have not tried it with wheat, but feel assured it will answer well.

T. J. RANDODPH.

FREDERICKSBURG, Va., Oct. 19, 1855.

TO MESSRS. WELLFORD, EASTHAM & CO.

Gentlemen:

At your request I with pleasure give you my opinion of Seymour's Patent Sowing Machine, which I have used with perfect satisfaction for two years past, in sowing wheat. I last year sowed with

one of these machines 300 bushels; it sows ten feet wide and distributes the seed with perfect regularity over the surface at any rate you may desire to the acre. The quantity is indicated by an index, to which a pointer is attached, and a small boy capable of filling the box with wheat, and driving so as not to vary much from the track of the machine, can manage it as well as a grown person. The grain is not affected by windy weather. I think I can safely recommend the machine to the Agricultural Community.

Very respectfully, your obedient servant.

ROBERT W. CARTER.

They are all made under the supervision of the inventor, and it is intended that every machine shall be made as it should be; for we are well aware that if we allow bad work or materials, the evil is greater to curselves than to the purchaser. The price with all improvements made previous to 1845, is $55. In July, 1855, an improvement was patented which when applied increases the price to $60. Since that time another very valuable improvement has been perfected; and with these late improvements, the value of the machine to the purchaser is nearly or quite doubled, while the price is only increased to $65. Another box, placed behind the wheels, will be furnished to order at $25. With this, grain or seed may be sown while sowing some other seed or substance from the main box. This can be removed or replaced in five minutes.

Reference is made to all the Presidents of the New York State Agricultural Societies who have presided since 1845, and as they are in use by intelligent farmers in half the States in the Union, as well as in Canada, we would refer to all these gentlemen to testify to their excellence:

S. Sands & Worthington,	Baltimore, Md.
D. C. Randolph,	Richmond, Va
C. R. Mason,	King George C. H, "
C. C. Baldwin,	Richmond, "
S. S. Henley,	Walkerton, "
Erasmus Taylor,	Meadon Farm, "
E. H. Osborne,	Petersburg, "
Edward Hill,	Ayletts, "
Dr. W. Gwathmey,	" "
Sam'l Ayres,	Richmond, "
D. A. Claiborne,	Halifax Co, "
W. R. Bland,	Nottoway, "
N. M Osborne,	Prince George, "
E Brown,	Wicomico Ch. "
W. S. Rylands,	Ayletts, "
J. T. Henley,	Walkerton, "
R. B. Watkins,	Mechanicsville, "
W. Y. Downman,	Smithfield, "
P. G. Ruffin, Ed. Southern Planter,	Richmond, "
Miles C. Seldon,	Powhatan, "
Wm. T Samuel,	Ayletts, "
R. M. Bridges,	Brandy Station, "
R. P. Atkinson,	Dinwiddie, "
J. P. Taliaferro,	York Co., "
R. B Haxall,	Richmond, "
T. J. Randolph, Jr.,	" "
Dr. P. B. Pendleton,	Tolersville, "
Dr. Jas. L. Jones,	Gordonsville, "
Lewen T. Jones,	Loudoun, Co., "
Hon. T. C. Peters,	Darien.
W B. Bowerman,	Seotsville.
H. Munson, Pres. two Ag. Soc.	E. Bloomfield, N. Y.
E. M. Bradley, Sec.	do. do.
Ira Peek, Pres't town Ag. Soc.	do.
T. H. Kellog, Jr. Sec. town Ag. Soc.	do.
Guy Collins,	do.
N. Steel,	do.
M. Adams,	do.
Dea. Pomeroy	do.
Luther Munson,	do.
J. W. Taylor,	do.
G. North,	E Bloomfield, N. Y.
Hiram Steel,	do.
Wm. Carter,	do.
F. N. Toby,	do.
Moses Eggleston,	do.
Ten Eyek Munsen,	do
Rufus Humphrey,	Victor, N. Y.
M. Norton,	do.
Levi Boughton,	do.
D. D. T. Moore, Ed. Rural New Yorker,	Rochester.
W. Kelly, Pres. N. Y. A. S.	Rhineback.
L. G. Morris, Pres. N. Y. S. A. S.	Mt. Fordham.
A. Van Bergen, Pres. N. Y. S. Ag. Soc.	Coxsackie.
Hon. C. H. Carroll,	Groveland.
L. Bradner, Pres. Bank of	Danville.
H. Keeler,	S. Salem.

