

THE SOUTHERN PLANTER

DEVOTED TO

AGRICULTURE, HORTICULTURE, LIVE STOCK AND THE HOUSEHOLD.

T. W. ORMOND, - - - - -	PROPRIETOR.
W. C. KNIGHT, - - - - -	EDITOR.
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43d Year. NOVEMBER, 1882. No 16.

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—THE—
SOUTHERN PLANTER.

DEVOTED TO

Agriculture, Horticulture, Live Stock and the Household.

Agriculture is the nursing mother of the Arts.—XENOPHON.
Tillage and pasturage are the two breasts of the State.—SULLY.

T. W. ORMOND,	-	-	-	-	-	-	-	-	PROPRIETOR.
W. C. KNIGHT,	-	-	-	-	-	-	-	-	EDITOR.

43RD YEAR. RICHMOND, NOVEMBER, 1882. No. 16.

FARMERS AND FARMING IN VIRGINIA IN THE OLDEN TIME

No. 4.

[Letter from Dr. Arthur Lee to Richard Henry Lee, written from Glasgow, Scotland ; also letter from John Howard to Dr. Wm. Cabell ; and a letter from Landon Carter to R. Henry Lee. All these letters are in the original manuscript and never before published.]

GLASGOW, October 21, 1761.

My Dear Brother,—In pursuance of my husbandry scheme, I am now in Glasgow. I find *the drill plow*, as used for sowing *wheat*, will not answer your purpose, but I have conceived one which I think may be applicable to *your grain*, as this is to wheat. I communicated the plan to the mechanical gentleman with whom I live, and received his approbation, but shall put it in practice before I trouble you any further with it, for I am sensible that ideal machines are worked with much more ease than real ones.

I spent all yesterday with Mr. Smyth, “author of the Moral Sentiments,” who is a very agreeable companion, and am this day to go with him to the farmer I mentioned in a former letter, who has pursued the new husbandry with such success. This town is by far superior to any in Scotland—in regularity, beauty and magnificence. The inhabitants are mostly traders in tobacco, and are said to import one-third of the whole produce of

America. Their strict attention to business has rendered them an uncivil, unsociable people and utterly strangers to politeness, so that the gentlemen of the college are the only conversable people in town.

The river Clyde runs smoothly by the town, and is navigable for small craft. They have many manufactories, which they carry on with success.

I saw the shattered ruins of a palace which was once the residence of the Archbishop of Glasgow, and near it stands an old cathedral of vast magnitude.

The College has lately built a fine astronomical observatory, which is well furnished with the necessary instruments by the best makers.

I have been really unfortunate in not finding the farming gentleman at home. I had only an opportunity of viewing his grounds and examining the instruments with which he tills them. I was satisfied of the truth of what I had heard—that he had drawn ten yearly crops from the same field, cultivated agreeable to the principles of the new husbandry, without the least assistance from manure of any kind, and that every succeeding crop had excelled its predecessor. I saw the same field bearing its eleventh crop, and, from one acre of this, the last year, received fifty-six bushels of wheat. From this day's observation and intelligence, I am convinced (of which, indeed, I wanted no conviction) that the new husbandry is the most rational and profitable method. In a former letter I mentioned my opinion, that plowing between the rows of your tobacco would be of infinite advantage to it, but I did not observe that this was the most effectual means of destroying the weeds; but this must be the consequence of many years' culture, which will almost utterly eradicate and destroy them; but at first they flourish with much more strength and vigor, so that the only method of succeeding is to persevere in it for some years.

I have had a strong proof of the unsociable disposition of the inhabitants here, for though I made a point of getting acquainted with some of the merchants, so as to settle some sure method of correspondence with you, I have not been able to accomplish it, so that we must still continue the same uncertain manner of corresponding. I would only beg you to write always by the Glasgow ships, as by others the letters are long before they reach me, and are then burdened with intolerable charges.

The pacific disposition of the new Ministry is so much con-

fided in, that the stocks have rose considerably since their appointment, in expectation of an immediate peace. Mr. Pitts' acceptance of a pension has given a mortal stab to his reputation. It pleases his enemies to have such a fair opportunity of aspersing his character with the most severe reflections, whilst his friends are dejected and see with sorrow their high expectations of his integrity and disinterested patriot spirit utterly deceived.

Forget not to remember me to all with you, and believe me to be, as I really am, my dear brother,

Most affectionately yours,

ARTHUR LEE.

BOTETOURT, Thursday, June 6th, 1771.

Sir,—[I received last night by my fellow Cato's accounts of the dismal destruction made on James river by the late fresh, in which I share very deeply, as I understand all my crop of tobacco that was growing is ruined, as well as all that was in the tobacco-houses—about six hogsheads, together with all my tobacco-houses, except one, are swept away, and thirteen hogsheads that were sent to the warehouse, or Westham, I suppose are gone, as I hear the water was over both places. My corn-house, with the corn, swept away, and some of my stock, and it is owing to the great goodness of God that my people are all alive] This misfortune I shall feel heavily, unless it should please God to incline my few creditors to have patience with me till I can rub through it. I intend coming down next week, by John Rains, to your house, whom I have been with sometime ago, and was encouraged to think he would be over at your house before now, at least to pay up the interest of his bond, as by his letter that I send you herewith, you will see, but I fear he has not been over and paid it, and when I come to your house, I know not with what face I shall appear, as I understand, by your letter to me, that you want what is due on my bond, also both principal and interest. [I sincerely commiserate my fellow-sufferers on James river, and especially Col. Joseph Cabell, whose damage I have more particularly been informed of. The flood in these parts did great damage; nearly proportionable to the size of the water-courses. Though I fortunately escaped any great damage here, about a fourth part of my fences were moved, seven or nine panels of my garden washed up and moved, but my ground is not very much washed.

My corn I have replanted, and it is coming up very well; and though it is late, I hope will come. My damage here will be chiefly repaired in three or four days more, except my crop of corn, &c., being put something backward. I should be glad if I, and other people too, could say the same with regard to our plantations on James river and several other rivers.]

I am, sir, your obedient, humble servant,

JOHN HOWARD.

Dear Sir,—My friend, Col. F. Lee, having informed me that you were acquainted with the whole process of making sugar, molasses and spirits from corn-stalks, particularly the process in the Eastern country and elsewhere, which he said that you would communicate when you called on me. He still continues to disappoint me of the promised process. I still desire to get the favor of that communication at least. If it is a written process, I engage to transcribe it and send it back just when you please. If it is not, may I ask the favor of your communicating it to me as particularly as you can, being intent, if I do recover, to leave in my family the completion of that hint I long ago gave the world in Purdie's paper. And as I have a desire to take (perhaps) the final respectful leave of my friends to the Northward, should I be well enough to do it, I should be glad to know when you move that way.

My best wishes ever attend you and yours, being candidly,
dear sir,

Yours, respectful and most obedient,

LANDON CARTER.

S. Hale, February 5, 1778.

I would ask what news, but I do suppose without some agreeable manœuvre we shall not hear any.

HOME ADORNMENT.—Nature is active in adorning her dominions; and man, to whom this beauty is addressed, should feel and obey the lesson. Let him, too, be industrious in adorning his domain—in making his home, the dwelling of his wife and children, not only convenient and comfortable, but pleasant. Let him, as far as circumstances will permit, be industrious in surrounding it with pleasant objects; in decorating it, within and without, with things that tend to make it agreeable and attractive. Let industry make home the abode of neatness and order—a place which brings satisfaction to every inmate, and which in absence draws back the heart by the fond associations of content.

THE WHEAT CROP AGAIN—SORGHUM.

[For the Southern Planter.]

As the editor says in his comments on my last article (in the September number), this discussion is an important one, and must result in good to the farmer who should know, if possible, what crops are best for him to raise.

As I have said, the fact stands out in bold relief, that the farmers, after a hundred years' experience in the culture of wheat, are raising an average of $8\frac{1}{2}$ bushels to the acre. Col. Knight says this is the result of bad culture, which seems to be increasing at a fearful rate, as he says that twenty-five years ago the yield was 50 per cent. larger than now. While not telling us what proper cultivation of wheat is, he expresses the opinion that one-half the present area would, with *proper culture*, produce a *greater* yield than the whole area now cultivated. Does he mean proper plowing and dragging, or the use of fertilizers and other manures? If the former, this could scarcely produce so great a difference. Mr. Ed. Ruffin, who raised excellent crops of wheat, is said to have put it in in a very rough manner, preferring a rough surface when the seeding was finished, believing the clods were a protection from cold. If he refers to fertilizers, no farmer can produce enough manure on his farm to go over but a small portion of his crop, and if commercial fertilizers are used, it is almost certain that they have not paid on wheat. In more than one instance we have known the wheat crop not to sell for more than enough, or enough, to pay for the fertilizer. This is due frequently to the great uncertainty of this crop under the most favorable circumstances, a point which the editor does not seem to appreciate. Now, we believe that the low production of wheat in Virginia, and the great falling off of the crop, is due principally to exhaustion of the lands, and especially to the removal of the phosphate lime, due to constant cropping. We have noticed this circumstance in connection with the Genessee country of New York, where, under the same cultivation, undisturbed by the war (to which the editor refers as a cause of the falling off of the crop in Virginia), the production of wheat fell off more than one-half—a trouble which has been remedied by the use of phosphate lime. We did not say there was no profit in wheat at $8\frac{1}{2}$ bushels to the acre, but that the profit was so small and insufficient towards supporting the necessary expenses of the farmer and family, that the farmers could not afford to raise it, except on the rivers and on the regular wheat lands.

The editor says in one place that the wheat crop of Virginia brings to

the *country* ten millions of dollars. That may be so, but what portion of that is Virginia's share? In another place he says that amount is added to the wealth of *Virginia*. But he forgets that a large portion of this goes out for machinery, mules, fertilizers, and frequently for Western corn.

The editor objects to sorghum as being a *gross feeder*. That is true, but is one of the great advantages of the plant. We want plants that will send their roots deep into the soil, and bring from thence mineral fertilizers that have been laying dormant for years for want of deep cultivation. While corn is firing up and twisting, sorghum is green and flourishing, scarce heeding the drouths. We were struck the other day with a proof of the deep hold sorghum gets on the land. A solitary stalk (not yet in tassel) had come up in the midst of my strawberries. I said to a hand who was weeding the strawberries, "Pat, can you pull up that stalk?" Not believing he could, for I had tried the experiment before. He replied, "Oh! yes, sir," and went to work. After repeated tugging, though a strong, young fellow, he had to give it up. But there can be no great exhaustion from sorghum. The roots, the seed, the fodder (after feeding) and the stalks are all returned to the land. Nothing is carried away but the syrup, which has no manurial value. Beside, the heavy shading which it gives the land is a benefit to it, and tends to prevent exhaustion.

THOS. POLLARD.

ON THE FARMERS' SIDE.—Speaking of the statement made by Hiram Sibley & Co., the great Rochester and Chicago seedsmen, and the largest seed growers in the world, to the Tariff Commission, the *Detroit Free Press* says, editorially: "It was one of those clear, compact, comprehensible utterances which are worth reams of elaborate discussion. When they declared against taxing 7,000,000 seed users for the benefit of 100 seed growers, they turned a perfect flood of electric light upon the iniquity of the tariff. We commend this pithy presentation of the case to the farmers who belong to the hundred thousands whom the tariff taxes for the benefit of the hundreds. The *Free Press* is in a position to sympathize with the farmers in this matter, having been taxed at the rate of \$15,000 a year for the sole benefit of four wood-pulp monopolists, upon whom a Protectionist Congress conferred the right to levy that tax."

IT IS GOOD for us to think no grace or blessing truly ours until we are aware that God has blessed some one else with it through us.—*Phillips Brooks*.

DOCTOR POLLARD ON WHEAT AS AN UNCERTAIN CROP.

[For the Southern Planter.]

I am sorry to be obliged to differ with my friend, Dr. Pollard, whose services in our noble calling have been so marked and so favorable; yet my experience with the wheat crop does not justify the Doctor's conclusion.

On the first of March, 1874, I purchased the growing wheat crop on my place for \$122. I reaped about sixty bushels of poor wheat—full of smut. The land on which this crop grew was, considerable of it, included in the field from which I (this year) reaped such a magnificent yield. I name this fact to show that the land was not only capable of improvement, but has been improved. Since that time I have sowed (each year) all the land I could improve for wheat, and generally some other. My improved land has always given me satisfactory results; perhaps never less than twenty bushels per acre, with the exception of two years, one of which was the crop sowed in the fall of 1878, which was mostly destroyed by the fly. The other was seeded in the fall of 1880, and promised, up to 4 o'clock P. M., June 3rd, 1881, magnificently; indeed, its promise was equal to the crop I made this year, but in twenty minutes it was entirely and utterly destroyed by hail.

I reason from these facts, that the wheat crop is reliable on good land; more so than tobacco, and I think oats also.

Indeed, it is generally understood and reckoned upon, that even if a tobacco crop fails, there is a pretty general certainty that the following wheat crop will pay for the fertilizer used for the tobacco and also yield a profit. All my neighbors consider this the general outcome, and I certainly would not overreach the truth if I say that well-prepared tobacco land, properly worked and fertilized, seldom fails to yield twenty bushels of wheat per acre. I learn that Mr. R. Bridgeforth has averaged this ever since the war. I am told Mr. Morgan's average yield was twenty-five bushels per acre, and he once threshed forty six bushels off a measured acre. I have several times heard of forty bushels per acre; frequently of thirty bushels and upwards. I know that the late J. G. Jefferson, Esq., preferred, during the latter years of his life, to make his wheat crop his principal money crop in preference to tobacco, and that he generally made good average yields. Mr. Jos. B. Dunn's place has the reputation of having been accustomed to make 5,000 bushels of wheat annually. I might quote the yields of Mr. Wingo, Mr. Crowder, Mr. Wallace, and many other gentlemen from every section of the county, but your space forbids. These will suffice to establish for Amelia a reputation as a wheat-growing county.

In relation to the comparative merits of wheat and oats as profitable crops, practically, the oat crop is annually more unreliable than the wheat crop as managed generally. Whether it need be so, is another question; but in practice it is so, and every year there is a much larger proportion of the oat crop an utter failure than there is of the wheat crop.

I know full well, that when winter oats are seeded properly in August or early in September, they are a pretty sure crop, but no more sure than wheat when all the conditions of success are fully met in the preparation of the land, manner of manuring and seeding, as well as the time of seeding.

Most of the contingencies of cropping are the results of improper or bad management, not in the land or crop. *The mere change of crop is no remedy.* The remedy consists in the intelligent, skillful and thorough management of all the processes and conditions of cropping. We must educate each other, observe closely all the phenomena that are developed in our processes, communicate freely all ascertained facts, and test thoroughly every process that promises success. If we couple these with the industry that characterizes the successful merchant in a given number of years, say a decade, our success will average that of the average merchant, whose capital and industry equals ours.

I hope that a re-survey of the premises will induce our Ex-Commissioner to change his mind as to the capacity of our county lands to produce wheat.

I fully justify his caution against sowing wheat on thin land. Still I must claim that the wheat crop, properly handled, is as certain as any crop we can grow. S.

Amelia county.

INCREASED PURCHASING POWER OF FARM PRODUCTS.—A contemporary says: "In 1816 one bushel of corn would buy one pound of nails. In 1882 one bushel of corn would buy fifteen pounds of nails. In 1816 it took from twenty to eighty dozen of eggs to buy one bushel of salt. In 1882 one dozen eggs would do the same thing. In 1816 it required sixty-four bushels of barley to buy one yard of broad-cloth. In 1882 five bushels of barley would do the business. In 1816 it required one bushel of wheat to purchase one yard of calico. In 1882 one bushel of wheat would buy thirty-five yards of a better article. In 1816 a pair of woolen blankets cost as much as a cow. In 1882 a cow would buy from six to twenty pairs of blankets superior in every way."—*Industrial South.*

TALKS ON THE FARM, BY F. GUY.

[For the Southern Planter.]

