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THE SOUTHERN PLANTER AND FARMER,

DEVOTED TO

Agriculture, Horticulture, and Rural Affairs.

L. R. DICKINSON.....Editor and Proprietor.

RICHMOND, VA.,

JANUARY, 1876.

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THE SOUTHERN PLANTER & FARMER,

DEVOTED TO
AGRICULTURE, HORTICULTURE AND RURAL AFFAIRS

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

L. R. DICKINSON, EDITOR AND PROPRIETOR.

Vol. XXXVII. RICHMOND, VA., JANUARY, 1876. No. 1

[For the Southern Planter and Farmer.]

THE IMPORTANCE OF ESTABLISHING AN AGRICULTURAL AND GEOLOGICAL BUREAU IN VIRGINIA.

That something must be done, and that speedily, to revive the drooping spirits of our people, and give new life to our industries, to save us from individual and State bankruptcy, no prudent, patriotic citizen can deny. No people have suffered greater reverses of fortune, or borne them with more fortitude, than the people of Virginia. There is a limit, however, to endurance, a period beyond which hope ceases to animate, when exertion is paralysed by desolation and despair. But we need not despond if we use the means and resources with which Providence has so bountifully blessed us. Here lies our foundation for success and future prosperity. Our State possesses wonderful resources in variety and abundance, and with rare advantages. There lie hidden in her bosom quarries of marble, gypsum, slate, granite and other desirable stones; beds of coal, veins of iron, lead, copper, gold and other valuable metals, but feebly developed and many wholly undiscovered. Her soils embracing every variety from the rich alluviums of her rivers and coast, through the sandy, slaty and clay loams of the middle, to the limestone soils of the west, are susceptible of almost unlimited improvement, and the production of the finest specimens of agricultural and horticultural products grown in the temperate zone. Some of these are noted for producing in the greatest abundance and of the finest quality, tobacco, ground-peas and sweet potatoes. The State is threaded with noble rivers and smaller streams whose falls have never been disturbed by the busy hum of the shuttle and loom, and whose waves have never been diverted to turn the wheel of industry, to propel the ponderous hammer on the ringing anvil, to drive the spinning millstone or the rattling shafting for endless mechanisms.

To develop and utilize our resources and advantages is imperatively demanded, if we would repair old losses and bring new prosperity.

We must foster and encourage the wealth-producing industries of the State. Agriculture, mining and manufactures need all that science, aided by State patronage, can confer to develop our natural resources and to utilize them for the public good. Our constitution wisely provides for a bureau of statistics, agricultural chemistry and geology; and it is a sad misfortune that no effort has been made by our law-makers for its establishment. The loss to the farmers in *one year* from the want of reliable crop reports and through press estimates; the losses consequent upon the purchase and use of fertilizers containing ingredients useless upon the lands to which they were applied, and the want of proper information, as regards agricultural chemistry and economical geology, which it is the business of such a bureau to furnish, amounts to more *annually* than the cost of establishing such a bureau, making a thorough geological survey and soil map of the State, analyzing every variety of her soil, every commercial fertilizer offered for sale in her borders, and the expenses of the bureau for many years.

Our sister State, North Carolina, has demonstrated what can be done in this line with a very limited amount of means. With an annual appropriation of only five thousand dollars, for a few years, her distinguished and able Superintendent, Professor W. C. KERR, has made a geological, mineralogical, botanical and agricultural survey of the State, published a geological map of the same; collected mineral, botanical and geological specimens, arranged by counties in a well filled and well arranged museum, in which are to be found also fossils, shells, skeletons and curiosities found in various portions of the State; analyzed soils from every section of the State, with suggestions for the best mode for improving the same; calculated the extent and value of its water power and facilities for manufactories, made many valuable suggestions tending to a fuller development of the resources of the State; and published the result of his examinations, surveys and labors in a book of 450 pages, replete with most interesting and profitable information, an honor to its author and a credit to the State.

All honor to North Carolina who was the first to order a public geological survey of the State. And although partial surveys were commenced as far back as 1823, and continued at various times, by different superintendents, it remained for Professor KERR to consummate the work in a manner that will hand down his name to future generations as a benefactor of his race.

What has Virginia done in this line? Scarcely anything worthy of the subject, and what she commenced has never been finished, as the report of Professor ROGERS has never been published.

It is a significant fact that States that have made geological surveys, and maintain agricultural, geological and statistical bureaus, are more prosperous than those that neglect these indispensable aids to a speedy and profitable development of the resources of a State. The writer demonstrated in the November No. of the *Planter and Farmer*, that farming in New Jersey paid three times as much as the

same business did in Virginia. But New Jersey is fostering her agriculture and manufactures by judicious expenditures of money to develop them. So of Massachusetts, New York, Pennsylvania, Ohio, Michigan, California, Missouri, Georgia, Kentucky, and Tennessee.

Georgia, the empire State of the south, starts with \$13,000 appropriated by the State, and "employs a corps of eight geologists, chemists, &c." "Kentucky expends about \$20,000 per annum for the work of her survey."