C. H. SEYMOUR.

East Bloomfield, Ontario., N. Y., 1856. fe tf

KOSSUTH.

This justly renowned trotting Stallion, who has received the First Premium two years in succession (1854 and 1855) at the Virginia State Agricultural Fair, and who is now pronounced by competent judges to be one of the purest bred and fastest trotting Stallions in America—will commence his season, (limited to fifty mares) on the 1st of March, at the stable of the subscriber, on the Mechanicsville Turnpike, one mile from the City of Richmond—and on Tuesday, 1st day of April, will be at the farm of Mr. Henry A. Winfree, near the Half Way house, in Chesterfield County, where he will make a regular stand of two days in each week throughout the season. The season will expire on the 1st of July.

Terms:—$25 the season, the money in all cases to be paid at the first time of serving the mare. No insurance. Groom fee $1.

DESCRIPTION & PEDIGREE of KOSSUTH.

Was foaled in Columbia County, State of New York; is a beautiful rich dark brown, five feet three inches high, of great muscular power and symmetry of form, docile disposition, and can trot his mile inside of two minutes and forty seconds to a wagon. His Colts are remarkably fine and promising, and as a proof three of them received first class premiums at the last State Agricultural Fair, and from 2 to $100 a piece has been refused for some of them at six months old.

Kossuth was sired by that world renowned trotting horse New York Black Hawk, out of the well known trotting Mare Lady of the Lake, and she out of a thorough bred Mambrino Mare, The sire of black Hawk was the celebrated stallion AndrewJackson. The sire also of Jackson, Kemble Jackson, Henry Clay, Young Andrew Jackson and large numbers of other fast ones, the fastest trotting horse of his day, he was sired by Young Bashaw, who was by Imported Grand Bashaw. The dam of Andrew Jackson was by Why Not, and Why Not by old Imported Messenger, the Grand dam of Jackson also by Messenger. Black Hawk's dam was the distinguished trotting Mare Sally Miller, who has trotted her mile in two minutes and thirty seconds, and was not excelled by any horse of her time. She was got by Tippoo Saib, and he by Imported Messenger, her dam by Gunpowder. Black's time with heavy weight is the best on record, up to the time of his death, and established his claim to be the best trotting Stallion in America.

PERFORMANCES of BLACK HAWK.

Nov. 17, 1847, beat Jenny Lind in a mateh over the Union Course, mile heats: Black Hawk to a 250 lb. wagon, Jenny Lind to a skeleton wagon weighing about 75 lbs, winning the first and third heats in 2 40, 2 43.

April 25th, 1848, beat Lady Sutton in a match over the same course, mile heats, best 3 in 5, to 250 lb. wagons: time 2 43; 2 43; 2 42; 2 45½.

May 15th, 1848, beat Americus over the same course in a match for $2000; three mile heats to 250 lb wagons; time 8 31; 8 36.

For further performance see Turf Register for 1847 and 1848; where will also be seen the challenge of his owner to trot him against any horse in the world for any amount from $500 to $5000; which challenge was never accepted. Subsequently $13,000 was refused for him.

Kossuth having been kept solely as a breeding Stallion, has made but one performance on the turf, and that over the Union Course, Long Island, on the of 1st Sept. 1855, in a match of two mile heats, in harness, against Mr. F. Felton's black Stallion Ticonderoga, Kossuth winning with ease, in two straight heats, in the last one, Ticonderoga barely saving his distance (160 yards)

Kossuth had made a large season, (serving 48 mares,) and been in training only one month, suffering all the while from a severe cold, taken on his passage from Richmond to New York, and was so evidently out of condition, that I was advised to withdraw him; but knowing his endurance I was determined he should trot, and had the gratification to see him not only win, but make a race under the circumstances, creditable to any horse. A few weeks subsequent to this race, he made a trial to a wagon, which in speed will compare with if not surpass, that of any trotting Stallion in the world. By reference to my bills, it will be seen that Kossuth belongs to a trotting family—the best in America, and traces his blood for upwards of half a century, through a line of choice ancestors—all celebrated for speed and great endurance—and goes back to some of the purest Arabian and English horses.

Persons wishing to breed from Kossuth, would do well to make early application, as he will positively not exceed the limit.