Wheat, etc.—The wheat crop with us was very good; better than I expected. On twenty acres of the land in wheat I have never put a shovel full of barn-yard manure or any commercial manure (unless you call lime a fertilizer). Eight years ago this fall, I put from seventy-five to one hundred bushels of shell lime per acre on it and sowed the field in winter oats and made a fair crop for the land. Fallowed it again the next fall and put it back in winter oats, and of all the wild onion crops I ever saw it was the heaviest. I was so disgusted with it, that as soon as the oats ripened I plowed all back in the land and sowed at once in peas, fallowed in peas in the fall and let it lie until spring, and sowed in oats two years in succession to try and kill out the onions, then in winter oats again. About five or six acres of it being hillside, and very poor and gullied, I let this part rest for two years, and covered the worst spots in old wheat-straw and chaff or any half-rotten straw or litter of the kind I could spare. After two years' rest it began to grow quite a good cover of vegetation, so that fall I fallowed this part and sowed in peas the next spring. The balance of the twenty acres were in either spring or winter oats every year. That year, as soon as I could get off the oats, I sowed that part also in peas, and fallowed all last fall, and sowed one and one-half bushels of amber wheat, and, to my surprise, made twenty-two bushels of wheat per acre. I sowed clover on it last February and made a good stand. I did not expect over fifteen bushels per acre, and am confident it would not make over five barrels of corn per acre. It did as well as an adjoining field of twenty acres that was heavily manured four years ago and rested last year, nothing being taken off, and fallowed last summer a year ago. So much for green fallows and lime. I drilled in on this last lot one and one-half bushels amber wheat per acre. The drilling this time did no better than broadcast sowing, yet I prefer drilling.

Last fall Dr. Thos. Pollard gave me fourteen quarts of Bennett wheat, a bearded variety of light amber and small berry. I sowed it myself the 28th of October broadcast on a little over an half acre of land only moderately good, that was manured not heavily three years ago, and has had a crop of corn on it every year up to the seeding of the wheat last fall. When threshed it yielded me sixteen bushels of wheat, equal to about thirty-four bushels per acre. The heads were very long, large and blunt, and very well filled. That would seem a good argument for thin seeding, yet I can't get my consent to agree to seeding less than one and one-half bushels of any large berry wheat per acre. I

tried seeding one bushel for two years. The first year I made twenty bushels per acre, and the second only twelve, so I am done with thin seeding. I notice that Prof. McBride, of Tennessee, tried careful experiments for two years, and he advises one and one-half bushels. The editor of the *Rural New Yorker*, after careful experiment for two or more years, advises from one and one-fourth to one and one-half bushels, and so I think, though I may be wrong.

Oats.—I am truly sorry that I cannot give my brother farmers any accurate information on my experiment of thick seeding of winter oats. I sowed last fall sixteen bushels of Rust Proof oats on four acres; they were from three and one-half to four feet high, and very heavy, but I was so pushed for room to stow hay, that I had to mix them in a barn with other oats, and thus lost the key to my experiment. I have threshed some of them and they weigh from thirty-three to thirty-five pounds per bushel right from the separator, before they are refanned. I am satisfied that four bushels is not too much for such land, and I never sow less than two on any land fit to seed in oats.

I sowed the Russian white oats in March on rich land, two bushels per acre, and made about forty bushels per acre only weighing twenty-eight pounds to the bushel. I am confident the Rust Proof yielded over fifty bushels per acre. I have tried them for six years, and they are better every year, and are to-day the best winter and spring oat in this country, but should not be sown until the middle of September, as they are apt to point if the fall is mild when sown early. We should get seed oats South and never North.

THE FERTILIZER TAG QUESTION.

Resolutions Endorsing the Commissioner of Agriculture—Action of Clinton Grange, No. 220.

At a meeting of Clinton Grange, No. 220, held the 2nd of September, the fertilizer tag question was introduced and discussed. Nearly all the speakers endorsed the Commissioner of Agriculture in his rules and regulations. After several speeches on the subject, the following preamble and resolutions, introduced by T. William Diggs, were passed with *one* vote in the negative:

WHEREAS, We have every right to believe that the Department of Agriculture for the State of Virginia was established for the protection and benefit of the farmers and honest manufacturers of fertilizers, especially in regard to the sale of fertilizers in the State; and whereas the necessity of State supervision of the sale of fertilizers is a matter of the

most vital importance to protect farmers from the sale of worthless articles, and raise the standard of fertilizers offered for sale in the State; and whereas the late General Assembly failed to pass the law demanded by the farmers, which would have been a fair and just law to all parties, and which by its operation in other States has increased the commercial value of fertilizers, while the selling price to farmers has been reduced; and whereas the Commissioner of Agriculture is now forced to execute the law enacted by the Legislature in 1876-7, under which law the Commissioner has full power to adopt such rules and regulations as he may deem proper to carry out the intents and purposes of the law; and whereas we, the purchasers and consumers of the fertilizers, and from whom the manufacturers must get their profits, believe the rules and regulations as adopted by the Commissioner are just and proper, and if carried out will insure pure and unadulterated fertilizers at less cost to the farmers; and whereas certain fertilizer manufacturers and agents are doing all in their power to prevent the Commissioner from carrying out these rules and regulations; therefore be it

Resolved, 1. That we look with disfavor and suspicion upon all parties who are using their influence and means to virtually break up the Agricultural Department of the State.

Resolved, 2. That we, the consumers, will not buy any fertilizers from any persons unless there be appended to the packages the tags prepared by the Commissioner of Agriculture, showing that the rules and regulations of the department have been complied with.

Resolved, 3. That we earnestly request the Commissioner of Agriculture to use his power and influence to raise the standard of fertilizers sold in the State, and, if possible, make some arrangements by which granges, agricultural clubs and farmers' associations may deal direct with the manufacturers of fertilizers on a cash basis.

Resolved, 4. That we call upon the Patrons of Husbandry and our fellow farmers throughout this State to join with us in our determination to uphold and sustain the Commissioner in the efforts he is making to protect our rights and advance our interests. To this end we strongly urge upon our fellow farmers the importance and necessity of forming themselves into *organizations*, that they may be in position to reap the benefits that will surely follow when the department is fully established.

Resolved, 5. That a copy of these resolutions be sent to the *Virginia Granger*, *Richmond Dispatch*, *Richmond Whig* and *Southern Planter*, with request to publish.

T. W. M. DIGGS, *Secretary*.

D. H. BROWN, *Master*.

[The foregoing communication was received after our issue for October had gone to press. We, however, cheerfully give it a place in our present issue. We are ignorant of all the principles involved in the *tag question*, and how they affect the farmer as well as the manufacturer. We cannot, therefore, say much on the subject. That the Commissioner of Agriculture has the legal right, and indeed ought, to affix a tag, or brand, on all fertilizers inspected and licensed by him, there can be no doubt or dispute. The only open question is, how far the *price* of the *tag or brand* is in excess of its real cost and value. This cost in itself may be too small to add to the price of a bag or ton of fertilizer to a farmer, but in the aggregate may amount to a great deal to the manufacturer.—ED. S. P.]

FARMING IN NEW ENGLAND.

Editor Massachusetts Ploughman :

Permit me to ask you a few questions relative to the prospects of a young man thinking of farming in New England :

First, Can one without capital or experience make money at it, or even get a fair living?

Second, If so, how shall he begin?

Third, If he cannot get a living without capital, what is the smallest amount which would make it probable?

Fourth, Which is the most profitable, stock farming, horse-breeding, vegetable or general farming?

Will you add what further advice, either in encouragement or discouragement, you may deem useful to give to an unmarried young man, desiring to act wisely in this matter? And oblige,

INQUIRER.

Questions similar to the above come in so often that it is evident there is a growing interest among the young men, in favor of farming, and a desire to engage in the business, providing it can be made to pay; so the question as to profits is continually being asked, but cannot be answered in a single paragraph, because of the fact, that success in any business depends more on the man than on the business. Some men will succeed in almost any business, while others may engage in the most profitable business, and not pay their expenses.

If a man possess an average intelligence, is industrious and not wasteful, he will be very sure to succeed in farming, providing he takes an interest in the business and makes the proper efforts to inform himself as to the best methods of growing the particular crops he desires to raise.

We do not think of any business that would promise very good returns without capital, or some knowledge of the business. As farming is a business that prospers by intelligence, quite as well as any other, it would not be wise for any one to attempt to follow it until he has become practically acquainted with the use of farm implements, and understands the principles of plant growth.

The young man who desires to become a farmer, and has neither capital or a knowledge of the business, should hire himself out to some intelligent farmer who has made the business a success; and he should work so diligently, and make himself so useful, as to get the good will of the farmer, who will thus become interested in his welfare and gladly give him such information as to the best soils and crops, and the best fertilizers and methods of cultivation, as will be

needed when he has a farm of his own. While a business education is thus being acquired, if proper economy be used money may be laid up, so that in a few years he will have enough to purchase a small farm; thus accomplishing two very important things at the same time, and he will also probably have decided what particular branch of farming is most agreeable to him. If it should be the production of milk, fruits or vegetables, he must locate near a city or manufacturing town, where he can secure a good market for his produce.

The amount of capital required must depend somewhat on the price of land where the location is desired, and also on the energy of the man.

He who commences in any business with a small capital, must expect at first his gains will be small, but we believe he had better commence with a very small capital of his own than a large capital that is borrowed.

A young man who desires to become a farmer can invest his first hundred dollars by purchasing ten acres of land, and still keep at work for wages until he has saved money enough to purchase manure to fertilize two or three acres, and enough to pay for plowing and the seed required. He can work on his own land a portion of the time, but still work for others enough to pay expenses until his crops are grown. Thus one can commence on a very small capital, without much risk.

As a rule, it is better to buy only what is wanted for cultivation. Cultivate it well, and its value is very sure to increase. Much more so than if purchased and permitted to lay a barren waste.

In conclusion, we would advise—

First, Make yourself acquainted with the business you are to follow, and be sure you like it.

Second, Begin small and on your own capital, and increase your business only as your capital increases.

Third, Strive to produce the best varieties of everything that is grown, and prepare them for the market in the best manner.

Fourth, Do just as you agree. When you promise an article at any particular time, be prompt, and deliver it as soon or before the time expires.

Fifth, Be diligent, be liberal, be just, and thus build up a character that will secure to you, in your declining years, the respect of all and the title of an honest man.—ED.

[This advice is good for any section of the country.—ED. S. P.]

**A THRIFTLESS FARMER,
Who Comes to Town to Buy What he Should Bring to Town to Sell.**

“How do you sell bacon?”

“Fourteen cents!”

He looked long and anxiously into space, as if ruminating upon the hungry children at home and the wan and work-worn wife. Again he ventured:

“How’s corn?”

“A dollar ten!”

And again the look of anxious thought overspread his face. A farmer without meat, without corn, with his patch of cotton mortgaged to the guano man, three mangy fise dogs at home, five children almost nude, a wife wearing a three-year-old four-cent calico, he was indeed a picture to behold. Throwing out an ancient-looking sack, he mumbled;

“Half a bushel.” •

The half bushel was filled and payment was made in dirty, greasy nickels, and the man with his smoke-house in the West drove off. He wore a suit of clothes, the material of which was furnished by an Ohio ram, his half-starved mule was imported from Kentucky, his flimsy wagon was from Indiana, his hat was from Massachusetts, his brogans were from Lynn, his harness was from Cincinnati, his corn was from St. Louis, his meat—was from nowhere, because he did not have the money to buy it. What was there about him that savored of Georgia? Nothing! For he had fed so long on Western sustenance, all there ever had been of Georgia in him was starved out, and all there now was of him was Missourian!

Poor Georgia farmer! And how little it would take to convert this pitiable object into a high-spirited, self-sustaining citizen. Appeal to Georgia soil for your corn, feed it to your Georgia hogs, cultivate your opportunities, avoid cotton, and you will master the situation.—*Atlanta Constitution*.

THE United States produce thirty per cent. of the grain and thirty per cent of the meat of the world.

IN the construction of railroads at present going on in Texas, 20,000 men and 100,000 horses and mules are employed. About 2,000 miles of road are under contract.

DISTANCE APART OF POTATO HILLS AND ROWS.

A New England potato-raiser of note writes to the *Springfield Republican* his advice and experience: "The shortness and scarcity of our last season's crop have taught us some lessons in regard to it, that it is well to heed. It has shown that foreign potatoes can be put upon our market and sold from sixty to eighty cents a bushel and at a profit. This shows that we must learn how to produce our crop for less than fifty cents a bushel. The yield per acre can be very much increased by proper planting, cultivation and cleanliness. Weeds and a large yield of potatoes rarely grow together. Distance between rows and hills very materially affects the yield per acre. With rows and hills three and one-half feet apart each way, there will be 3,555 hills per acre, and allowing forty hills to the bushel, the yield would be eighty-eight and three-fourth bushels. Reduce the distance to three feet each way and we get 4,440 hills, and allowing the same number of hills to the bushel, it would give 121 bushels per acre. Reduce this still further, and grow them three feet between rows and hills two feet apart, and each acre will have 7,260 hills, and at the same ratio will give 181½ bushels per acre. Again, let the rows remain the same distance, and put the hills only one foot apart, and 14,520 hills will give a yield of 363 bushels per acre, allowing the same number of hills per bushel. Now, different varieties require different distances, and I would recommend that all small-top varieties be planted still closer than three by one foot. On clear and clean land this crop will grow with rows only thirty-three inches apart, or six rows to each rod in width. At this distance, with the hills one foot apart, the acre will have 15,840 hills, and the yield (still allowing forty hills to the bushel) would be 400 bushels per acre. Thus distance between rows and hills affects the yield.—*Rural New Yorker*.

ON LISTENING TO EVIL REPORTS.—The longer I live the more I feel the importance of adhering to the rules I have laid down for myself in relation to such matters:

1. To hear as little as possible to the prejudice of others.
2. To believe nothing of the kind till I am absolutely forced to it.
3. Never to drink into the spirit of one who circulates an ill report.
4. Always to moderate, as far as I can, the unkindness which is expressed toward others.
5. Always to believe that, if the other side were heard, a very different account would be given of the matter.—*Carus "Life of Simeon."*

A WORD FOR COMMON COWS.

The unstinted use of printer's ink in connection with the introduction of Jerseys and Holsteins into this country, posting in every corner of the country the performances of a score only at best, of the "pick" of these herds, throwing absolutely into the "shade" any record the farmer with his home-bred cows ever dared to publish to the world, has caused the farmer to actually think that his cows are of no account, and that he is being nearly impoverished every day by keeping them.

To call these records in question is not our purpose. They are not improbable performances, and there is not a dairy of native cows in this country but from which one cow could be taken, and if fed as these noted cows are, and their performances made the subject of accurate record, wonder would creep over the faces of their owners, and money slip into their pockets. The dairy reputation of this country has been built upon the offerings of these native cows, and that the dairy industry of the country has surpassed that of any other special industry, is an assurance that if a radical change was made in the care and belongings, including the breeding of our native cows, a vast increase in production would follow.

The truth is, the common cow of America is a much more valuable animal than she is credited with being. She is hardy, vigorous, and thoroughly acclimated, and the proportion of good common cows is fully as great as those existing among advertised herds. No class or "family" of thoroughbreds can show a uniform line of great milkers, and investigation will show that where a "family" is "lined" from an Alpha, or Pansy, or some none the less famous cow, the descendants, not one time in one hundred, ever approach the original type of excellence.

The great fault in the past has been that too much has been required of the native cow. We have demanded of her that she carry and transmit to her offspring, not only milking qualities, but form, health and all the virtues supposed to belong to cows, expecting her to "breed after herself," when for a sire anything that could walk has been adopted; and with all this, including an unending hay and grass diet, the idea of feeding for profit being quite modern, the American cow has held her own, and the dairy districts of this country have taken western flight until the Rocky Mountains now forms the western pasture fence of our National dairy farm. True it is, that there has been accidental infusions of well-bred blood among our dairy herds, and that this has improved them there can be but little doubt, but it does not

prove that a change from the one to the other, would, upon the whole, benefit us. The probabilities that with our common cow, with an occasional out-cross to infuse new and vigorous blood, the best results will be obtained.

In our thoroughbred stock there is a tendency to barrenness, tuberculosis and other diseases, with symptoms of impaired vitality that entail loss, unknown among our common cows. Is not the demand of the times, especially in our great dairy districts, for an improved common cow, rather than for a thoroughbred?—*John F. George, in Practical Farmer.*

TO THE AGRICULTURISTS, STOCKMEN, MANUFACTURERS, MERCHANTS AND CITIZENS OF VIRGINIA.