North Carolina, as before remarked, expends about \$5,000 per annum, and "this covers all expenses, salaries, museum rent, field work, laboratory," &c.

By every principle of political and industrial economy, Virginia demands that a beginning should be made of developing her resources and encouraging her industries. The establishment of such a bureau will benefit every class of her population. According to the census of 1870, she had engaged in all occupations 412,665 persons. In manufacturing, mechanical and mining industries, 49,413—about 12 per cent. In trade and transportation, 20,181—about 5 per cent. In farming, 214,550—about 60 per cent. In all other occupations and in idleness, 98,521—about 23 per cent. The industrial classes that will be directly and mainly benefited by such a bureau, number 284,144 or 77 per cent. while the professional and personal occupations of the 23 per cent. will be incidentally benefited. On a subject therefore of such general importance, it is to be hoped that we are a *united people*. It will require a *united effort* of all our people to bring prosperity to our industries, and save our State from bankruptcy. We would fain believe that all classes of our population are eager with willing hearts and ready hands to build her up and place her where she should stand, pre-eminent, in the foremost rank, among the most energetic, the most advanced, the most prosperous of all the States.

We have indeed, a goodly heritage, let us not neglect opportunities for its improvement. Our Legislature will not satisfy the expectations of their constituents, if they fail to inaugurate substantial measures for the relief and encouragement of the people. We have suggested one that will benefit all, help the State and return a thousand fold the small appropriation necessary for its accomplishment.

Halifax county, Va.

R. L. RAGLAND.

NOTE BY THE EDITOR.—This appeal to the Legislature is not made a moment too soon, and we are full of hope that it will bear good fruit. The *personnel* of that body is in the highest degree creditable to the State, and we are persuaded that we may look for results consistent with its character.

While it was not so intended, and certainly not desired, the abolition of slavery is bearing with much greater hardship upon the North than upon the South, as sorely as it affected us in the direct loss it involved. The South before the war was the storehouse of crude materials, which the ingenuity of the North worked up into manufactured articles. The production of cotton goods, in particular, has proved the main source of wealth to England; it has not done less for New England. Mr. GLADSTONE declared, not long ago, that the wealth of England

had increased more since the year 1800 than it had from the invasion of Cæsar to that time. The energy in the South that was devoted almost wholly to the growth of raw products has, by the destruction of its large estates, or rather the ability to conduct them, been largely turned into the channels of trade and manufactures. We find that we can do both, and that the advantages are greatly in our favor. Reasonably good government and an honest presentation of the inducements we have to offer, will bring about a transfer of capital to our limits, so ample, that the most sanguine amongst us will be astonished. As it is, cotton factories have been already established to such an extent as to double Southern consumption in three years. A pound of cotton turned into number 14 yarn can be spun now in the South for $3\frac{1}{2}$ cents less than in New England. This added to the fact that the raw material is delivered at the door of the factory, if desired, "in the seed," thus divesting it of the charges the Northern manufacturer must incur before it reaches him, exhibits an advantage that must operate as certainly as the disposition of water to flow down hill. Capital goes where it will pay best. While the Cotton States have their advantages, Virginia has not been left barren—her climate is genial because her location is between the North and the South; her soils are mainly rock-made and, therefore, can never be exhausted; her rivers are numerous and abound with available water-power; her timber is noted for its excellence; her mountain slopes admit of stock-raising on the largest scale, and also of wine production; her quarries show granite, soapstone, slate and limestone in abundance, and her mines yield the whole range of metals from gold to iron. All this we are told in a general way, and it is a fact; *but the world must know the details, AND KNOW THEM WITH ABSOLUTE EXACTNESS.* What does it avail a man if he has a house filled with food, and the doors and windows barred so securely as to keep him from getting into it. He knows the food is there, but failing to get at it, he will either starve to death or go to some other country where he can get what he needs. We have had such a house these many years, but standing closed against its people, the brains of men that would have added glory to their native State, being useless there, have left its borders to find a lodgment with people whose genius rose above the mere business of local politics. Men of only common prudence, having means, are not satisfied with declamation; *they must know the facts.* God has not been unmindful of us. He has made the provision; are we men if we cannot administer it? Can we afford to delay a single year? We will flounder forever if we insist upon placing the burden of our maintenance so entirely upon the tiller of the soil; not that he is unwilling to do his part, but his calling of all others, has been left the worst off by the war. With ALL the forces at our command, brought into only reasonable play, the burden will be so divided that no one will feel it. We have left us at least two men in the State who can find out what we have, where it is located, and what it promises. They are Major JED. HOTCHKISS and M. F. MAURY, Jr. The office might, without confusion, have attached to it an arrangement for the collection and tabulation of the statistics of the State. We should know, every year, the actual extent of our tobacco crop, not in hogsheads but in pounds; the area of land not in cultivation, distinguishing between open and wood land; the debt of the several counties and cities, and their ability to provide for it; indeed, everything needed to inform an immigrant beforehand of what we have and are as a place for him to locate. It will not do to make him dependent upon private sources of information in such matters. Capital is timid, and must be fortified by disinterested assurances before

it will change its lodgment. We have had (and we presume this is the experience of many in the larger towns of the State) numerous inquiries about our resources from intelligent Englishmen and solid men in the North, but had to make the humiliating confession that we, as a State, had no collection, no bureau, no anything in fact that would show what we had. How can we expect other people to invest their money in the development of our resources, when we, ourselves have not shown interest enough in them to present even their claims to attention.