Mares sent from a distance will be well taken care of, at my stable, at forty cents per day.

H. J. SMITH.

Richmond, Jan. 29th, 1856. fe-tf

THREE TRACTS OF LAND

On the Danville Railroad in Amelia, 36 miles from Richmond, for sale.

I have for sale three tracts of land in Amelia County. One, the tract on which I reside, containing 310 acres, with excellent Dwelling, 7 rooms, newly painted, and in excellent order, with all necessary outhouses, above two thirds cleared, the other in timber. One other tract, 150 acres with a new house, 3 rooms, and a large passage; about the same proportion of cleared land as the above. Another tract, 760 acres, with all the necessary out honses, including a first rate granary, 8 tobacco barns, an overseer's house, with four rooms, with five servant's houses, all new with brick chimneys; the granary well painted. Each tract is good tobacco and wheat land, the largest tract thought to be among the best if not the best quality of soil in this part of Virginia, with one hundred acres of first rate Creek and Branch low grounds. This tract is within two miles of Amelia Ct. House Depot; the other tracts, one three the other four miles from said Depot I wish only to sell two of the above tracts, reserving one for myself, purchasers however having choice of the three.

Price and terms will be reasonable, as I am determined to sell. For any further particulars address me at Amelia Court House Post Office.

jan tf JOHN G. JEFFERSON.

WHAT THE NEW YORK CITY FOLKS SAY OF DR. M'LANE'S CELEBRATED VERMIFUGE.

New York, August 25, 1852.

This is to certify that I am well acquainted with a man fifty years of age, for many years a resident of this city, who has been at times extremely ill, but could not tell from what cause, unless it was worms. His son then mentioned Dr. M'Lane's Vermifuge, and asked him if he would take it; his reply was—I must take something to get relief, or die.

They at once procured a bottle of Dr. M'Lane's Celebrated Vermifuge, and took one half at one dose, the result was he passed upwards of three quarts of worms, cut up in every form. He got well immediately, and is now enjoying most excellent health; and like the good Samaritan of old, is endeavoring to relieve his unfortunate neighbors. He makes it his business to hunt up and select all cases similiar to his own that may be given over by the regular physicians, and induce them to try Dr. M'Lane's Vermifuge. So far he has induced more than twenty persons to to take the Vermifuge, and in every case with the most happy results He is well satisfied that Dr. M'Lane's Vermifuge is far superior to any other known remedy and that more generally known would not fail to save many valuable lives. For further particulars inquire of Mrs. Hardie, 121½ Cannon street, New York City.

P. S. The above valuable remedy, also Dr. M'Lane's celebrated Liver Pills, can now be had at all respectable Drug Stores in the United States

Purchasers will please be careful to ask for, and take none but DR. M'LANE'S VERMIFUGE. All others in comparison are worthless. jan

TO FARMERS AND GARDENERS.

Your attention is called to the Manures manufactured by the Lodi Manufacturing Co. from the contents of the sinks and privates in New York City, and free from offensive odor, called

POUDRETTE AND TAFEU.

Poudrette is composed of two-thirds night soil and one third decomposed vegetable fibre. Tafeu is composed of three-fourth night soil and one-fourth No. 1 Peruvian Guano.

These manures are cheaper and better adapted for raising Corn, Garden Vegetables and Grass, than any other in market. Can be put in contact with the seed without injury, and causes Corn and seeds to come up sooner, ripen two weeks earlier, and yield one third more than other manures, and is a sure preventative of the cut worm.

Two bbls of Poudrette or 100 bbls. Tafeu, will manure an acre of Corn in the hill. Tafeu 1 3.4 cents per lb. Poudrette $2 00 per bbl. or $1 50 for any quantity over 7 bbls., delivered on board vessel or railroad free from any charge for package or cartage. A pamphlet containing every information sent, post paid, to any one sending their address to

THE LODI MANUFACTURING CO.

3t 60 Courtlandt-st., New York

WESTMORELAND LVND FOR SALE.

Five hundred acres of good level land, two thirds under Cultivation, with a good two story dwelling house, a kitchen, good barn, stable and carriage house, all new, and all other necessary out houses, in a good neighbourhood, and convenient to churches, mills and Post Office.

Address G. H. NORTHAM.

Nominy Grove, Westmoreland, Va. fe 2t