Gentlemen,—It is impossible that every one whom we would like to approach in regard to making a display at the State Fair, commencing November 1st, can be interviewed individually, therefore I take this means of asking you to give the matter earnest attention. Unusual efforts are being put forth to make the Fair an eminent success, and we have great assurance that such will be the result. We are doing all in our power for the accommodation of exhibitors and visitors and for the protection of articles placed on exhibition. We sincerely hope that you will do your full part, even though at some sacrifice, to aid in accomplishing the end so vital to the welfare of the Society and to the interests of the whole State. We earnestly request, therefore, that you all endeavor to have on exhibition something that will add to the attractiveness and interest of the approaching State Fair. The officers of the Society would be glad to consult with any one who proposes to make an exhibit, that any special accommodation desired may, if practicable, be tendered. It is desired that all parties should notify the Secretary as early as possible of their intention and the nature of exhibit proposed. The entry books are now open.

Richmond, 4 October, 1882.

WMS. C. WICKHAM, *President.*

[Our present issue, in due course of publication, will reach its readers a few days before the Fair; and on the principle that it is never too late to do good, we present the foregoing address from President Wickham. The appeal it makes is brief and to the point. If not already heeded through its publication in the daily and weekly papers, we may, in the eleventh hour, awaken a few slumberers.

We have in the past twenty-odd years written and spoken so much about the State Agricultural Society and its Fairs, that our words may go unheeded, but we hope not. As the people learn its important influences on the agricultural interests of the State, nothing which has been said or done can be regarded as misspent labor. The coming Fair, we have reason to hope, will be a new era in the history of the Society. The

entries now made for the exhibition, and the correspondence and arrangements for many others, sustain this hope and belief. The farmers and their families, and all who are interested in the State's welfare, should come and see. Ample and cheap arrangements for their transportation have been made. The capital city will open its doors to all visitors, and put on its *holiday clothes* in the way of its *trades parade, fire-works, etc.* The *military*, including the Lexington cadets, with accoutrements and music, will add to the enjoyments of the occasion.

Come to the Fair for recreation and amusement if you do not expect profit. The first Fair, in 1853, was, in one respect, an important turning point in our agricultural experience. We bought a *pair of Chester pigs* and thus got a good stock of hogs, and our *razor-backs* soon played out, and our neighbors got the benefit also. So, also, as to cattle. The purchase, at an after Fair, of a thoroughbred Devon, improved our own stock and that of the neighborhood. Machinery and improved implements followed, and thus the Fairs do good.

The change of the day of the opening of the Fair from the 25th of October to November 1st, makes it necessary that Rule 56 in the published catalogue should read as follows:

56. Entries can be made by letter to the Secretary, or at his office, *at any time prior to Friday evening, 27 October*, preceding the Fair, *when the books will be closed*, that the Superintendents may know in advance what to expect in their departments; and in order to exhibit everything to the best advantage, it is necessary that all animals and articles be on the ground the evening preceding the day of the Fair, *and no article not in place and ready for exhibition by 9 A. M. on Wednesday, November 1st, will be allowed to compete for a premium.* The halls, stables, pens, &c., will be in order on the morning of the 30th October, and the Superintendents on the ground, to receive all subjects for exhibition.—Ed. So. P.]

EXTRACT from the speech of Hon. Geo. F. Hoar before the New England Agricultural Society, 6th September, 1882:

“History has her permanent lessons, and the most permanent of those lessons is that the character, quality and the prosperity of every people depend in the end and in the course of centuries and generations upon the men who till her fields. Great manufacturing cities, great commercial cities, rise, flourish and decay, but the farmer and the farms survive, and the temper of brain and heart, the quality of muscle and hand and limb which comes from immediate contact with the earth, is the permanent quality which determines the character of every people upon earth. Even in this depressed period the farmers of Massachusetts have no reason to be ashamed. Wherever you go, through Worcester county, or Middlesex county, or Berkshire, or the Cape, you see farm-houses, and you are told that from this house came some great merchant, and from the other house some great manufacturer, and from another house some great railroad builder. The great men in all other occupations are reared and bred in farm-houses. Whatever statistics may show of the products of machinery and of wealth, remember always that man is the machine of all machines, the product of all products, the wealth of all wealth, and in the production of men the farm-houses of Massachusetts were never more successful than they are to-day.”

KNOWLEDGE is the only fountain, both of the love and the principles of human liberty.—*Daniel Webster.*

FARMING IN THE VALLEY.

[For the Southern Planter.]

The Editor's visit to the Valley seems to have been as unfortunate as that of the correspondent of the *Country Gentleman*, who, as Bill Arp said, "came down to the Exposition (in Georgia) on the fly, and went back in a sort of fog;" or else he only took this way of provoking a reply to his questions, by acting upon the suggested advice of the Irishman who told his friends if they wanted a row, "just to tread on the tail of his coat."

I don't know just how the grass looked between Harrisonburg and Rawley Springs in the latter part of August. I do know, that about that time we were suffering from a drought, and the probability is that the grass showed the effect of a want of rain, which probably explains why the only luxuriant grass seen by the Editor was along the borders of the streams; but it seems to me that, as compared with the section which he had just left, at almost any season his eye would have been delighted by the *luxuriant* appearance of everything in the line of vegetation. No gullied hills, but one native blue grass covering every available inch not occupied by crops or cultivated grasses. A very gratifying impression must have been produced by the neat, well-kept fences; by the general clean cultivation, and the evidence everywhere that those occupying the lands in the Valley were thrifty, industrious, pushing farmers, generally ahead of their work; and all this, it seems to me, must have started the inquiry in his mind, How has this been accomplished except by systematic farming?

We generally find that the people living in a country have discovered the methods by which they can best accomplish the results sought. They have found out by experience the best teacher.

I can best answer the questions of the Editor by giving the system of farming adopted in the Valley, subject to some few local differences, which experience has taught those occupying soils slightly different, is best suited to their particular farms. In the first place, the universal method of planting corn upon sod is found best, for the reason that some cultivated crops—like corn—is necessary to free the soil from the native blue grass, and suit it for the production of wheat, oats or barley.

Corn, then, in the Valley is planted upon sod, which, after plowing and harrowing, is laid off—three and a half feet each way—generally fertilized by the application of ashes and plaster, or some home-made manure in the hill. This is thoroughly cultivated, so that when

the corn is cut off in September and shocked, eighteen square, the ground is in excellent order for sowing wheat, without even using a harrow; but running a harrow in front of the drill is always sufficient preparation, and often results in producing better wheat than the fallow. Oats are very uncertain in this section; both varieties have been tried repeatedly. If it is designed to sow oats, a portion of the corn land is left until spring, then flushed and sown, to be fallowed after harvest, along with the rest of the corn land, and seeded down with wheat and grass. Occasionally, when the catch of grass fails, or is inferior, the field may be seeded to wheat the *third* time. I have known fields to be cropped successively in wheat for nine years without any diminution in the yield; and I believe it is conceded by some of the most distinguished agricultural professors, that wheat is not an exhausting crop. Certainly, I have known fields which were brought to a very high state of fertility by this process of successive cropping in wheat with the application of phosphate, and no farm-yard manure applied.

Our farms are generally small—say, from 150 to 200 acres—but the same proposition will hold good, no matter what the size, in the application of this system; and it will be seen that each year there is sown in wheat, which is our main crop, just twice the land planted in corn, one-half of which being the second year, is seeded down to grass, generally timothy in the fall, about one bushel to eight acres, followed by about the same application of clover in the spring. Some prefer to mix clover with the wheat in the proportion desired, and sow both together through the drill in the fall; and in many instances this has given successful results when the application of clover in the spring has failed. Barley is sometimes sown instead of wheat, either upon corn land or fallow, producing good crops, and is thought to be a better crop with which to sow grass seed.

Last year the yield of barley in this section was from fifty to sixty bushels to the acre, upon land which would not have produced over twenty to twenty-five of wheat. Generally, two crops of grass are taken from the land. I wish I had by me the statistical reports of the hay production of this section, that your readers might form some idea of the immense production of *grass*, and the yield of grass-seed, clover and timothy which are sold from Augusta and Rockingham alone. I have, however, already made this article too long; and you will doubtless find that you have trod upon the tail of somebody else's coat, who, as an "*observing farmer*," will enlighten you better than I can as to Valley rotations and systematic farming. One word as to the deterio-

ration of our lands. An experience of twenty years has taught me that the productive capacity of the Valley of Virginia has increased; and I could show you fields, now well set in clover and timothy, from which twenty-five to thirty bushels of wheat have been threshed this season, which produce double to-day what they did twenty years ago, and upon which it was then extremely difficult to secure a stand of grass. Commercial fertilizers have been largely used; but the experience of our best farmers is, that the application of bone—either the raw or the acid phosphate, as it is called (South Carolina rock)—following with a good dressing of plaster upon the clover, is all they need to preserve and improve the fertility of their lands. Farm-yard manures are preserved and applied—the coarser upon the sod to be plowed under for corn, and the finest manure used to top-dress the thinner portions of land sown in wheat.

G. J. P.

[We are glad that our friend "G. J. P." has so promptly come to the defence of the methods of farming in the Valley. If we have trodden on his coat-tail, and that of any other farmer, we hope they will take it in good part, as our object was to elicit facts in reference to the farming practices in the Valley. When we saw so little grass on many beautifully undulating fields, and saw wheat stubble being replowed for wheat, it did not occur to our mind that it was because "the catch of grass" had failed, but rather that it was a part of a system that we deemed bad. We do not agree with our friend, that repeated tillage in wheat, or any other crop, is good farming, but may be justified if a stand of grass is the object. Our friend, and others, must pardon us if we have *stirred up a muss*, for we promised to make the *amende honorable* if it should appear that a proper system of rotation exists. We have always given the Valley credit for its great agricultural capacities, and its farmers for their energy and thrift; but we could not commend the repeated tillage in wheat, of which we saw evidence, and heard prevailed to some extent, and perhaps for other reasons than to secure a "catch of grass."

A TALE OF TWO FARMS.

No one but a farmer's wife can have any but a faint idea of the duties belonging to her position, for the requirements are numberless; the demand upon her time, her skill, her strength and patience, incessant. Her kitchen, where so many hours of the day must of necessity be spent, should be a sunny room and convenient. In too many farm-houses it is the living-room of the family. Here may be seen, on one side, a table covered with utensils for cooking, butter making, and, perhaps, some soiled linen, awaiting alike the cleansing operations so long delayed; underneath it the boots of the farmer and his sons, flanked by the dish in which the dog, the cat, or both, receive the remnants from the table. The sink, partly filled with milk-cans and dishes, is on the other side, and the water-pail is in a ledge beside it. The

stove, red from long use, and unacquainted with polish, is covered with the marks of boiled-over dinners and careless frying, and the ashes are on the hearth. Woods and chips are scattered about the floor. The horn sounds for dinner. The men—heated, hungry—come tramping in to a meal of half-boiled pork and sodden potatoes, with heavy bread, to be washed down with copious drafts of sloppy tea, or perhaps cider. The wife is slipshod, frowsy, and always in a hurry; the children, copies of their mother. And as the influence of woman, in whatever direction it may be exerted, is magical and potent, it is no wonder that about the premises everything partakes of the same general character. The dooryard is cumbered with broken sleds and debilitated cart-wheels. The mowing-machine, which they will need to use next week, stands under the poplar tree by the gate, just where it stood when the farmer loosened his horses from it last year. They cannot find the hoes, or shovels, or rakes, or forks, because they lay rusting under the wall by the pasture, where they were laid last fall until a convenient time for carrying them home. Such farmers tell us that farming does not pay. They have no ambition save for the rest each night brings after the day's toil. Their sons go away as soon as possible, to find a more congenial occupation. Their daughters, if they marry, follow the example of their early life and duplicate its miseries and ugliness.

But another farm has a different atmosphere. The grounds about the house are prettily arranged and carefully attended; climbing vines and roses are about the door, and the back fence is hidden by hollyhocks and the æsthetic sunflower; the farming tools are all in their proper storehouses; the kitchen has all necessary appointments for convenience; the table is heaped up indeed, but with loaves of light, delicious bread, or, perhaps, piles of shining pans just in from the airing. The men come in to their meals quietly, performing their ablutions in the place set apart for them. The dinner table, covered with a snowy cloth, is set in a cool room, and the food, though simple, is abundant, well cooked and appetizing. In the dairy, the rolls of golden butter show that here the wife is also a skilful dairy-woman. At even, the dust of toil is shaken off, the evidence of the daily labor is put out of sight, and they gather in the family room. The farmer and his sons read aloud by turns, or they have a little music—for the daughters play the piano pleasantly, if not well—the blessing of God is asked, and all seek the rest which such preparation makes refreshing. That farmer makes farming pay. His sons may leave the farm—not all of them will—because it is too small for all. His daughters bless other homes, patterns of tidy, quiet, methodical little women they call mother.—*Mrs. E. V. GAGE in Pacific Rural Press.*

HISTORY OF THE POLLED ANGUS.

Mr. J. C. Lyell, of Dundee, Scotland, in a contribution to the second volume of Warder's work on "Angus of Forfarshire," remarks of the cattle in that region as follows: The now celebrated Polled or Hornless cattle of Forfarshire, long familiarly known as Angus Doddies, were probably originally introduced into Scotland from Norway. They were formerly known in the neighborhood of Dundee as Humble Cattle, a name synonymous with that used in Aberdeenshire, where a somewhat similar breed were called Buchan Humilies. The Sueo-Gothic or ancient Swedish word *Hamla*, to mutilate, is evidently the root of these terms, which, when applied to cattle, may literally mean mutilated in appearance by the want of horns. According to Mr. Bernt Patterson, Norwegian Consul at Dundee, Polled cattle are very common in the southern parts of Norway; while in Tronso, within the Arctic Circle, they also exist in considerable numbers, as I have been informed by Mr. John Neish (younger), of the Laws, who was there in 1879. Iceland has also a breed of Polled cattle, noticed by Dr. Uno Von Troil 1772. He says: "They are all well provided with cattle, which are generally without horns;" and again, "their beeves are not large, but very fat and good. It has been reported by some, though without foundation, that there are none of them with horns. It is true, however, that they seldom have any." Mr. Neish, who was in Iceland in the summer of 1881, says that the cattle there still agree with this description.

It is reasonable to suppose that both the Icelandic and Scotch breeds were originally derived from the Norwegian; but on the other hand, it can not be denied that the same natural law of variation that produced hornless cattle in Norway, or when the Norwegian breed originated, could act on any breed. In addition to the Angus and Buchan Polls, now to some extent intermixed in all the best herds, there are two British breeds of Polled cattle—viz., the Galloway, in the south of Scotland, and the Norfolk and Suffolk red Polls. The Galloway had enough resemblance to the Angus breed to have been included with it in the early volumes of the Polled Herd Book; but each has now a herd book of his own. The Norfolk and Suffolk breed is said to have originated chiefly from a mixture of Scotch Polls with the Old Horned breed of cattle of these counties.

The improved Angus cattle had reached such a degree of perfection in 1848, that the judges of the Highland and Agricultural Society's Show, held that year at Edinburgh, expressed the opinion that "the

highly improved portion of this much-famed breed is not surpassed by any other description of cattle, in the equal way in which the fat is mixed and diffused over every part of the animal, or in yielding to the butcher a greater quantity of prime meat, in proportion to the weight of the carcass." In conclusion, I may say that I think it a great mistake to confine them to one color—black. They were formerly of many colors besides, such as black with brown muzzles, and brown-streaked backs, red, yellow and brindled. Long as they have been bred to black, they still throw reds and yellows, which are discarded as unfashionable, while, as every breeder of domestic animals knows, off-colored and mismarked produce is often the best in other respects. Variety of color is pleasing to the eye, and if the ignorant idea that red and yellow Polls show impurity of blood were got rid of, herds mixed in color would soon be common and admired.—*Farmers Review*.

MULBERRY TREES FOR SILK CULTURE.