Local politics are only a good thing to the extent that their results inure to the public benefit. Government otherwise is a curse instead of a blessing.

In founding a department like that here contemplated, we would show to the world that we were using our best endeavors to place the State on such a foundation of prosperity as would enable her to look her creditors in the face, and make good to them the last dollar she owes. It would do more; it would present a spectacle of natural advantages, so diversified in their character, and each of so much moment as a source of wealth, that an inpouring of good white blood might be assuredly counted on, and the old Commonwealth given again the pre-eminence she enjoyed in days gone by.

We cannot boast ourselves worthy sons without we *add* to the achievements of our fathers.

[For the Southern Planter and Farmer.]

A PHYSICAL SURVEY OF THE STATE—A MOST PRESSING NEED.

That Virginia possesses great natural resources is no doubt true, but they lie all undeveloped, crudely scattered upon the surface, or darkly hidden in the bowels of the earth. Nothing is so much and sadly needed as an exact, systematic, *authoritative* statement of the extent and whereabouts of these resources. This fact has been fully recognized by some of our ablest men, but their efforts have failed to awaken in the public mind a due appreciation of this great public want. Gen. F. H. Smith, Superintendent of the Virginia Military Institute, wisely conceived the idea of making that Institution the focus of this great State enterprise, and enlisted in the undertaking Col. William Gilham, a profoundly able chemist and geologist, and Com. M. F. Maury, the greatest scientific man of his day. The work was indeed, well begun, but Maury and Gilham are dead; the efforts of Gen. Smith are prostrated; other and similar efforts have failed. To-day comparatively nothing is known of the extent and availability of the resources of the State. So long as this fact remains, all efforts to attract hither immigration and capital will be fruitless.

Plainly enough a man who has sense enough to make money or to use money is not to be induced to venture his means in enterprises based on vague and glittering generalities. He wishes to know for a certainty something of quantity, quality, accessibility, facility of transportation and numberless minute things. The money holder descends into exact particulars; he pays no attention to the newspaper correspondent setting forth with declamatory enthusiasm, that the mountains of Virginia are teeming with the most valuable minerals, because he knows well that such a person knows nothing of what

minerals are there, or what ores there exist, in what quantities found; whether the mines are accessible and workable, whether fuel, limestone, sandstone, water-power are obtainable; and what is worse, no newspaper man can refer the capitalist to any man who can answer his questions, for we have no State geologist and no man knows what is worth knowing concerning these matters. Let us enter further into particulars: suppose some capitalist who has an interest in coal inquires concerning the coals of the State? he wishes to know what is the heating power of the coal? if converted into gas, what proportion of gas does it yield? what is the lighting power of that gas? what per cent. of sulphur does the coal contain? what part of it is driven off in cokeing, and how much remains in the coke? No man upon the earth can answer these questions, because no man knows the answer to any one of them. But suppose an agriculturist shall ask a few questions of our immigration bureau or its agent, a sheep husbandman it may be—what sorts of sheep do best in your State? what is the average weight of fleece? what number of lambs to one hundred ewes? what average annual losses by dogs? Who can answer? who knows? the best informed can only guess. If these questions were asked in our sister State of Georgia, for instance, the commissioner of agriculture for that State could promptly reply "*ninety-four thousand dogs in Georgia, slew last year, twenty-eight thousand six hundred sheep.*" Doubtless, it was much worse in Virginia, but no man knows. The State of Virginia is without statistics; such as have been prepared by the Federal Government are prepared for the most part under the influence of partisan malice, for the purpose of hiding and perverting the truth. While this state of things remains, not only shall we seek in vain to induce foreign capitalists and foreign laborers to come among us, but we shall not be able to keep what we have; our most enterprising young men will seek their fortunes abroad, and such little surplus money as may be owned in Virginia will be employed in foreign investments, as is the case even now, simply because no definite information can be had concerning home industries and home resources. We have an immigration bureau and it will not be difficult to supply them with the means to employ a competent geologist, to collect at the capitol a museum of samples of the industrial products and raw materials of the State, to exhibit and give exact and detailed information concerning the same, and to prepare a report for publication. I have before me the report for 1875, of Prof. W. C. Kerr, State Geologist of North Carolina, which is replete with valuable information, valuable because definite, exact, *authoritative*. I had also the pleasure lately of visiting his museum at Raleigh, and hearing his able and lucid explanations and comments upon his collections. It cannot be doubted that he has done more to develop enterprise at home, and to attract capital and population to the State in four or five years, than the immigration bureau could have done without his aid in forty. Yet an appropriation of \$5000 a year is all that he has had to work upon, out of which comes his own salary. I trust that some one who can com-

mand public attention will take hold of this matter, and that we shall have a State Geologist in Virginia.

Montgomery county, Va.

M. G. ELLZEY.

[NOTE BY THE EDITOR.—What prudent man will change his location without he is assured he can better his condition? How can he have this assurance, in respect of Virginia, if we continue to have no *official* arrangement through which he can ascertain what we have, where it is, and what it promises? It behooves, then, every tax-payer in the State to do his best to induce the Legislature to make this provision, *and to make it without delay.*

Georgia, Tennessee, Texas, North Carolina and other States in the South, whose progress is known to be forward, have such bureaux, and they are worked with untiring energy.

What does it profit us to have a goodly heritage if we do not put it to use, for that is what it was made for; and are we men if we spend our time in complaining instead of working to make the *very best* out of what is left us?]

[For the Southern Planter and Farmer.]

NOTES ABOUT FARMING,

The best plan I have tried for improving land is to use finely ground Charleston Phosphate, which can be bought at \$20 per ton, mixed with one-fifth of Guanape Guano; about 200 pounds of this mixture to the acre is applied to wheat fallow, drilled in, the cost per acre being about \$3.50.

The next Spring, about the 8th or 10th of March, clover seed is sowed, one-half the quantity to be applied; the other half is sowed across the first sowing about the 25th of March, due reference being had to the condition of the ground. The next year this clover should be fallowed or allowed to fall on the land, merely grazing enough to trample down the clover to some extent. Land cannot be improved rapidly by using fertilizers to make clover and then grazing or cutting the clover. Farm manures and ashes are also used, and surplus straw spread over the land; under this system I have seen poor land, costing \$16 per acre, pay for itself in five years. Corn is greatly benefited by applying a mixture of equal parts of Charleston Phosphate, ashes, and plaster to the hill, at the rate of 200 or 300 pounds to the acre; the ashes should be from hard wood and unleached. Besides being an excellent stimulant to the young corn, it has been found to be a complete preventive of the ravages of the cut worm and bore worm. A very excellent fertilizer for corn may be made by penning sheep at night during the late Fall, Winter and early Spring, under cover, and littering from time to time with chaff. At corn planting time this manure will be found to be really dry and in a finely divided state, or, in a condition to pulverize easily; a small quantity should be put in each hill. The increase in the yield of corn will often more than pay the expense of keeping the sheep. It is deemed important to save carefully, under cover, the ashes made upon the farm; they pay best applied to corn. If the ashes made in Virginia were carefully saved and applied to the

corn crop, there would be a large increase in the yield; I think fully one-fourth.

In the preparation of all Superphosphates, a large part of the phosphate of lime is converted into sulphate of lime or plaster, and the planter pays for this plaster at the rate of \$50 or \$60 per ton, five or six times its value, and my theory is that it is best to use the finely ground, undissolved Charleston Phosphate; that the vital action of the plants, aided by the constituents of the soil and Guanape Guano or ashes, will dissolve what phosphate they require, and that the surplus will remain in the soil, stored up for future use, and not liable to be leached out like the soluble Super Phosphate by rain.

I have been taught that it was very desirable to plow red land for corn in the Fall and early Winter. My neighbor, who is very successful with corn and wheat, says this is a mistake; that land is injured by being exposed all winter to the atmospheric influences; that its salts are more readily washed out by the rains, and that by alternate freezing and thawing the land is made too light to produce wheat. He has a small farm and makes more wheat than those five or six times larger. My neighbor states that Fall and Winter plowing have injured the capacity of these lands to produce wheat. His rotation is a clover fallow for wheat followed by corn and then wheat again with clover.

What do you think of this idea?

KELTON.

NOTE BY THE EDITOR.—Quite a controversy sprang up several years ago among the agricultural chemists in this country as to whether it was really necessary that phosphatic materials should be treated with acid or not. One side held that it was sufficient simply to grind them to an impalpable powder, the soil itself doing the rest of the work—that is, putting them in a shape to be taken into the circulation of the plant. A gentleman in this city, whose business requires constant attention to such matters, took the trouble to submit the question to what are generally accepted, since LIEBIG'S death, as the most trustworthy authorities, in agricultural chemistry, in the world, namely, Dr. VOELCKER, Chemist of the Royal Agricultural Society of England; M. VILLE, of the Emperor's farm at Vincennes, France; and Prof. JOHNSON, of Yale College, New Haven. Their replies are too full to be reproduced here. The substance is as follows: On peaty soils, abounding in humid and similar organic acids, and also on poor, purely sandy soils, the worst superphosphates, that is to say, superphosphates poor in soluble phosphoric acid, have a decidedly better effect upon the crops to which they are applied than superphosphates rich in soluble phosphoric acid. In the first case, to apply soluble phosphoric acid would be simply adding acid to acid, of which there was already existing too much for health to the land; and in the second, the absence of basic soil constituents sufficient to neutralize the soluble phosphoric acid renders it unavailable as food for crop plants. When these bases exist in abundance, as in clay lands, the safest course is to resort to soluble phosphoric acid, especially if it is desired to have a reasonably speedy return for the outlay. The action of manures is two-fold—first, in rendering available the crude materials in the soil with which they come in contact; and second, in contributing directly to the store.