Editor Southern Planter:

At the present time, much is being said and written in regard to silk culture, and it is well indeed that the subject is agitated in the U. S., for if once developed, it will furnish lucrative employment at the homes of thousands of women and children, and add largely to the material wealth of this land. Perhaps a few practical ideas in regard to the relative value of the different kinds of mulberry, used for silk culture, from one who is engaged in the business will be of interest to some of your many readers. For the Northern states I place at the head the Russian, brought to this country about seven years ago by Russian mennonites. 1st, Because it is perfectly hardy, and will thrive in any soil. 2nd, It is a rapid grower. 3rd, It produces large quantities of leaves which furnish silk of the finest quality. 4th, It produces the best fruit of all the mulberries and the most of it. It can be grown to the height of forty feet, and from three to five feet in diameter, or can be sheared to any size or shape you like. There are eleven varieties of the *Morus Alba* or white mulberry, among them the *Morus Tartarica*, *Morus Multicaulis*, *Morus Moretta*, *Morus Japonica*, English White, and others. The only hardy mulberry among the above named sorts, is the *Morus Tartarica*, from Russia, where it has long been used for silk culture and is one of the favorites. It produces a reddish white fruit of inferior quality. For the south, there is but little difference in the *Morus Alba* varieties. The *Morus Multicaulis* produces the largest

leaves, but the common old English is hard to beat, and is planted largely.

The following table will show the relative value of the leaves for silk.

Eighteen lbs. of multicaulis leaves make.....	1 lb. of silk.
Sixteen " English white make.....	1 " "
Fourteen " Moretta make.....	1 " "
Thirteen " Tartarica make.....	1 " "
" " Alba Rosea make.....	1 " "
Twelve " Japonica make.....	1 " "
Thirteen " Russian make.....	1 " "

Nearly all of the silk producing countries of the Old World have their favorites for silk.

In China and Japan, the Multicaulis is said to be the best, while France clings fondly to *Morus Alba Rosea*. In Italy the *Morus Moretta*, leads all others, while the German thinks the *Morus Nigra* has no equal, even if it does produce silk of a coarse quality. Soil and climate have much to do with the different varieties, but if I were to plant two acres, it matters not in what part of the U. S. one would be Russian, and then if you tire of silk culture, its fine fruit will more than pay for the labor and expense of growing. Never plant the common American or *Morus Rubra*, nor the paper mulberry, and I would not advise planting *Morus Nigra* for silk culture. In Europe and Asia the mulberry is considered the most valuable of all trees, for it produces the most delicious fruit. Its timber is used in the arts and for fuel, the bark and fibre for paper, and its leaves produce the finest of fabrics—silk.

At some future time, I will send you an article on the different kinds of silk worms.

G. J. CARPENTER.

Fairbury, Nebraska.

KEEPING FARM ACCOUNTS.—The real practical value there is in keeping accounts with the farm consists in this: "When a farmer keeps such an account in his operations he is able by annually casting up his balances to see just what crop and what line of his farm operations have paid him best. If any line of cropping in a series of years is thus shown not to be so profitable as some other crop, these definite data enable him to correct his mistakes and determine on some new line of procedure. The most of the business men who fail find on a revision of their transactions, too loosely kept, that in reality they had failed months and sometimes years before the fact was revealed to them.

JERUSALEM ARTICHOKE.

[For the Southern Planter.]

The cultivation of the artichoke is so very like that of the potato as to render general details unnecessary. It appears to be perfectly indifferent to the temperature, whether high or low, drought or excessive rainfall, rich or poor land, high or low land; only in one condition of soil does it refuse to flourish, and that is one on which the water remains stagnant during the winter. When the conditions are favorable, the potato will sometimes yield an equal amount on the same ground; but on a thin, sandy, gravelly soil, the artichoke has an immense advantage. Artichokes in the second or third year, seed themselves in such a way as to admit of no further cultivation. Of course the richer the land the better, and nearer the pens or feeding grounds the better still for the artichoke patch. Plow and harrow as for potatoes, lay off in rows three and a half feet apart. Into the rows drop one piece, cut as potatoes are to two or more eyes, fifteen to eighteen apart in the rows. As soon as the shoots are green, harrow in the direction of the rows, and in the course of the summer run a cultivator through them once or twice. If the work has been done well in each stage, that is all that is necessary to do. If cut as described, from six to seven bushels will seed an acre. If the tubers are planted whole, two or three times more seed will be required. Artichokes do not perfect the growth of the tubers till very late in the season, though they set quite early, and under ordinary circumstances should not be disturbed before the first or second week in November. The artichoke labors under a great disadvantage in storing. If taken from the ground it undergoes a greater shrinkage than any other root. If in the ground during an ordinary northern winter they are exceedingly difficult to secure, though in the spring they may be dug and used as late as the first of May. When the crop is raised for the benefit of the hogs, it is customary to let them do the digging, turning them into the patch for an hour or two at a time. It has been made as an objection that the artichoke has the bad habit of spreading. This may be considered an advantage rather than otherwise, as they dispossess the soil of other plants stock will not eat, while they are fond of artichoke herbage whether green or dried. When they spread into cultivated fields and possess them, the crop will prove as profitable as that of any crop they take the place of.

M.

OLD mother Earth always honors the drafts of her sons of labor.

PREPARATION OF LAND—ROLLING.

First in order for wheat culture, is thorough preparation of the land. This should be done, when fallow is being prepared, as early in the summer as possible. I prefer having my land thoroughly plowed, the sod being uniformly inverted, and at as great a depth as an Oliver Chilled plow (which I prefer) or any other good plow can bury it, provided the subsoil is not brought to the surface. After plowing, which should be done as early in August as possible, I use a heavy roller and an Acme harrow to fill up all interstices, and assist in settling the earth and making it as compact and fine as possible. This thorough compactness and pulverization I regard as the great essential in the preparation of land for wheat. I next apply my barnyard manure, and before grass starts to grow (as I propose keeping my seed-bed free from either grass or weeds) I have a spring-tooth harrow run over the ground, which mixes the manure with the surface earth and destroys the young grass and weeds, and keeps the ground in condition to receive and retain the beneficial atmospheric influences of fertility. After this treatment I can generally dispense with further cultivation until just before seeding wheat, at which time I have the spring-tooth harrow and Thomas' smoothing harrow, and the roller used to put the seed-bed in as fine and solid condition as possible. I prefer preceding my drill with the roller, and immediately after drilling roll again. This latter process I regard very important, although many good farmers think differently. My reason for adopting the plan of rolling after the drill, is that the surface of the seed-bed may be as nearly as possible of the same degree of compactness as that portion of the seed-bed immediately under the freshly deposited grain. My experience with this process is, that I have no winter killing of wheat. My wheat invariably makes such vigorous root growth in compact soil that it is not thrown out of the ground.

On the contrary, if I did not roll after seeding (unless a rain should fall to settle the ground very soon thereafter), the very fine, porous earth loosened up by the hoes of the drill would be the only covering for the wheat, and would necessarily be much more congenial to the young rootlets than the harder and more compact soil immediately under the bottom of the shovel where the grain is deposited. The result of this is, that the surface becomes one mass of roots, and the wheat may look equally as well in the fall as upon the land where the roller has been used; that is, provided the surface soil has fertility sufficient to keep wheat in vigorous growth until overtaken by freez-

ing weather, when the trouble begins. The unrolled wheat has no depth of root; it lies upon the surface, feeding upon the congenial loose earth until overtaken by winter, and then remains quiescent until favorable weather for its growth. When this period comes the wheat makes an effort to find more food; the freezing and thawing process has broken off the young feeders, and it is a struggle for fresh food until the weather becomes permanently settled. By this time the fly makes its appearance, and now begins again a new battle for life with impaired constitution, all resulting from not applying the proper remedy immediately after seeding.

While living in Baltimore county, Md., I tested this matter thoroughly. I had a neighbor who prepared his land (which was of the same character of soil as mine) in the most perfect manner, the only difference in the cultivation was, that he would not roll after seeding, and I did. His crop for years in succession was 22 bushels per acre; mine was 30. He attributed the difference to the kind of wheat, and bought seed of me. The difference in yield per acre continued the same. He would not roll after seeding, because he considered the loose earth which the drill hoes drew up between the rows of wheat to be a grand thing to recover the wheat roots that the frost threw out of the ground. I was raised a merchant, he a farmer; consequently, he knew better than I. My wheat was not thrown out—his was; my wheat grew off promptly in the spring out of the reach of the fly—his wheat was affected by the fly. My experience is, that thorough preparation (as above described) and early seeding—say from the 20th of September to 10th of October in this locality, and in Maryland from September 10th to 20th—with an application of dissolved South Carolina rock and kainit, will almost insure a crop of wheat. In seeding corn stubble I prefer having the corn cut off, and twenty-four rows shocked together. I then use the spring-tooth harrow to prepare the seed-bed. The corn should be cultivated flat, and kept as clean of grass and weeds as possible—for the benefit of the corn in the first place, and to save labor in preparing the land for wheat, in the second. I used the Shreiner broad-cast grain drill shovel (on a Champion drill) which deposits the grain over a space of four inches very regularly, instead of crowding it into a narrow trench, as is the case with the hoe that is generally sold with drills. These can be attached to any drill, and are a very great improvement on the narrow hoe.

Phosphoric acids and potash are the elements most needed in our lands. After these thorough tests, I am disposed to give Dr. Sharp all the credit possible for his long persistent efforts to establish a fact that

would have saved the agriculturists millions of dollars, if he could have influenced them to abandon the use of an article that has been the ruin of many. To my own knowledge, Dr. Sharp has made a very poor farm one of the most productive in the very fertile county of Kent, and in doing so he has made no use of ammoniated fertilizers, excepting in making experiments.—*In Country Gentleman.* T. R. C.

Mantua Va.

POLLY GORDON'S PREMIUM FARMER.

[Springfield Republican].

Polly Gordon was an old maid living in Kansas; she was not born there, for the State has not been long enough settled, and I will not mention the place of her nativity,—but lest the excusable State pride of Ohio people be hurt, I will say it was *not* Ohio; and yet she had energy enough at any hard work that offered itself to entitle her to the presidency, if women were eligible to that position. She was able-bodied, and in her way strong-minded, even to obstinacy. Though she “didn’t b’lieve in them wimmin’s rights, wimmin she had heerd tell of,” she always voted in school-meeting,—the Kansas law gives that privilege to women, “because if they mean to waste the people’s money on too much schoolin’ and high edicatin’ I’m a goin’ to do all I kin to prevent it,” was her reason for voting.

She wore her dresses made in the style that prevailed when she first put on long dresses, and her scanty hair from one year’s end to another was twisted in a little round knot and pinned on top of the back of her head. “[The fashions kin come round to me when they want to, I’ve no time, and ain’t a goin’ to run round after ’em,” was her invariable reply when some friend dared to suggest an improving change. Her highest ambition on the womanly side of her nature was to have the finest colored, striped rag-carpets, the nicest drawn-in rugs of impossible roses and improbable cats; the whitest clothes and lightest bread of any housekeeper. She carried on a little farm, and among farmers it was her boast and pride that her calves were biggest, and pigs fattest; that her corn yielded most to the acre, and she never lost a chicken or turkey by pip or cholera. She could scarcely read or write, despised “book larnin’ as no ’count towards gittin’ along,” and took no interest in the world outside beyond the prices of her crops and the groceries she had to buy.

Mrs. Prudence Volney, for the last four years Polly’s nearest neighbor, also living on a farm—I may fearlessly add that she was from

Ohio,—was a refined, intelligent woman, very fond of reading, and Polly was always lecturing her on her expensive tastes. “I do think it’s so foolish in you to waste your money in that way, an’ spend your time too. You pay out enough hard cash every year for such trash as would buy two or three fat calves; if you’d ’a done that way, countin’ the nateral increase, you’d ’a had a herd o’ cattle by this time, instid o’ this litter of books an’ papers; an’ you might ’a drawn in a dozen rugs just like mine!”

Mrs. Volney took this advice from Polly in good part, for the maiden lady was really kind hearted and well disposed, and too ignorant of etiquet and propriety, of the most common things belonging to cultured, and I might add civilized life, to be aware of the impertinence of her suggestions.

So great was her prejudice against newspapers and books, as wholly useless, that, while to the lightning-rod, sewing-machine and patent-pump man she would give a not altogether impatient hearing, and examination of his wares, the mild-mannered book or newspaper agent, with chromo attachments, was sure to receive a severe, “No, sir, you need not trouble yourself to take a step inside! I’ve no time to look at such trash, an’ no money to throw away on it; an’ if you want a piece of my mind I’ll tell you, you’d better pitch into hard work than to go round in such low business!” and as she always gave a call to the dog, who stood by grinning with white teeth that added to the effect of Polly’s remarks, the agent mildly said: “Good morning,” and retired, crabwise, with meek side glances in the dog’s direction, and never came again.

But Polly was human and a woman, and in a state where men do so much more abound than the other sex, she had secretly wondered why, with so many substantial attractions of farm stock, full cribs and fat turkeys, her strong, bony hand had not been sought in matrimony. As she grew older and accumulated more, she often felt the disadvantage of not being around so as to know the prices of things, but she was entirely ignorant of the value or use of a newspaper in giving her the information wanted. Besides, she wearied of tending her stock and holding the plough; and it vexed her still more to pay her hard-earned cash to some indifferent hired man, whom she feared or knew slighted his work, or in some way cheated her.

One day while chaffering about a plough, she noticed on the premium list of the coming county fair, “Best loaf of wheat bread, \$5, and Kansas Farmer for one year.”

The last clause very much puzzled her, but concluded that even for

a year the farmer was well worth trying for, and he might be so well suited he would be willing to stay a lifetime. Mrs. Volney came in a day or two after. "Have you heard tell of the premiums yit for the fair?"

"Yes, I have a list."

"Will they truly give \$5 and a Kansas farmer for the best loaf of light bread?"

"I presume so, and I am half inclined to send in a loaf."

"I should think you'd most be ashamed to say so and let folks know it."

* Mrs. Volney never dreamed of Polly's mistaken notions in regard to the "Farmer," and though she meant she took so many papers she ought not to be so extravagant as to want another; and she was greatly astonished at the blush that crawled up over Polly's freckled face and lost itself in the roots of her scanty, tightly-drawn hair, as she hesitatingly went on. "Well, to tell the truth, I'd like both very well myself; money always handy, and the farmer'd be convenient in the house and out of doors too. There's somethings about farming I don't know, and being just alone by myself, I can't look after everything, and so I get taken in. Do you s'pose I could have the farmer longer if it suited all around? she asked anxiously.

"Of course, the publishers would be glad for you to have it all the rest of your life, if you wanted it."

"Publishers" was an unmeaning word to Polly, but she had a dim recollection of hearing in her early youth about something called "publishing the bans" that was connected with matrimony; and that Mrs. Volney spoke of the "Farmer" as "it," soothed her maidenly modesty, for, as said "farmer" was only a supposable case, she could not yet bring herself to the familiarity of the "he" and "him" which the assured wife of several years gives to the husband of her youth, as if there were but one masculine in the world! Mrs. Volney was delighted that after all her invectives and declarations Polly had become reconciled to the idea of even having a paper in her house, and in trying to steer clear of any discussion she led poor Polly further astray by saying, "Oh, yes, the Farmer would be so much help to you about giving the prevailing prices all over the State; in that way you know when corn, butter, stock, and poultry are advancing, and the best time to sell. Otherwise, we women, tied to the house, not able to get out and learn about things as men do, are at the mercy of speculators, who come round, and taking advantage of our ignorance, buy our things and take all the profits themselves."

“That’s so,” said Polly sadly. “I sold some my corn last week five cents on a bushel too low.”

“If you had had the Farmer you would have known corn was fast advancing and held on. I knew it and so was saved.”

“Do you s’pose if I get the premium I’ll have the Farmer in time for fall ploughing?”

Mrs. Volney did not see the connection, and was greatly puzzled to understand Polly’s agitation, but attributed it to her embarrassment for this sudden conversion and confession of faith in newspapers, and answered, “Oh yes, you will get the money and Farmer as soon as the fair is over.”

There were only two weeks till the fair, and they were very busy ones to Polly, who cleaned house from garret to cellar, and made many changes to suit the tastes of the possible coming farmer; her old loves were forgotten in the fervor of this new hope, and so many times was her pet cat driven off the newly-covered cushion in the big rocking chair that she grew anxious, gray, and thin. She also bought fifteen yards green alpaca at a bargain, and going over to Mrs. Volney’s, with unwonted bashfulness, asked for polonaise and overskirt patterns.

“I shall want one suit just right if I should git the farmer!” she explained to the uncomprehending Mrs. Volney, “and I thought I’d go the whole figger for this onct.”

“The very idea of taking a newspaper is an educator; this premium offered may be the entering wedge that shall break up Polly’s ignorance and let a flood of light on her soul,” Mrs. Volney said to her daughter, after Polly had gone with the patterns and full instructions how to use them, to which she had listened as attentively as any devotee of fashion.