As to the propriety of exposing broken land to the action of the elements during winter, we can only say that no point in good husbandry has been more generally accepted the world over than this practice. Old GEORGE HERBERT (and the pens of few men dropped words of purer gold than his) says: "Frost is God's plowman." It would seem impossible that any of the soluble salts in the soil should be lost if the land was cultivated to a proper depth. However, the crucible of experiment determines all things, and the world may err even in this.

[For the Southern Planter and Farmer.]

THINGS IN GEORGIA.

This is a terrible year with the planters of Georgia; about half crops of cotton, and prices at much less than cost of production, will cause much suffering and a vast bankruptcy.

The labor question still agitates the people, and will do so, until the landed proprietors cease to tenant and work on shares. Happy I am to find a very decided revolution in the minds of the people on this subject.

The planters of this State are seeding large crops of small grain this Fall, but to cultivate grain in this country for market is, in my judgment, folly. The older Cotton States of this Union will have to become manufacturing along with mixed husbandry. It is idle for us to compete with Arkansas, Mississippi and Texas in raising cotton. We calculate how many acres to the bale; *they*, how many bales to the acre.

The three States named are capable, and will in time, and in a very short time, raise enough cotton for the world. It costs us as much to cultivate an acre as it does them, and one acre of their land will produce a bale, while it takes three of ours to make a bale, with about eighteen dollars for manure.

It is equally futile for Virginia and other Southern States to attempt to compete with the great West in grain raising. All you can do is to live at home, and make all you can by tobacco and manufacturing.

Why then do you Virginians demand such prices for your lands?

A gentleman, a real estate broker in Richmond, sending me a list of James River plantations for sale, puts them at forty, thirty and twenty dollars per acre. What inducements for plain workingmen to buy? Were I a Vanderbilt or an A. T. Stewart, I would buy Brandon, Westover, Shirley and all the rest of those fine old classic estates on account of my undying love for Virginia; but this is a day of utility, a struggle for bread, and if holders of land wish to sell or are obliged to sell, they certainly would serve their best interest to meet the loss, be it real or imaginary, at once; for depend upon it, a crash is approaching that will carry under millions of the best people of this nation.

Nothing will save us from want or general ruin but the most rigid

economy, unflinching industry and the total banishment of show, pride and ostentatious living.

Allington, Georgia.

S. W.

NOTE BY THE EDITOR.—We are sorry our correspondent did not assign the reasons for his assertions. We are altogether more hopeful. The truth is, whatever there is substantial in the future of this country will be found *in the South*. When only two of her crops, cotton and tobacco, sell annually for \$350,000,000, something *must* remain to the people who produce them.

[For the Southern Planter and Farmer.]

SOME POINTS ABOUT THE USE OF COMMERCIAL FERTILIZERS.

Much has been written for and against the use of commercial fertilizers, and the question is still very far from being settled. Some writers throw all the blame of worn out soils on commercial fertilizers, but I do not think this can fairly be done in any case. Soils are never worn out by fertilizers of any kind. That farmers who use commercial fertilizers sometimes exhaust their soils very rapidly, cannot be denied; but the same is true of farmers who do not use them. It is the farmer that exhausts the soil, and the sooner this fact is fully understood by him, the better it will be. At least four-fifths of those engaged in agriculture are ignorant of the elements and conditions on which fertility of the soil depends; and so long as this is the case, the soil will be exhausted from year to year no matter whether they use commercial fertilizers or not.

Every farmer who is well posted on the subject, knows that the productiveness of a soil depends upon the presence of certain elements in the right condition, to be appropriated by the growing crop, and that where there is a deficiency of these or any of them, its productiveness will be diminished to the same extent, and that the only remedy is to supply the deficiency in some way. It is often the case that the deficiency can be supplied very economically by the use of commercial fertilizers, and many who have pursued this course have eventually exhausted their lands; but it is untenable to say that it was done by the use of said fertilizers—it would be more consistent to say it was done by the plow and hoe. Every crop that is removed from a farm reduces its productive capacity to a certain extent, and the only way to prevent its final exhaustion is to return the fertilizing elements taken off with the crop. This cannot be done without the intervention of commercial fertilizers, especially where grain and hay are sold. But commercial fertilizers alone will not do it, although they are indispensable. It is necessary to keep the farm supplied with vegetable matter by turning under pea vines, clover, stubble, &c., and not allow stock to run on it much at any time. Everything consumed on the farm by man or beast should be carefully saved and returned to the farm. Good stalls should be pro-

vided for the farm stock of all kinds, and they should be kept in them when not needed for other use.

The word 'permanent' in connection with fertilizers should be discarded at once and forever. Anything that is permanent in the soil is worthless as a fertilizer. Our farmers must learn that, in order to keep their farms up to a high state of productiveness, they must be constantly feeding the soil; and in order to be prosperous in their occupation, they must be more united, and act more in concert, so as to enable them to take some part in regulating the prices of what they sell and buy.

Owing to ignorance of the principles of agriculture, four-fifths of the present generation engaged in it will go on with the work of exhaustion as long as they live. Much good might be done to check it if the readers of agricultural papers would take advantage of every opportunity to induce their neighbors to subscribe also.

Ashville, Ala.

M. H. ZELLNER.

[For the Southern Planter and Farmer.]

AN EXPERIMENT IN DRAINAGE.

The wheat sowed and corn safely housed, our thoughts should be directed to the preparation of the land for next year's crops of corn and tobacco. These crops in this, the Piedmont section, particularly love the rich bottoms bordering on the streams, making down from the mountains; and while they are usually free from any extensive swamps or morasses, the beauty and uniformity of our crops on them are frequently marred by spots of more or less extent, rendered unproductive by excess of moisture. Many of these spots are isolated, with dry and productive ground all around, sometimes the water shows on the top of the ground, and often its presence is only indicated by its effects on the vegetation. One of these spots I have drained and dried in a very cheap way. The difficulty about its drainage heretofore has been that it was so far from the stream, and so much higher land intervened, that it was not thought that the increase of crop on it would pay for the cutting and maintaining even a select drain through the large extent of naturally dry ground to the stream.

I had started to work on it determined to get rid of the eyesore if possible, when the idea occurred to my overseer, Mr. Sim Flynt, that inasmuch as all the water that rose on the wet spot sunk and found its way to the stream under the dry ground, by which it was surrounded, now if he were to cut a ditch through the wet spot so as to draw off the water and let it terminate in a pit or well in the dry ground between the branch and the wet place, that perhaps the water would continue to find its way from the ditch to the branch in the same way that it had before passed from the wet place. He therefore cut a deep narrow ditch about 20 yards long through the wet land and ended it in a pit 6 feet long, 4½ feet deep, 3 feet wide

in the dry ground, and left the whole open to see how it would work.

Quite a stream of water rose in the ditch and flowed into the pit, covering the bottom to the depth of about 3 inches, but at the end of four days did not seem to have risen any. We then had a quite heavy two day's rain, which saturated the ground and formed as severe a test as our experiment will probably have to undergo, except in times of freshet. Of course we watched the result with great interest. The water running into the ditch had increased in volume but little, showing that its source was not near the surface, and the depth of water in the pit had only increased to about 5 inches, which in a few days shrunk back to what it was before. All of which showed that the natural subsoil drainage was amply sufficient to carry the surface and ditch water both, even in a rainy season.

As this test satisfied me, the ditch was secreted with poles, and the pit was filled with stones, so arranged as to leave as much of the bottom and sides exposed to the water as possible, to within two feet of the top, and then with earth, completely hiding the whole drain and pit.

This was done last spring, and though the past season has been quite a wet one, the crop of corn on this spot, from being an eyesore was changed into the best in the field, having no appearance of water either where the ditch was cut or where it terminated in the pit.

The piece of ground drained was near the foot of the hill about 120 yards from the stream and was lower than some of the intervening land. To have drained it in the ordinary way, I would have had to cut 120 yards of ditch 6 feet deep a part of the way in order to get it 3 feet at the wet ground.

In this way it was done, 20 yards of ditch, 3 to 3½ feet sufficient. The top soil over both wet and dry land is a red clay loam; about 2 feet under it in the wet place is a stratum of white micaceous clay very stiff and seemingly impervious to water, which seemed to rest on the bed rock, though as we did not cut through it, I cannot say how thick it is. This white clay shades off to blueish, and in the dry land either abruptly terminates, or dips under a red alluvial formation, which contains horizontal layers of gravel an inch or two thick at considerable intervals.

I have many other such spots upon which I shall try the same process, and from their similarity to the one mentioned above, I expect to be as successful in laying them. And I have been thus particular about the details, that other farmers who have such ugly spots on their bottoms (or hills either) may judge whether the same inexpensive process might not answer in their cases also.

H. M. MAGRUDER.

Albemarle County, Oct. 30, 1875.

Aim to do some permanent good, that your life may be one of usefulness.

SPEECH MADE IN NEW YORK BY GEN. FITZHUGH LEE,
ON IMMIGRATION.