She “set” four “sponges” for her prize loaf, and made two loaves from each “settin,” and at the appointed day arrayed in her most extraordinary dress, polonaise overskirt and trimmed skirt, with three carefully selected loaves she hastened to the fair. While ticketing them she anxiously asked the polite official, “Will I git the farmer and \$5 to onct if I draw the first premium?”

“Without the slightest doubt, madam; I have all the premiums here on hand to be given as soon as called for.” Polly gazed earnestly at the men who were in the office, feeling that if her “farmer” was as anxious as to his fate as she was in regard to him, his looks would betray him. But she might as well have studied the Sphynx as their faces, so she followed her loaves, and when once in place she hovered around them as a hen near her brood, listening to every word said, as if from the

general public opinion she might get a clew to her fate. She passed a sleepless night; and next day, with carefully curried horse, newly-washed buggy and herself in her best array, she drove in. At noon the committee came, smelled, tasted, and discussed, while she suffered agonies as if running the gauntlet, but at the last the blue ribbon was put on one of her loaves and the red on another.

Regardless of the latter she seized the blue ribbon loaf and hurrying to the office she accosted the same suave official, who wondered at her breathless excitement as she held the loaf up and said, "Are both your prizes here?"

"Yes, madam."

"Do you see that blue ribbon? I want my \$5 and my farmer."

"Here they are," and he extended the bill and a copy of the Farmer.

"When would you like to begin with the Farmer, madam?"

"I'm all ready, for I come prepared to take him home. Which one is it?" and she looked inquiringly at a group of gentlemen who noticing her excited manner as she came in, had stopped their conversation and were observing her.

"This is it," said the superintendent, putting it in her hand, "date of September 6, 18—."

"Why, this is a newspaper—I want my farmer."

"Well, see, the Kansas Farmer," and he displayed the title-page.

"Was that what you meant by the farmer you was goin' to give for the best loaf o' yeast light bread?"

"Yes, madam. Oh, not one copy certainly, but a year's subscription," he added hastily, thinking he had discovered the cause of her trouble.

"That paper!" she answered with the utmost scorn as she sniffed with her upturned, freckled nose. "Is this the underhand way you take to deceive a lone woman like myself? I wish I had words to speak out my mind to you and tell just what I think about it!"

"What did you expect? It was so announced on the premium list."

"Why a *farmer*,—a *man*, of course!"

The unfortunate official tried to explain, and the other gentleman assisted him, each assuring her that doubtless somebody might be found to fill the bill, but as no one offered himself for the vacancy, Polly, not at all appeased, went off leaving her Farmer and loaf of bread, but she did not forget the crisp \$5 bill! In that dark hour of disappointment it was a source of comfort to her, and kept her from utter despair as she unhitched her horse and drove home single and alone.

At first she thought she would hunt up Mrs. Volney and speak her

mind to her, but the ride home, and the soothing purr of the old cat who lay in the no longer tabooed arm-chair, calmed Polly, and sober second thought prevailed.

She did her own fall ploughing; it kept her home three weeks, and when next she met Mrs. Volney, who had heard of her disappointment through the superintendent, neither of them made any reference to the "Kansas Farmer."

But as the "Farmer" came to her regularly, she gradually learned to look for it and felt a new importance to have some mail for her at the post-office. From reading current prices, weather notes and prospects of crops, she began to care for other things; so that by the next fair she presented herself at the office with another loaf, and to the smiling superintendent's "Miss Gorden, if you get the blue ribbon, remember it is only the 'Weekly Kansas Farmer' for one year from date we can give you," she was able to reply with a return smile: I don't want any other. This is the best kind for me."

However, in Mrs. Volney's house, the inquiry is made weekly, "Has 'Polly's educator' come yet?" and it always creates a ripple of laughter among the young folks.

TAKE YOUR HANDS OUT OF YOUR POCKETS.

To begin with, it does not look well, when a young man crooks his arms and thrusts his hands into his pockets, making a figure eight out of himself, and then stand up against the sunny side of the house, like a rooster in December.

How would the girls look all turned into eights, and leaning against the wall? How would your mother look in that posture? You don't find her hands in her pockets. Your mother's hands, while you are loafing, they are hands that sew, and bake, and stew, and fry, and sweep, and darn, and nurse; but she does not sink them in her pockets, and then loll against the building.

Are your hands cold? Warm them up at the end of the hoe-handle and the scythe. Swing the hammer; drive the plane; flourish the axe. There is untold caloric about a spade, a trowel, a wrench.

Besides, pocket heat is not profitable. Have you money there? Are your pockets the safe in which you have hidden treasure, and are your hands the bolts that secure the safe door? Money may be there to-day; but it won't be a guest over to-morrow night. An idler's money is apt to leap out of his pocket. It is likely to go for a pipe, a cigar, a tobacco plug, a mug of ale. There is no money in pocket-warming.

Take your hands out of your pockets, young man! You are losing time. Time is valuable. People feel it at the other end of the line, when death is near and eternity is pressing them into such small quarters, for the work of this life craves hours, days, weeks, years. If those at the end of the line, if youth with its abundance of resources, would only feel that time was precious! Time is a quarry. Every hour may be a nugget of gold. It is time in whose invaluable moments we build our bridges, spike the iron rails to the sleepers, launch our ships, dig our canals, run our factories. You might have dug twelve hills of potatoes while I have been talking to you, young man. Take your hands out of your pockets.

The world wants those hands. The world is not dead, asleep under the pyramids, a mummy by the Nile. The world is active, wide-awake, pushing, struggling, going ahead. The world wants those hands. You need not take them out of America. They can find a market here at home. The country wants those hands leveling the forests, cradling wheat in Minnesota, raising cotton in Alabama, weaving cloth in Lowell, picking oranges in Florida, digging gold in Colorado, catching mackerel from the deck of a down-east fishing-smack. Take your hands out of your pockets!

You are willing to work, you say, but can't find anything to do?

Nothing to do? Do the first thing that comes along. Saw wood, get in coal, go on errands. In short, do anything honest with your hands, but don't let them loaf in your pockets.

A good example of what can be done by a young man who takes and keeps his "hands out of his pockets," was set by one who graduated a few years ago at Harvard University. He determined to become a cotton manufacturer. Instead of relying upon his general education, and waiting for an opening, as many of his classmates did, he began at once to prepare specially for the business he had chosen by entering a machine-shop as a workman—making full hours, and acquainting himself with every part of the machinery of a cotton mill. From the machine-shop he went into the cotton mill, and by hard work and close attention rapidly acquired a thorough knowledge of all the processes of cotton manufacture. While some of his classmates were waiting ter- looking for an opening in business, and others were with diffical filling subordinate positions, he was rapidly rising step by step, such he is to-day in charge of one of the largest cotton mills in Newritory land, with ample salary, and, what is better, is discharging the apply of his position with great satisfaction to the company he serves.—

Farmer.

al con-

THIS GREAT AND GLORIOUS COUNTRY.

With her crop of 6,000,000 bales of cotton, toward 600,000,000 bushels of wheat, and over 1,500,000,000 bushels of corn, we may look upon our enormous and astonishing imports as not alarming; the owners of American railway property have a right to expect particularly happy results, and those who feel discouraged at the comparative slowness of our export markets may possess their souls in peace. As Europe must take our surplus, we need not be in a hurry to send our new cotton and our foodstuffs abroad, and we need not send anything on which we have not made a good profit. The future is decidedly in our favor. Our farmers have and will have an abundance of everything; our mechanics and laborers will have cheap food; our factories are busy and will so continue; our transportation companies begin the best season on record; our merchants and tradesmen will have better buyers and more customers than during the last twelve months; our financial institutions will be busy and prosperous; and the whole country will celebrate Thanksgiving Day with more than ordinary joy and satisfaction.—*Boston Advertiser*.

[Tobacco is not mentioned, but we add it. And how much of live-stock, pork, beef, butter, cheese and other exported articles?—to say nothing of sugar, rice, hay, oats, rye, barley, potatoes, fruits, wines, brandies, whisky, and other products.—Ed. S. P.]

HOW MUCH TOBACCO DO WE GROW?

	Pounds	Acres.	Lbs. per Acre.
Kentucky	171,121,134	226,127	756
Virginia.....	80,099,838	139,423	573
Pennsylvania.....	36,957,772	27,567	1,340
Ohio.....	34,725,405	34,679	1,001
Tennessee.....	29,365,052	41,532	707
North Carolina.....	26,986,448	57,215	471
Maryland.....	26,082,147	38,174	683
Connecticut.....	14,044,652	8,666	1,620
Missouri.....	11,994,077	15,500	773
Wisconsin.....	10,878,463	8,811	1,234
Indiana.....	2,872,842	11,055	742
T. New York.....	6,553,351	4,938	1,327
Massachusetts.....	5,369,436	3,358	1,599
you Illinois.....	3,936,700	5,625	699
hand West Virginia.....	2,296,146	4,071	564

Total.....469,283,463 pounds.

626,641 acres; average 748 pounds.

plug, Kentucky grows over one-third (36 per cent.) of the entire tobacco

crop of the country, and the above 15 States supply 99 pounds out of every 100 pounds grown; 22 other States and Territories report a small amount—together only one per cent. The yield varies all the way from 471 pounds per acre in North Carolina, to 1,620 pounds per acre in Connecticut, in which State fertilizers are largely used.—*American Agriculturist.*

OHIO WOOL-GROWERS' ASSOCIATION.

PROCEEDINGS OF MEETING HELD AT CITY HALL, COLUMBUS, AUGUST 30, 1882.

The committee appointed at the morning session reported the following: "The committee appointed at an informal meeting of this Association, held on the Ohio State Fair Grounds this morning, to consider and recommend such action as it might deem best for the Society to adopt upon any subject connected with the general purposes of the Association, beg leave to report that, in their opinion, this organization should express to the public as generally as possible, and should present, also, to the Tariff Commission, now in session, distinctly and emphatically, in such language as may be deemed proper and suitable to the following ideas, to-wit:

"This Association regards as among the leading interests of the people that come under the influence of the State and National legislation those that may be denominated or classified as agricultural, manufacturing, commercial and mining. The order in which these are named is not intended to express their importance or usefulness; they are each necessary elements in our civilization, and each demands with equal power and emphasis the support, encouragement and aid of our legislation, both State and National.

"There is no reason for rivalry among these great interests. They should act in harmony, and neither should ask or receive more than can be demanded by justice and equality.

"We regard the production of wool, which is the subject embraced in the duties devolved upon the Association, as one of the important interests connected with agriculture, and we believe that the true interests of those engaged in woolen manufacture, as well as the general welfare of the people of these United States, will be promoted by such legislation as will enable the wool growers to utilize our vast territory adapted to raising sheep in the production of domestic wools to supply the demands of domestic woolen manufacturers.

"We feel authorized to assert, without the danger of successful con-

tradition, that the present duties on unmanufactured wools are not sufficient to accomplish the object above stated, and, therefore, we desire to assert this opinion, that if these duties are to be changed, they should be increased. It is well known that the existing tariff on wool permits a considerable annual importation, especially of the lower grades, and hence it is clear that a reduction of the present duties will be ruinous to the wool growing interests of our people, and will compel many now engaged in this pursuit to turn their attention to other branches of agricultural industry. Against such results we desire to present the respectful, yet earnest and emphatic protest of the united wool growers of Ohio.

“ We desire to add, that in our opinion, the history of our past legislation affords conclusive evidence that the interests of agriculture have not at all times received a full share of consideration from the National Legislature. The situation and condition of our agricultural population forbids easy and ready concentration and combined action; but, happily, our civilization (aided by the improvements in the modes of travel which the science and progress of the present century have secured to us) have removed some of the causes which at one time paralyzed the voice of agriculture, and this justifies us in saying that we expect to see her interests more fully considered in the future, and, at all events, we guarantee for the great body of those who are engaged in this work, fidelity and obedience to the Constitution and laws, and a moral support to the welfare and prosperity of the Nation.”

The above was discussed at length by J. C. Stevens, of Kenton, and the President. Much interest was manifested by the entire membership, and the question recurring on its passage, it was unanimously adopted.

On motion of the Secretary, Hon. C. Delano was selected to represent this Association before the Tariff Commission. Also, the Secretary was, on motion of S. S. Thomas, instructed to have copies of the above resolutions and proceedings laid before the Tariff Commission.

A. E. SPRAGUE, *Secretary.*

C. DELANO, *President.*

AN English authority gives the points of a Berkshire pig as follows : Black color, a longish head, slightly dished, ears thick and inclined forward, a star or white mark down the forehead, feet and tip end of the tail white, neck muscular, shoulders wide, ribs fat, somewhat narrow loin and hindquarters, drooping rump, bone of the legs thick and rather coarse, as is the coat, denoting hardihood rather than aptitude to fatten on little food.

INCREASED CULTURE VS. INCREASED ACREAGE.

Intelligent men are beginning to see the folly of increasing the size of the farm at the expense of its culture. A few see what multitudes could never be brought to realize, that it is better to raise five hundred bushels of wheat on ten acres rather than on fifty. The latter is the practice by the majority of farmers in some whole districts, especially where the land is let to tenants. It is one of the blessings connected with the high prices of labor that it forces the farmer to economize the time of his men and teams by cutting short the number of acres plowed, harrowed, and harvested, and increasing the fertility of the fewer acres gone over. One man and one team may thus be made to answer when ten acres are put into wheat, where four men and four teams would be necessary to put in fifty acres. By sowing clover on a heavily manured field the product is enormous. The aftermath turned under and the surface harrowed and rolled, and rolled and harrowed and well coated with manure will ensure a heavy crop of wheat. Seed again with clover and turn under after cutting one crop of clover, and manure again and sow to wheat. Large yields will be certain and sure to increase from year to year, until fifty bushels will be as common to the acre as five are now. A man can afford perhaps to thus bring up ten, if not ten, five, two, or one acre, but when fifty acres are to be thus treated, he is either a bold, wealthy or enterprising man who will dare attempt it.

One difficulty, which is usually a preventive of this mode of culture, is, want of faith in ultimate success. Land run down, so as to produce only five bushels of wheat or corn to the acre, cannot be made to produce like Virginia soil by the application of ever so large an amount of manure the first year.

It requires several years in the great laboratory of the soil for that kind of chemical action to take place, when the crude elements are supplied even bountifully, necessary to furnish the readily assimilable pabulum for an extraordinary crop of wheat or corn. Hence the necessity of keeping up the liberal supply year after year. And when once the land is brought to yield her generous increase, a wise farmer will have no difficulty in keeping up a degree of fertility that may well surprise the slipshod farmer.

State legislatures or State Agricultural Societies might do a much more unwise thing than to offer a liberal premium for thus bringing up poor land, to show its possibilities. Take, for instance, a farm located in a district where the average yield of wheat or corn is reported at

five bushels of wheat and ten of corn per acre. Offer a premium of one hundred dollars for a five or ten acre field that could furnish evidence of the greatest increase of yield in three years over the three previous years. Hundreds might be stimulated to bring up their land who now think such a thing entirely impracticable. Thousands of acres of land have been turned out to the common as "old field" after having been exhausted of its fertility by cropping with tobacco, that might be brought in the course of five years into remunerative culture. It would require as much money expended in manure as the present value of the land before the first remunerative crop could be raised, but after that, all expended on it would bring ample returns. Very many men are now working land that does not pay for its culture. Teams are worked down—much is paid for hired help—hands are boarded, when the whole crop will scarcely pay the wages and value of board, throwing in the use and keeping of the teams, the implements and the land. We know this is so. What is the remedy? Work fewer acres. Double, quadruple what you have done for each acre worked, curtail expenses by hiring less help—feeding less team—using less seed—wearing out less plows and harrows—by taking fewer but more profitable steps on fewer and more fertile acres, and let the rest lie idle, or sell it.—*Practical Farmer.*

SALT AS A FERTILIZER.

Common salt is a compound of chlorine and sodium, the first being a gas and the latter a metal. From sodium is derived soda by a union with oxygen, and soda is usually met with in the shape of sulphuric, carbonate, or bicarbonate. Nearly all plants contain more or less soda, though it does not supply the place of potash to any extent. Common salt, therefore, supplies soda to all plants with which it may come in contact, and the chlorine is a very useful substance in the soil; it also yields up that element. It is a very difficult matter to separate the two which are so firmly bound together in the salt; still, there is no doubt that salt undergoes disintegration in the soil. But before this takes place it first performs several duties as salt, and experiments have proved this substance very important to farmers. It will kill weeds to sow salt on them when wet with dew. Applied on land, after seeding to corn, wheat or turnips, provided it does not come in contact with plants just pushing through, it facilitates their growth and

keeps cut-worms, turnip-flies, and even the Russian fly away to a certain extent. It is also obnoxious to many other insects. In experiment with salt it should not be overlooked that it is beneficial to some few weeds, but a positive injury to the majority. The celebrated Dr. Voelker, a German chemist, used the solution of salt in order to test its effect on different plants, and found that from three to twelve grains in a pint of water produced no effect on cabbages, beans, onions, lentils and thistles, but a solution of double strength instantly killed the sweet vernal grass. A solution of twenty-four grains to the pint gave a fresher appearance to cabbage, radishes and lentils, the latter especially being highly benefitted, but a solution of forty-eight grains exercised a prejudicial effect on lentils, while it did no injury to the other plants. From these experiments it appears that it is useless to apply more than the quantity actually required, and that fertilizers will give excellent results when used in proper proportions, but are sometimes injurious in large quantities. The plants most benefitted by salt are cabbages, celery, asparagus, onions, radishes and tomatoes. Grasses are affected more readily by salt than other crops, and it is of especial advantage to bulbous plants and plants with succulent leaves. Salt is taken up into the body of the plant without decomposition to a limited degree. Sown on soils it renders them more friable, as it possesses the property of attracting moisture from the atmosphere. Mr. William Saunders of Washington, D. C., writing to the *National Farmer*, states that this property has been significantly utilized in the growth of turnips, beets, and other root crops in dry seasons. Application of ten bushels to the acre on young beets that were languishing for moisture had an astonishing effect in the vigorous growth at once imparted to the young plants, and increased the crop to the extent of five tons per acre above that produced in the same field which was treated in the same way, but omitting salt. Even on the following wheat field the salted portion was clearly defined, as the wheat on that portion stood better, gave a heavier crop and was better in every respect. When salt is mixed with moist earth and lime a considerable quantity of carbonate of soda and chloride of calcium is produced, the chlorine of a part of the salt uniting with the lime, while carbonate acid takes its place, forming carbonate of soda. This, having the property of combining with silica and rendering it soluble, is of great benefit to plants, and if it is thus able to assist plants in appropriating silica, which is a very insoluble substance under certain conditions, it no doubt possesses other chemical properties which are as desirable in the soil as the actual benefit derived by the plants directly from the salt.—*Philadelphia Record*.

DOING UP MEN'S LINEN.

Many a husband easy to please in all other respects, has had his weekly grumble over "the way this collar sets," or "how this bosom bulges out!" And many a housewife has tried again and again to remedy these faults. A lady writing to the *New York Evening Post* explains the difficulty in the following language:—

Some time ago my husband used to complain that his linen collars did not set nicely in front. There was always a fullness which in the case of standing collars was particularly trying to a man who felt a good deal of pride in the dressing of his neck, as it spoiled the effect of his cravat, and often left a gap for the display of either the collar band of the shirt or a half inch of bare skin. While talking with a practical shirtmaker one day, he mentioned his annoyance, and inquired if there was any means of relieving it.

"Yes," answered the man, "the fault lies with your laundress. While doing up your collars she stretches them the wrong way. Damp linen is very pliable, and a good pull will alter a fourteen-inch collar in the twinkling of an eye. She ought to stretch them crosswise and not lengthwise. Then in straightening out your shirt bosom she makes another mistake of the same sort. They, also, ought to be polished crosswise instead of lengthwise, particularly in the neighborhood of the neck. A lengthwise pull draws the front of the neckband up somewhere directly under your chin, where it was never meant to go, and of course that spoils the set of your collars. With the front of your neckband an inch too high, and your collar an inch too long, you have a most undesirable combination.

The speaker was right. As soon as my husband ordered the necessary changes to be made in the methods of our laundry, a wonderful difference manifested itself in the appearance of that most important part of his clad anatomy, the neck. Let me commend the shirtmaker's hint to other distressed women.

DEVICE FOR COOLING AIR.

A simple way of cooling the air of a room is described in the *New Orleans Picayune* of a recent date. The composing-room of the *Picayune* is situated in the upper story of its publication house, just under the roof, and in summer is extremely hot. This season an inspiration seems to have come to one of the oppressed occupants, and in accordance with it a vertical wooden box was constructed in the corner of

the room, with openings at the floor and ceiling, and furnished with a pipe for supplying water at the top, and a pan and drain at the bottom for receiving the flow and carrying it safely away. The supply-pipe was bent over the upper end of the shaft, and fitted with a rose like that of a watering-pot, so as to deliver a shower of spray instead of a solid stream. On connecting it with the service pipe, the movement of the water was found to cause an active circulation of the air in that part of the room, which was drawn in at the opening of the shaft and issued again, cool and fresh, at the floor level. The most surprising thing about the experiment seems to have been the effect of the water in cooling the air to a degree much below its own temperature. With Mississippi water, which when drawn from the service pipe indicated a temperature of eighty-four degrees, the air of the room, in which the thermometer at the beginning of the trial stood at ninety-six, was cooled in passing through the length of the shaft to seventy-four degrees, or about twenty degrees below the temperature at which it entered, and ten degrees below that of the water which was used to cool it. Of course the absorption of heat by the evaporation of a portion of the water accounts for its refrigerating effect, but the result seems to have been so easily and inexpensively attained that the experiment would be well worth repeating in other cases.

SWEET POTATOES.—A DISCOVERY.

It is well known among farmers and gardeners that English peas, beans, tomatoes, and some other plants need some support to climb upon to keep them off the ground, or else the result of the crop will not prove satisfactory. In the case of these plants the reason is obvious enough. Not only the plant itself needs all the air and sunlight that it can get, but the fruit itself must be kept off the ground, or it will decay.

But few farmers, we opine, ever thought of providing similar supports for sweet potato vines to climb upon, or ever thought that it would be any benefit at all to keep them off the ground during the growing period. Yet an accidental discovery we made the past summer almost convinces us that it would be much better to provide in some cheap way a support to keep the potato vines off the ground, and thus have both them and the earth about the roots more accessible to light, heat, and air. All know how hard it is to prevent potato vines from taking root, especially during a rainy season. If, then, the

vines could be made to climb upon some such support as brush, stuck along the ridge from end to end, this would be prevented, the vines and the whole plant would get more air, and the ground could be worked and kept fine and mellow as long as the growing season lasts. The consequence would be, there would be larger and better flavored potatoes and more of them than now. An accidental discovery leads us to this conclusion, and when we remind the reader that most of the useful discoveries are the result of accident, we hope none will scout the idea before trying it. *Verbum sat sapienti.*—*Petersburg Weekly Index-Appeal.*

A GIRL'S POULTRY ACCOUNT.

Several weeks ago a bright little girl who tried her hand at poultry raising, last year, danced into my room and exclaimed: "Just think of it! I have \$23.59 all of my own and I earned every cent of it." "Got the figures, Kate?" I asked. "Oh, yes!" and she handed me a little book which contained her poultry account for the year ending February 3, 1882. She commenced with thirteen Partridge Cochin fowls—and twelve hens. This is the result of her year's work—debit and credit.

DR.	
Original cost of 13 fowls,.....	\$15.00
Paid brother for work,.....	4.75
Material for coops and chicks,.....	3.75
Food for old fowls and chicks,.....	39.86
	63.46

CR.	
127 doz. eggs sold at 25 cents,.....	\$31.75
7 cockerels sold for breeders at \$1,.....	7.00
3 dozen early chicks sold for broilers at 50 cents,.....	18.00
60 chickens sold at 35 cents.	21.00
12 old hens sold,.....	9.30
	\$87.05

Profit on 13 fowls for one year,.....\$23.59

And besides the \$23.59 in cash, Kate had the old rooster and twelve fine young hens to commence with this season. This beginner is a girl of 14, who attended school thirty-nine weeks during the year.

She did all the work about the chicken house and coops, except some heavy work, such as shovelling in fresh earth, etc., which she hired her brother to do for her. She also hired the brother to make the coops for little chicks. Every ounce of food, except the scraps from the table, was bought and paid for at current market rates, and everything sold was put down at market prices. To pay for the table scraps, Kate cleared the table and washed the dishes twice each day throughout the year. The fowls were confined to their house, and a yard 60 by 40, except for an hour or so each day, when they were allowed to run in the orchard—*Prairie Farmer*.

TO VIRGIL.

[Written at the request of the Mantuans for the Nineteenth Centenary of Virgil's death.]

BY ALFRED TENNYSON.

I.

Roman Virgil, thou that singest Ilion's lofty temples robed in fire,
Ilion falling, Rome arising, wars, and filial faith, and Dido's pyre ;

II.

Landscape-lover, lord of language more than he that sang the Works and Days,
All the chosen coin of fancy flashing out from many a golden phrase ;

III.

Thou that singest wheat and woodland ; tilth and vineyard, hive, and horse, and herd.
All the charm of all the Muses often flowering in a lonely word ;

IV.

Poet of the happy Tityrus piping underneath his beechen bowers ;
Poet of the poet-satyr whom the laughing shepherd bound with flowers ;

V.

Chanter of the Pollio, glorying in the blissful years again to be,
Summers of the snakeless meadow, unlaborious earth and oarless sea ;

VI.

Thou that seest Universal nature moved by Universal Mind ;
Thou majestic in thy sadness at the doubtful doom of human kind ;

VII.

Light among the vanished ages ; star that gildest yet this phantom shore ;
Golden branch amid the shadows, kings and realms that pass to rise no more ;

VIII.

Now the Forum roars no longer ; fallen every purple Cæsar's dome—
Tho' thine ocean-roll of rhythm sounds forever of Imperial Rome—

IX.

Now the Rome of slaves hath perished, and the Rome of freemen holds her place,
I, from out the Northern Island, sundered once from all the human race,

X.

I salute thee, Mantovano, I that loved thee since my day began,
Wielded of the stateliest measure ever moulded by the lips of man.

Editorial.

REPLY TO DR. POLLARD IN THIS ISSUE.

Our esteemed friend, Dr. Pollard, is persistent in his views in respect to the wheat crop. We are glad of it, and hope he will continue until the next crop is harvested, unless he or we are before convinced as to our respective positions. It is, or should be, understood that neither of us have any personal interests involved, or any pride of opinion in the matter, and our discussion is only designed for the benefit of the readers of the *Planter*, who may determine for themselves.

We can best answer the Doctor by noticing his positions in the order they are presented:

First. The "average of $8\frac{1}{2}$ bushels, after one hundred years' experience," does not conclude the question. We have said that this low *average* for the year 1880 was, mainly, the result of bad culture, and the cultivation of poor and infertilized surfaces. We might enumerate hundreds of instances—which are seen and known by every observant person, and, therefore, not needed for specification—that show this fact. We have also said, "one-half of the present area would, with proper culture and fertilization, produce a greater yield." And just here, we do not, the Doctor says, say what *proper culture is*. We have, in an itemized and general way, in our last issue, given our views on this point. It will not be expected that all the details of plowing, harrowing, seeding, fertilizing, etc., should be given in our brief comments on the Doctor's articles, or otherwise, as these will address themselves to the mind of each intelligent reader. The decrease from the aggregate production twenty-five years ago, alluded to, results from these facts: The surface cultivated then was larger than now, the labor system was more stable and efficient, the rotation was better, and fertilization more perfect.

Allusion is made to that great patriot and agriculturist, Edmund Ruffin, who, the Doctor says, advocated *rough culture* and "a *cloddy* surface when seeding was finished." If Mr. Ruffin ever entertained such an opinion, it was a short-lived one, and one of his *kinks*, and all great men have them. We would like for the Doctor to cite any respectable authority of the present day adverse to thorough preparation and tillage of wheat, or any crop.

Second. We have advocated the cultivation of *only so much surface in wheat* as had proper fertility, or could be properly fertilized. We

know that the resources of any farm for direct manuring, are inadequate for very large surfaces; but these may be judiciously amended by a proper system of rotation of grain and grasses, fallow crops—peas especially—and the use, in an intelligent way, of commercial fertilizers. The Doctor is, no doubt, right in respect to the *phosphates*; and nothing else will supply, if even they can, repeated cropping, and a disregard of the grasses and rotation.

The wealth of any State is estimated by what it primarily produces. If its products, when sold, are invested in mules, agricultural implements, or anything else, paid for outside, the animals or articles purchased represent *capital in the State*; and so there is no loss. As to *Western corn*, the Doctor alludes to, we doubt it. Some sections of the State may, by reason of droughts or bad culture, be short in this important home staple; but other sections are always able to supply the deficiency, and so the bulk of the Western staple passes through our Atlantic ports for a foreign demand.

Sorghum, as a substitute for wheat, we do not think can or ever will be; but it is a good auxiliary or compensating crop, which must do its proper part in the great field of production, without attempting to drive out those great *bread staples* which have fed the world from Adam to the present time. The Doctor's argument—apparently, we may say—that because sorghum is a *gross feeder*, it is therefore an *improver* presents a novel question in agriculture. All *gross-feeding* crops are, by universal experience and observation, characterized as *exhausting crops*; but the Doctor, in his ardor for *sorghum* and his dislike of *wheat*, has originated a new theory. Before we say more on this branch of our subject, we will wait awhile to see if we clearly understand the Doctor's position.

The Doctor's facetious story about his man Pat's attempt to pull up a stalk of sorghum, might be equally true of a stalk of corn, or even a well-set stool of wheat, as it is difficult to do either.

All plants search for their food to the deepest points their tillage will allow, especially the grain crops; and if sorghum has the capacity, as the Doctor thinks, to search deeper for its food, it is an evidence of its greater capacity for exhaustion. Its *syrup* is only taken away, he says; and in the case of wheat, the *grain* is only taken away; so, it will be rather hard to say how the question stands as between *syrup* and *grain*.

We repeat, that sorghum comes in very well under a system of diversified crops, and that every farmer who can afford to purchase a mill and evaporator, will do well to make the *syrup* necessary for the

use of his family, and a hundred or so gallons for sale. We cannot admit, however, that it can in any way be regarded as a substitute for our great food staples—wheat and corn. The Doctor appears to advocate this idea; and if so, this is a point of difference between us, and the *Planter's* readers must judge for themselves. We invite all who have cultivated sorghum to give their experiences through our columns.

On the whole, we say again that we hope our friendly discussion may awaken an interest in this special subject, as well as the general question of agricultural improvement; and if so, we are fully repaid.

HYDRO-CARBON FUEL.

Our friend, E. G. Booth, seems to have been awakened from his Rip Van Winkle sleep by our note in our last issue to an article copied from the *New York World*. When we made the extract and penned our note, we had not the remotest idea of disturbing our friend's nap, but it seems we did. Whilst still enthusiastic in respect to his Burwell's Bay estate on the James, he protests that he has not slackened in his faith, or weakened in his purposes as the owner for Virginia of the great invention of Dr. Holland. He has anticipated our regular issue by giving response to our enquiry through the columns of the *Dispatch* and *Industrial South*. This is all well; and what is better, he promises to make a display of the hydro-carbon process of heating and cooking at the approaching Fair of the State Agricultural Society in a more thorough manner than that to which we alluded in our editorial note above referred to. Our observations then satisfied our mind as to the great practical utility of this new fuel for all, or most, ordinary purposes. The idea is somewhat startling that *water* can be used as fuel for the usual cooking and heating purposes, but this *retort* of Dr. Holland's appears to do it effectually; and at a cost very far below that of coal or wood, and without smoke, cinders or flavor. And yet, it is simple enough when it is remembered that water is composed of two gases—hydrogen and oxygen—and that the former is very inflammable and produces a great heat.

The *Holland retort* is a simple contrivance by which the hydrogen of water is set free and thus becomes a cheap and efficient fuel. If our friend Booth does what he says he will do, and we have no doubt he will, the Holland process will be one of the most attractive displays at the Fair, and will be well worthy of a visit by every farmer and house-keeper of the State, who have breakfasts, dinners, and suppers to cook

Mr. Booth means business in the matter, he says; and also means to

give the largest advantage to the people of his native State, and will soon adopt a practical method for bringing this useful invention to the doors of every household.