GENTLEMEN:—Some two months ago, a number of persons residing in Fredericksburg, Virginia, and in the counties lying adjacent thereto, assembled in conference with a view of taking into consideration the improvement of their section of the State of Virginia. The termination of the war found them with the same area of surface as at its commencement, not even curtailed by the loss of the forty acres (and mule), so enthusiastically promised by the most violent wing of their conquerors to the negro. Yes, the large productive, profitable estates were there; there in most instances in their former grand proportions and beauty; there I may say, stretched out before their eyes, thirsting for cultivation; there, inanimate, I admit, but speaking almost as to their many and great advantages; there, as it were, ready to uprise and welcome some one who would take care of them; and what could the land owner reply to all that? Sad and sorrowful was his response—I recognize your fertility, I know your profits, I am confident of your ability to repay me, but the disastrous termination of the war has indeed left me financially feeble and unable to employ and pay the labor necessary to your improvement, and your broad fertile fields must lie idle unless I can get some assistance to develop you; manifestly the pathway of hope was illumined by but a single ray of light, but which ray, if properly pursued and followed up, might, like the sound of the day of promise, widen and deepen, until at last it spread out unto a glorious brightness; and what was that comforting, consoling, absorbing thought? Why, that we might try concerted action and truthful representation, bring to our aid gentlemen from other sections, whose means the war had not lessened, and who would help us once more to march along the road to prosperity. Full of such hopes, and as a result of such co-operative views, the Rappahannock and Potomac Immigration Society was organized and composed of the property holders of our district of Tidewater Virginia. A representation of that society is here in your midst to-day, here to tell you how we live, where we live, and what we have, and invite you cordially to come down and see for yourselves the inducements we offer.

Since we ceased to fight each other in our country, two kinds of immigrants have appeared to tell us what they knew. The first, a class unprincipled, rapacious, eager for booty, thirsting for gain, and debauched enough to take advantage of our prostrate condition, to enrich and elevate themselves. They cajoled and tampered with our laborers. By means of Federal bayonets, sharpened and pointed, to maintain party supremacy, they were hoisted into office, and kept there. The damage done to both sections was great. To the masses South, they appeared under the general appellation of northern men, and representatives of your country, which of course was not productive of good feeling; our whole progress was checked and retarded.

The responsibility for their peculations and sins must be borne by

one of the political parties of the country, which, in view of a possible change in the administration of affairs, is trying to unload themselves of them even now. Their presence was most injurious to Southern people of both colors, and thank God, in the language of your own "New York Herald," the carpetbag element is fast disappearing from our southern politics.

The second class of immigrants referred to, were those who devoted more time to business, and less to politics, who came to us with the idea that we knew nothing about farming and they everything, and if they had (for example) 1000 dollars, they should buy with it if possible, 1000 acres of land—the more surface for the money, the better off—because their superior energy and knowledge would soon restore it to fertility, and cause it to blossom as the rose.

It is useless to take your time up by telling you that that class of immigrants was not successful either in the cotton, tobacco, or grain growing sections of our country. As a general thing, they invested their whole capital in the original purchase, leaving no reserve to fall back upon, trusting to the first year's yield to reimburse them in whole or part, and as a result of their great agricultural sagacity, they too have left us and are now wiser and I trust better men.

What we really want, gentlemen, and have come upon this trip to look for, are men with a capital, if of only a few thousand dollars, who will expend a portion of it only in the purchase of our tide-water lands, reserving a sum, to provide against the rainy day, and a bad crop year should it come. To all such we can, and will promise, successful pecuniary results—and we confidently assert that for a given amount of capital invested in our river lands, a man can live with more comfort, more independence, and with more returns for it than an investment of an equal amount in any other way. Our grounds are easily cultivated—no stumps or stones; and broad rivers flow ready to carry to near markets for but a few cents per bushel, as to grain, their products; and such is the abundance of oysters, crabs, fish and wild fowl, that ours was the only section of the State, where just after the war, the people felt no apprehension or inconvenience from the scarcity of food to sustain life. With such fertile lands, such a genial climate, with mines of shell and marl and muck, all we want is to get the assistance which would be derived from parting with a portion, in order to pay the labor necessary to be used to develop the remainder.

The City of Fredericksburg, around which this representation centres, has an unrivalled water power, and I am very glad to see present some gentlemen who can explain that much better than I can. It is a city whose refinement and hospitality are proverbial in the State, and its citizens are numbered among the most orderly, industrious of the whole country, bombarded and wrecked by the wrestle within its limits of armies during the war; the fortunes of the inhabitants were indeed crushed—but little being left to begin once more their respective business callings.

Such, gentlemen, is our situation—may I hope you understand it—and our reasons for the organization you see here to-day.

Politically, we are in a prosperous condition—the State is well governed with order and quiet reigning throughout its borders—its debt, by reason of renewed economy and retrenchment and the recent constitutional amendments proposed, is marching to a satisfactory and honorable solution. The great majority of us, I confess candidly, are inclined to think as an eminent American has said, that “the recent financial troubles, the stagnation of business, the depression of all industries, the extravagance and corruption of the public service, the demoralization of the administration, the personal government of General Grant, the third term project, the violation of all law in the policy adopted towards the Southern States as a means thereto; that all of these have filled the people with uneasiness, and they are anxiously seeking a better state of things;” all of which means we desire a change—but that is not going to prevent us from giving a cordial welcome to all bona fide settlers who may come among us, even though they differ politically with us. We want reconciliation to take the place of reconstruction.