NOTE.—Since the foregoing was in type, we have received from Mr. Booth the following copy of a letter from Dr. C. Holland, the inventor of the hydro-carbon process. The agent who will represent Mr. Booth at the State Fair will apply the novel fuel to one or more of the steam engines which may be on the ground, and thus give practical illustration of its capacity for generating steam for use on railroads, steamboats, or steam engines of any kind.

NEW YORK, October 5th, 1882.

Dear Sir,—The “C. Holland” locomotive took the 3:5 P. M. passenger train from Patterson to Jersey City, and the 3:55 P. M. passenger train from Jersey City back to Patterson, both heavy trains and short time, and the actual running time was at the rate of sixty miles per hour. Started at each end with 130 pounds of steam, with the pop valves blowing off, and went into the depots at each city with the same amount of steam and the pop valves blowing off, and ahead of time on each run.

We burned but seventeen gallons on each trip, which, at three cents per gallon, would be but fifty-one cents for each trip, and less than two and three-quarter cents per mile.

Yours,

C. HOLLAND.

ENSILAGE IN GREAT BRITAIN.

With regard to ensilage as practiced in the United States, it is almost entirely confined to Indian corn. The corn is cut down as it comes into flower; it is then cut into chaff, and thrown into large pits, which are covered over. When these pits are opened there is a strong smell of acetic acid and alcohol, and—as far as I can gather from the published experiments—there is a loss of something like 40 per cent. of the organic part of the crop.

Maize is so full of saccharine matter, at one period of its growth, that it has even been proposed to use it for making sugar; it is evident that the sugar contained in the crop placed in the silo has been destroyed by its conversion into alcohol, and acetic and carbonic acids.

In my remarks on the subject I did not in any way find fault with the process as applicable to the agriculture of the United States; but I did say that in Great Britain, when we had produced sugar in our crops, we could not afford to have it destroyed by fermentation.

An enthusiastic advocate of ensilage in the States points out, as one of its great advantages, the enormous increase in the percentage of the mineral matter of the maize after it has been in the silo some months; this increase, however, could only be in proportion to the amount of destruction which had taken place in the organic matter of the plant.—*Dr. J. B. Lawes, in London Agricultural Gazette.*

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EDITORIAL NOTES.

TO OUR SUBSCRIBERS—AGAIN.

Our appeal in our last issue to subscribers to square up their accounts has been promptly responded to by many, but still much the largest number appear to be waiting for a "more convenient season." The letters we have received in connection with remittances have encouraged us very much. They are apologetic as well as commendatory of the *Planter* as it now is; and a number have contained payments, not only to the end of the current year, but even for one and two years longer.

We are not disposed to be urgent, but we desire to commence the coming year with a clean balance-sheet, and then we shall feel sure that our friends appreciate our labors and we will be encouraged thereby.

EVERY Lady should send 25 cents to Strawbridge & Clothier, Philadelphia, and receive their *Fashion Quarterly* for six months. One thousand illustrations and four pages new music each issue.

THE STATE FAIR.

We have a word or two more to say about the Fair, and do not wish its encouraging prospects to be marred by any misunderstandings or lack of information in respect to matters of detail.

1. We, therefore, renew the statement that cars, propelled by steam, will run each half hour to and from the heart of the city, at the head of Eighth street, on Broad, and thus afford cheap and easy access to the Fair Grounds.

2. Transportation of stock, implements, &c., to the Fair by all the leading railroads, will be as usual—regular freight prepaid to the Fair Grounds, and on the certificate of the Secretary that exhibition has been made, *free transit* will be given back, and the *inward freight refunded*.

3. Passenger rates will be given at *one and a half to two cents per mile*, or less than one-half of usual fares.

4. The railroads will adopt the system of *coupon tickets*, which give passage on their trains and *admittance* to the Fair; but in all cases where such a ticket is purchased by a member of the Society the *coupon*, if presented to the Secretary, will be redeemed *in cash* at its value of *fifty cents*.

KEMP'S MANURE SPREADER.—We think we have somewhat an eye for good and practical agricultural implements. In passing through the exhibition-rooms of the National Agricultural Society at Washington last year, we noticed what seemed to us apparently *unnoticed* the Kemp Manure Spreader. The courteous agent explained its operation, and he promised to exhibit it at the Virginia State Fair which was to follow the next week. He did so, but with what success our other occupations prevented us from knowing. We see by the report of awards at the State Fair of Maine the present year it received the prize of a *silver medal*. This note is written with no suggestion from the makers of the implement or any one else, and only with the view of verifying our own judgment of its merits. We understand that Mr. ASHTON STARKE is agent for it in Richmond.

WHEN SHOULD A FARMER SELL HIS PRODUCTS?

It is said that when a farmer holds his products until he can obtain a price which suits him *he gambles*, and he is, therefore, condemned. This is not true in philosophy or morals, for a man has the undoubted right to do what he thinks proper with what belongs to him. Still, in most cases, when a farmer withholds his crops from the market when they are ready for it, with the hope of better prices, it evinces a speculative disposition, by which generally he loses. It is a safe rule to sell when crops are ready for the market, and in proper condition, and obtain the prevailing prices. The isolated condition of farmers, and their lack of information as to the causes of the rise and fall of prices place them at a great disadvantage, and hence the rule we have named. They must be reading people if they determine to study the markets, and watch their fluctuations and the causes thereof, and this is not generally the case.

We, therefore, advise to send crops to the market in *good order*, and when it is most convenient to be done. There is no *gambling* or *speculation* in this, and is every farmer's right, and in the end will pay best.

TYPOGRAPHICAL ERRORS.—There are so few generally in the *Planter* that we have found a table of *errata* useless. Educated readers will detect and recognize them. As, for instance, in our last issue, page 184, the word *strata* is used for *stratum*; or, in other words, the plural for the singular. Proof-reading is always a tedious business, and cannot at all times be absolutely correct.

THE SOUTHERN WORLD, Atlanta, Ga., semi-monthly, \$1.00 per annum.

With the next number of this publication it will conclude its *first* year. We have before us the issue for October 1, and find it filled with excellent agricultural matter. The previous issues have well sustained its character in the field of journalism, and its direct application to the greatest of all industries—*Agriculture*.

PICKLES.—In our observation of the dinner tables of Virginia we have concluded that too little attention is paid to *pickles*. They are good appetizers as well as good condiments for meats and aid digestion. We could furnish many recipes for pickles, but we are sure they are not needed, for every housekeeper is well supplied with them, and only a little time and care are required for making them. The girls in a family, we are told, and we believe it true, have a morbid appetite for pickles, and for this reason, perhaps, they are not oftener placed on the table. Curb your girls in this respect, and look to the comforts of the older members of the family is the best advice we can give.

SWEET POTATOES—AN ENQUIRY.—We have a letter under date September 30, from HIRAM SIBLEY & Co., the large and well-known seedsmen of Rochester, N. Y., asking the names of any growers of the *Early Golden Sweet Potato* in our section. We are unable to respond, but hope some of our readers in the counties of Hanover, Nansemond and Norfolk will do so through the columns of the *Planter*. The *Nansemond* potato, which is so largely grown here, has a yellow skin and flesh, and may not, therefore, essentially differ from the *Early Golden*, but if the latter is a new variety, possessing new and valuable characteristics, it is desirable that our farmers should have it.

We call the attention of our readers to the advertisement of "POOL'S SIGNAL SERVICE BAROMETER," in another column. It combines with an excellent Thermometer, a Storm Glass or Weather Indicator, of surprising accuracy, rendering it an article of great value to the farmer, and to all others who feel an interest in the important question, "What will the weather be to-morrow?"

Beware of CHEAP, WORTHLESS IMITATIONS. Ask for Simmons Liver Regulator. Recollect that for malaria, biliousness, dyspepsia, constipation and headache it has no equal.

ST. NICHOLAS for November.

This beautifully illustrated *monthly* has been received. With Harper's *Young People*, which we also regularly get, we have two of the most interesting publications now produced in the interest of the children in any intelligent home circle; and when we add the *Chatter-Box*, we may count *three*. Old as we are, we enjoy them very much; and the privilege is added to by sending them to our *five-year-old* grandson living in the beautiful Valley of Virginia, who is ever on the lookout for the pleasure they afford him. Without being able to read, his tenacious interest and memory enable him to understand and repeat many passages from one or two readings by his mother.

All parents who wish to contribute to the pleasure and instruction of their children should have one or all of these publications in their homes.

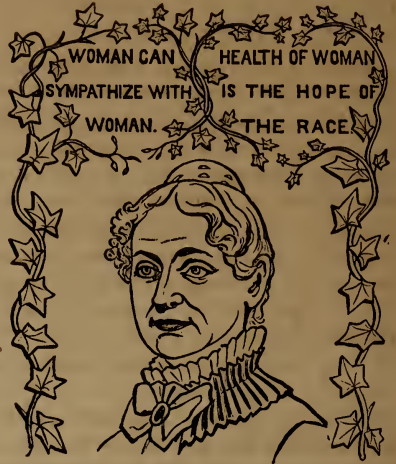
VIRGINIA REVENUE LAWS. 1882.

First Auditor S. BROWN ALLEN will accept our thanks for his courtesy in sending us his compilation of the existing revenue laws of the State. The book contains 480 pages, and covers the whole ground of revenue assessments, as well as many convenient *forms* for clerks and other officers.

THE CENTURY for November.

This pleasant visitor to our table is again with us. It contains a full page portrait of HENRY JAMES, Jr., the novelist, with a critique by his friend, W. D. HOWELL, in which the "Daisy Miller" and other productions of Mr. JAMES are noticed. It contains also an admirable paper by Mr. JAMES on *Venice*—the city in the waters. One of the humorous sketches of FRANK R. STOCKTON, "The Lady or the Tiger," is also given. On the whole, it is full of interesting reading.

"ROUGH ON RATS."—The thing desired found at last. Ask druggists for "Rough on Rats." It clears out rats, mice, roaches, flies, bed bugs. 15c. boxes.



Yours for Health
Lydia E. Pinkham

**LYDIA E. PINKHAM'S
VEGETABLE COMPOUND.**

A Sure Cure for all FEMALE WEAKNESSES, Including Leucorrhœa, Irregular and Painful Menstruation, Inflammation and Ulceration of the Womb, Flooding, PRO-LAPSUS UTERI, &c.

☞ Pleasant to the taste, efficacious and immediate in its effect. It is a great help in pregnancy, and relieves pain during labor and at regular periods.

PHYSICIANS USE IT AND PRESCRIBE IT FREELY.

☞ FOR ALL WEAKNESSES of the generative organs of either sex, it is second to no remedy that has ever been before the public; and for all diseases of the KIDNEYS it is the *Greatest Remedy in the World*.

☞ **KIDNEY COMPLAINTS of Either Sex Find Great Relief in Its Use.**

LYDIA E. PINKHAM'S BLOOD PURIFIER will eradicate every vestige of Humors from the Blood, at the same time will give tone and strength to the system. As marvellous in results as the Compound.

☞ Both the Compound and Blood Purifier are prepared at 233 and 235 Western Avenue, Lynn, Mass. Price of either, \$1. Six bottles for \$5. The Compound is sent by mail in the form of pills, or of lozenges, on receipt of price, \$1 per box for either. Mrs. Pinkham freely answers all letters of inquiry. Enclose 3 cent stamp. Send for pamphlet. *Mention this Paper.*

☞ **LYDIA E. PINKHAM'S LIVER PILLS** cure Constipation, Biliousness and Torpidity of the Liver. 25 cents.

☞ Sold by all Druggists. ☞ (3)



Sent FREE!
TREATISE ON
EVAPORATING FRUIT
Profits and General Statistics.
American Mfg Co., Waynesboro, Pa

THE TAG TAX.

RICHMOND, VA., Oct. 17, 1882.

My Dear Sir,—Judge Fitzhugh, of the Chancery Court, has this morning delivered his opinion in the matter of the "tag tax" levied by the Commissioner of Agriculture, and His Honor perpetuates the injunction restraining the Commissioner from levying, or attempting to levy, this tax. We send you herewith a brief of one of the counsel in the case, and call your attention specially to the depositions (page 29 *et seq.*) of the State Chemist and of the late Commissioner of Agriculture, in vindication of the integrity of the fertilizer trade.

Yours truly,
JOHN OTT, Secretary.

TEN YEARS ago the name of Lydia E. Pinkham was scarcely known outside of her native State. To-day it is a household word all over the Continent, and many who read the secular and religious journals have become familiar with the face that shines on them with a modest confidence, in which we read the truth that "Nothing ill can dwell in such a temple."

HEAR YE DEAF

Garmore's Artificial Ear Drum.
As invented and worn by him perfectly restoring the hearing. Entirely deaf for thirty years, he hears with them even whispers, distinctly. Are not observable, and remain in position without aid. Descriptive Circular Free. **CAUTION:** Do not be deceived by bogus ear drums. Mine is the only successful artificial Ear Drum manufactured.

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Fifth & Race Sts., Cincinnati, O.

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Oriental & Hybrid Pears.

Manchester, Bidwell and Mt. Vernon Strawberries. Raspberries, Blackberries, Flowers and Fruit Trees. Catalogues free.

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GREAT WESTERN GUN WORKS,
Pittsburg, Pa.



Write for Large Illustrated Catalogue
Rifles, Shot Guns, Revolvers, sent a. o. d. for examination.

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CANCER OFFICE, 202 West 4th St.

New book on treatment and cure of Cancer. Sent FREE to any address on receipt of stamp. Address, Drs. **GRATIGNY & NORRIS,** Box 598, Cincinnati, O.

je 1—6m

NORFOLK & WESTERN RAILROAD.

Time Table in effect Aug. 27, 1882.

WASHINGTON TIME.	WESTWARD DAILY.	
	No. 1.	No. 3.
Leave Norfolk	12.25 p. m.	
" Suffolk	1.13 "	
Arrive Petersburg	3.35 "	
Leave Petersburg	3.50 "	
" Burkeville	6.11 "	
" Farmville	6.56 "	
Arrive Lynchburg	9.00 "	
Leave Lynchburg	9.30 "	2.40 p. m.
" Liberty	10.38 "	3.32 "
" Roanoke	12.15 a. m.	4.39 "
" Christiansburg	1.32 "	6.00 "
" Wytheville	3.22 "	8.06 "
" Marion	4.26 "	9.08 "
" Abingdon	5.33 "	10.14 "
Arrive Bristol	6.09 "	10.45 "

CONNECTIONS.

At PETERSBURG, with R. & P. R. R. for Richmond and Springs on C. & O. Ry., Fredericksburg, Washington, Baltimore and the North and East. Through Pullman Car from Petersburg to New York. Solid trains Petersburg to Washington.

At BURKEVILLE, with R. & D. R. R. for South.

At LYNCHBURG, with Va. Mid. R. R. to and from the South and North, and with Richmond & Alleghany R. R. for Buchanan, Clifton Forge and C. & O. Ky. points.

At B RISTOL, with East Tenn., Va. & Ga. R. R. for Knoxville, Dalton, Chattanooga and all points South, West and Southwest.

WASHINGTON TIME.	EASTWARD DAILY.	
	No. 2.	No. 4.
Leave Bristol	11.35 p. m.	5.00 a. m.
" Abingdon	12.07 a. m.	5.29 "
" Marion	1.13 "	6.31 "
" Wytheville	2.17 "	7.31 "
" Christiansburg	4.08 "	9.28 "
" Roanoke	5.35 "	10.45 "
" Liberty	6.55 "	12.15 p. m.
Arrive Lynchburg	8.00 "	1.15 "
Leave Lynchburg	8.20 "	
" Farmville	10.14 "	
" Burkeville	11.00 "	
Arrive Petersburg	12.55 p. m.	
Leave Petersburg	1.05 "	
" Suffolk	3.28 "	
Arrive Norfolk	4.15 "	

CONNECTIONS.

At LYNCHBURG, with Va. Mid. R. R. for Danville and North Carolina points, and for Washington and Eastern cities.

At BURKEVILLE, with R. & D. R. R. for Richmond.

Through car from Lynchburg to Richmond.

At PETERSBURG, with P. R. R. for Weldon, Raleigh, Goldsboro, Wilmington and the Southeast.

At NORFOLK, with Bay Line Steamers daily, except Sunday, for Baltimore—thence rail to Philadelphia and New York; with Old Dominion Steamers on Mondays, Wednesdays and Saturdays for New York, and on Tuesdays and Fridays with M. & M. T. Co. for Boston and Providence.

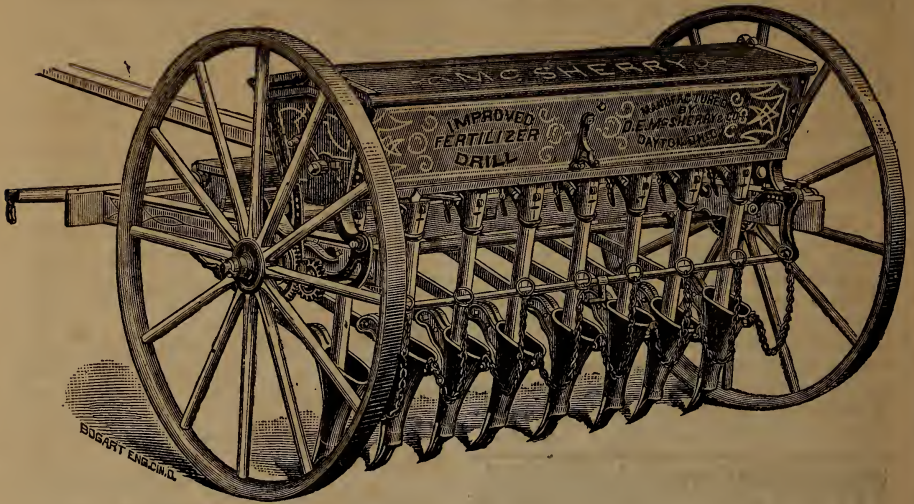
First and second class tickets as low as the lowest—150 lbs. of baggage checked free to each wh. le ticket, and 75 lbs. to each half ticket. 1,500 mile tickets, \$37.50; 1,000 mile tickets, \$30.00.

For further information as to tickets, rates, baggage checks, &c., call on or address the Gen'l Freight and Passenger Agent, Lynchburg, Va.

HENRY FINK, V. P. and General Manager.
CHAS. P. HATCH, Gen'l Ft. and Pass. Agt.
W. A. CARPENTER, Ass't G. F. and Pass. Agt.
Lynchburg, Va.

WATT & CALL, Farming Implements and Machinery,

1444 Main St. (Cor. 15th) and 1518 and 1520 Franklin St., RICHMOND, VA.



The MCSHERRY DRILL—either as a *Plain Drill* or as a *Combined Grain and Fertilizer Sower* is the BEST ON THE MARKET. Has the genuine force-feed. Fully warranted. Send for special Drill Circular.

THE AUBURN WAGONS are manufactured to order for us by the E. D. CLAPP MANUFACTURING COMPANY, the founder of which has had an experience of thirty-five years, and has made the building of wagons a study.

We offer these wagons as the strongest built and best finished on this market, and invite a comparison with any. Will meet prices of any first-class wagon, and warrant them in every respect.

ENSILAGE CUTTERS AND FODDER CUTTERS of all sizes for hand or power, with and without patent-safety fly wheels. Our prices and styles cannot fail to meet the requirements of all. We guarantee to cut with less power one-third more than any other machines one-third larger in size.

CIDER AND WINE MILL.—The cheapest and best Mills made, with two tubs; will extract more juice than any mill of a similar kind.

Send for Descriptive Circular of FRUIT, WINE AND JELLY PRESS; should be in every household; will extract the entire substance from all kinds of fruit and berries uncooked in one operation.

GRAIN AND FERTILIZER DRILLS with genuine force feed.

PLOWS AND CASTINGS of every variety. Our IMPROVED CHILLED PLOWS, as now constructed, are the most economical in use.

PRICES OF REPAIRS REDUCED.

HAY PRESSES, MOWERS, CORN AND COB CRUSHERS, CORN SHELLERS, PUMPS, FARMING TOOLS of every description. GARDEN SEEDS of every variety from selected stock. Now receiving a large and varied stock of TURNIP SEEDS.

Catalogue of Implements mailed free to any address.

WATT & CALL, Main Street, corner Fifteenth.

On receipt of six cents, for postage, we will send a handsome book on Ensilage bound in cloth, of seventy pages. It will be of great assistance in building silos and preparing ensilage.

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1838, 1883. **POMONA NURSERY!** - 6,000
 Keiffers Hybrid Pears in orchard,
 50,000 in Nursery, propagated ex-
 clusively from healthy standards, no
 buds or scions cut from dwarfs
 Strawberries, Raspberries, Blackber-
 ries, Grapes and Currants of all the ap-
 proved varieties. Fruit, shade and or-
 namental trees, vines and plants. *Cata-
 logue free.* WM. PARRY, PARRY P.O., N.J

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SOLID TRAINS with PULLMAN Sleeping Coaches, run through daily between Washington, Richmond, Charlottesville, Waynesboro, Staunton, Clifton Forge and Louisville and Cincinnati WITHOUT CHANGE.

SHORTEST & MOST DIRECT ROUTE

and the only route without transfers, Avoiding the uncertainty by other routes of making connections.

For rates and full information, call on the nearest Chesapeake and Ohio agent, or address

C. W. SMITH,
 Gen'l Manager.

H. W. FULLER,
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For the North and West.

Do not fail to see that your Ticket reads by the

NASHVILLE, CHATTANOOGA and ST. LOUIS RAILWAY.

For speed, safety and comfort you will find this line to be unrivaled.

Emigrants wishing to go West either to locate or as prospectors, will find it to their advantage to go by this route. Round trip emigrant tickets on sale to Texas points. By this line you have no tiresome delays. Through coaches are run from Chattanooga to Columbus without change. Sleeping coaches on all night trains. Good Coaches, Good Road and quick time.

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From largest herd South, which took Five Premiums and special mention at Virginia State Fair 1881. This hog is free from disease, a natural grazer, prolific and early to mature. Catalogue free.

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Also, Collie Pups in April from imported strains. jan 1-1y



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Adjustable and Folding

IRON HARROW.

Cuts Six, Seven, Eight, Nine, Ten and Twelve Feet Wide at Pleasure.

ALL IRON.

Does fine or coarse work, adapting it to different seeds and soil. Best Harrow for cultivating corn, potatoes, cane, cotton, tobacco, &c., as each section goes between the rows. The only Harrow adapted to small farms, large farms, nurserymen and gardeners. The frame can be spread to a distance of eighteen feet and narrowed to fourteen inches.

Low freight and low prices.

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(Established 1866.)

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For Roofs, Walls and Ceilings in place of plaster. Samples and catalogue mailed free. W. H. FAY, Camden, N.J

Received Medal
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HIGHEST AWARD



OF MERIT
AT
CENTENNIAL
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A. B. FARQUHAR, York, Pa.

Cheapest and best for all purposes—simple, strong, and durable. Also Horse Powers and Gin Gear.

SAW, GRIST AND COB MILLS, GINS, PRESSES AND MACHINERY generally. Inquiries promptly answered.



Specialty.

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Vertical Engines, with or without wheels, very convenient, economical and complete in every detail, best and cheapest Vertical in the world. Fig. 1 is engine in use. Fig. 2 ready for road.



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Patented by A. B. Farquhar. Delivered in all kinds. Also, Ploughs, Cultivators, &c., &c.

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BY THE ATLANTA COTTON EXPOSITION, ON THEIR

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Special attention given to Plantation Machinery. Illustrated Circulars Free.

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COOLEY CREAMERS

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In daily use in over 15,000 factories and dairies. For securing cleanliness, purity and greatest possible amount of cream, have no equal.



Made in four styles, ten sizes each. Durable and ornamental. Skim automatically with or without lifting the cans. Most popular in the cream-gathering plan. Four gold medals and six silver medals for superiority.



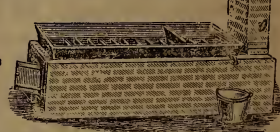
Davis' Swing Churn

Best and Cheapest.

No inside fixtures—always right side up. No danger of cover falling out, letting all of the cream on to the floor. Nine sizes made. Three sizes Nesbitt Butter Printer. Four Sizes Eureka Butter Worker.

THE IMPROVED EVAPORATORS

Make Better SYRUP, SUGAR,



and JELLY, with less fuel and labor than any other apparatus. Will condense Sorghum Juice faster than any evaporator in use. The best apparatus known for making jelly from sweet cider. Thousands in use. Send for descriptive circulars of Evaporators, Cane Mills, &c. Every implement warranted exactly as represented.

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FOR THE CURE OF DYSPEPSIA.

The late Hon. THOMAS S. GHOLSON, of Petersburg, Va., says:

"For two years I had labored under severe Dyspepsia, and had tried various remedies without relief, when I was induced by a friend to try BECKWITH'S ANTI-DYSPEPTIC PILLS. The effect was most happy, and in the course of a few weeks I was entirely relieved, the tone of my stomach restored, and my general health much improved. For the last eighteen months I have taken no other medicine, and, I may add, no other medicine has been taken in my family. The high reputation which these pills have acquired is, in my opinion, richly merited, and I confidently recommend them to the public as a most valuable medicine."

They have stood the test of more than sixty years, and have lost no reputation.

Prepared solely by E. R. BECKWITH, Pharmacist, Petersburg, Va., from the original receipt of Dr. John Beckwith, and sold by druggists generally. Price, 25c.

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Manufacturers of



Superior Solid Steel

Silver Plated Pie, Butter, Table, Dessert, and Tea Knives, to Match.

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 85 CHAMBERS ST., NEW YORK.

In order to introduce our goods to the people, we will send by mail, prepaid,

1 Pie Knife,	\$2.00	6 Table Knives,	\$3.00
1 Butter "	50	6 Dessert "	3.25
6 Tea Knives,	3.00	or any portion pro rata.	

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SICK HEAD-ACHE.—For the relief and cure of the distressing affection, take Simmons' Liver Regulator.

MALARIA.—Persons may avoid all attacks by occasionally taking a dose of Simmons' Liver Regulator to keep the liver in healthy action.

CONSTIPATION should not be regarded as a trifling ailment. Nature demands the utmost regularity of the bowels. Therefore assist Nature by taking Simmons' Liver Regulator; it is so mild and effectual.

BILIOUSNESS.—One or two tablespoonfuls will relieve all the troubles incident to a bilious state, such as Nausea, Dizziness, Drowsiness, Distress after eating, a bitter, bad taste in the mouth.

DYSPEPSIA.—The Regulator will positively cure this terrible disease. We assert emphatically what we know to be true.

COLIC.—Children suffering from colic soon experience relief when Simmons' Liver Regulator is administered.

Take only the Genuine, which always has on the wrapper the red Z Trade-Mark and Signature of

J. H. ZEILIN & CO.

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WANTED TO RENT FOR CASH, a GOOD GRASS FARM in Virginia, from 300 acres upward, in good neighborhood. Answers please state condition of buildings, fences, &c. Address, no1t H. L. BURE, Bement, Ill.

Agents Wanted. The Culminating Triumph. HOW TO LIVE!

A complete Cyclopaedia of household knowledge for the masses; now ready. **Nothing like it. Going fast.** Low priced, illustrated, unequalled in authorship. Send for Press notices and full particulars now. Outfit and instructions how to sell, free to actual agents. Success guaranteed faithful workers. State experience, if any, and territory desired. W.H. THOMPSON, Pub., 404 Arch St. Phila.



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The Cheapest and Best.

Will Crush and Grind Any thing.

Illustrated Catalogue FREE.

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Agents wanted. \$5 a Day made selling our New **HOUSEHOLD ARTICLES and PLATFORM FAMILY SCALE.** Weights up to 25 lbs. Price, \$1.50. Domestic Scale Co., Cin'ti, O.

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POLAND-CHINA PIGS.

A choice lot just farrowed for which I am now booking orders. Prices reasonable.

J. B. GRAY, Fredericksburg, Va.

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Feed Your Lands and They Will Feed You.

FERTILIZER FOR THE WHEAT CROP!

Farmers in the Wheat Country will be able to procure this season, as usual, their supply of the **OLD STANDARD**

“Anchor



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PATENTED

FERTILIZER FOR THE WHEAT CROP!

Reliable Agents attend to its sale at all points of any importance in the Wheat-Growing Region; and receiving it in quantity, will furnish it at bottom figures.

This article, in the thousands of tons that have been used of it during the past sixteen years, has demonstrated its reliability in the field against all comers.

For further particulars, address

SOUTHERN FERTILIZING COMPANY,

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Sept-3m

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MANUFACTURER AND WHOLESALE AND RETAIL DEALER IN

Grates, Fenders, Stoves,

TIN, SHEET-IRON AND JAPANED WARE,

830 and 832 Main St. (bet. 8th and 9th), and corner of Fourteenth and Main Sts,

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MARBLEIZED MANTELS, KEROSENE LAMPS AND OIL, CUTLERY,

HOUSE-FURNISHING GOODS, &c.

ROOFING, PLUMBING, AND GAS-FITTING PROMPTLY ATTENDED TO.

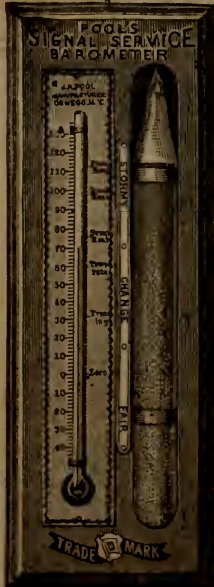
A GENERAL ASSORTMENT OF ALL KINDS OF GAS FIXTURES.

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WHAT WILL THE WEATHER BE TO-MORROW

Pool's Signal Service Barometer

OR STORM GLASS AND THERMOMETER COMBINED,
WILL TELL YOU!



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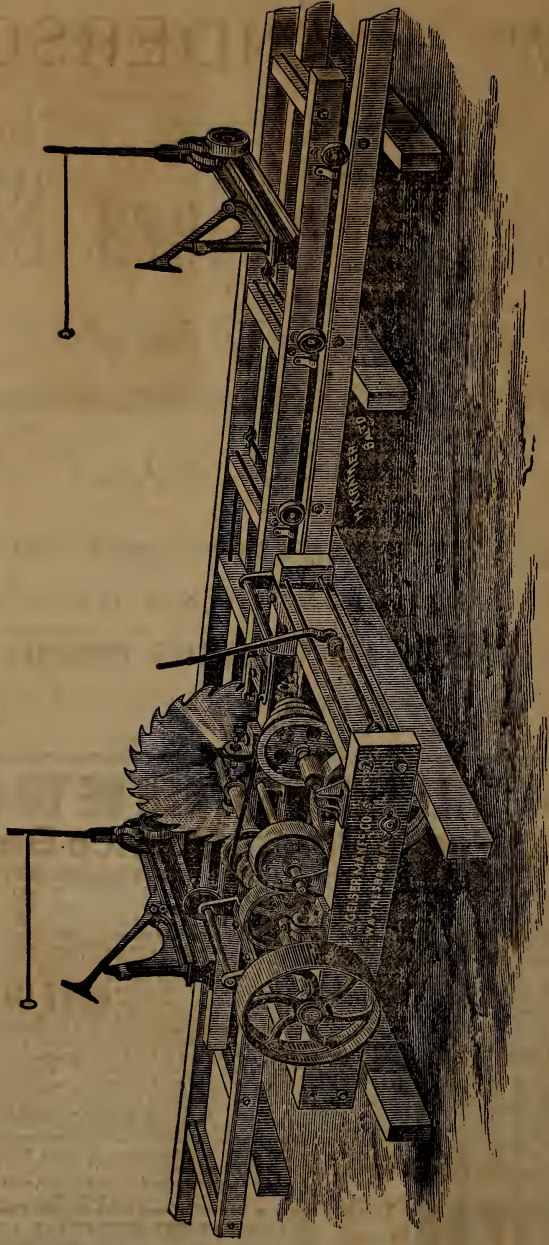
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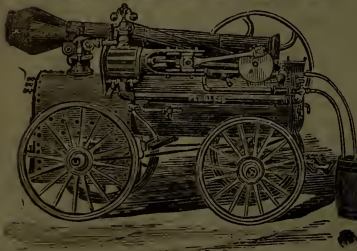
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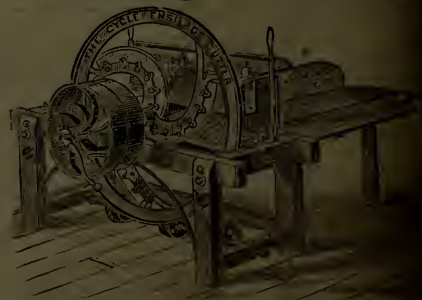
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