Virginia gave to our country, without expecting or receiving any reward, two-thirds of her entire territory; Kentucky, Ohio, Indiana and Illinois rose up from her loins, and even after that one-third more of her territory was seized and taken from her during the late war, and another State carried out—a blow hard to recover from. Yes, that too we are trying to regard as a dead issue, so pressing are the living ones upon our notice. What is left is a goodly heritage, and we come here to ask you to come down and help us enjoy it; for we do indeed regard immigration to our State as the prophets rod, which is to smite the rock of her hidden resources, and cause the waters to flow out for the refreshing and revival of the tribes of her people.

[For the Southern Planter and Farmer.]

SALICYLIC ACID—ITS VALUE IN CONNECTION WITH DOMESTIC ECONOMY AND MANUFACTURES.

BY PROF. J. W. MALLETT, UNIVERSITY OF VIRGINIA.

Salicylic acid is a substance which has been known to scientific chemists for a great many years, but like many other materials of practical value, it has long been looked upon as merely curious and interesting to men of science and as having nothing to do with every day life, until lately a careful study of it has shown how it may be prepared cheaply and in large quantity, and has, at the same time, proved that it possesses in a very remarkable degree the power of *preventing fermentation and putrefaction*; a power which may be usefully applied in a number of different directions. Some of these applications are of a nature to render a short account of what is so far known of this remarkable substance not unsuitable for the pages of the “*Planter and Farmer*.”

Passing over older methods of preparing the acid, the following is the process which we owe to M. M. Kolbe and Lautemann, of Leipzig, who have been busily at work upon the subject for the last two or three years. Carboic acid, now pretty generally known as a powerful disinfectant, is exactly neutralized with caustic soda, the mixture thoroughly dried by heat, and dry carbonic acid gas passed over it, first at the temperature of boiling water and then with increasing heat up to about 450° F. The mass so produced is allowed to cool, dissolved in water, and one of the common mineral acids (sulphuric or hydrochloric) added; a deposit settles to the bottom of the vessel which is salicylic acid not quite pure; it may be purified by dissolving again in hot water, from which it separates on cooling, or, better, it may be exposed to a current of super-heated steam, which carries it along and deposits it in a pure state in the cooler part of the vessel used, while the impurities are left behind.

As commonly sold salicylic acid is a crystalline powder of yellowish color, but when quite pure it is beautifully white and in delicate needles. It can be melted and driven off in vapor by heat; it requires about three hundred times its own weight of cold water to dissolve it, but dissolves to a much greater extent in hot water, in alcohol, glycerine and some other liquids; it has no smell, only a slight sweetish taste, and is *not poisonous*, an important point of difference between this substance and carboic acid. In the concentrated form it produces a little, but not serious irritation of the lining membrane of the throat and stomach, while carboic acid attacks violently even the outer skin—in fact, just as common washing soda produces the same sort of general effects as strong caustic lye, but in a much milder and less destructive way, so salicylic acid, which belongs to the same class of agents as carboic acid, behaves as a much gentler and more manageable material. Whenever any of those changes in animal or vegetable matter which we speak of as the various stages of fermentation or putrefaction are to be prevented or arrested, this new substance may be advantageously brought to bear.

To the surgeon it proves valuable in dressing wounds and sores, and its solution may be used to keep wet the bandage employed.

It has been as yet but imperfectly tested as a medicinal agent, but already results have been obtained showing that when properly dissolved it may be taken in doses of 15 or 20 grains in 24 hours without any inconvenience, while it promises to be of essential service in the treatment of many formidable diseases, scarlet, typhus and typhoid fevers, small-pox, cholera, &c.; in diphtheria it has given very valuable results. It offers similar advantages in the treatment of contagious diseases of the lower animals, as of sheep, and its price is being rapidly diminished so as to make it available for such purposes without too great expense.

In numerous manufactures, such as those of glue, of leather, of the albumen of blood and of eggs used by calico printers, of extracts of dye-woods and of tanning materials, of starch, and gen-

erally of any form of organic matter liable to spoil by standing exposed to air, alteration may be prevented and valuable material saved by the addition of this anti-ferment. But it is chiefly to direct attention to the applications which may be made of salicylic acid for farming and domestic purposes that this little article is written.

In making wine, fermentation may be regulated, and when the proper stage has been reached may be stopped, while many of the after changes and so-called "diseases" of wine may be prevented by the use of this substance in such small quantity as to prove neither disagreeable nor injurious. Special experiment seems to be needed with each kind of wine in order to fix the exact quantity proper to be used, but it has been suggested that in such experiments about $1\frac{1}{2}$ to $3\frac{1}{2}$ grains of the acid (first dissolved in alcohol or strong spirit) to each gallon of wine may be tried with a view to make the latter keep free from further change.

Vinegar may be similarly treated, with rather larger amounts of salicylic acid, to preserve it free from "mother" or mould.

Drinking water may be kept sweet and good, even in wooden vessels, by a mere trace of the acid. In places like New Orleans, where rain water is habitually caught and kept in large wooden cisterns for months, this point becomes decidedly important.

Beverages for the sick, such as barley water, lemonade and beef tea or soup, which often have to stand ready for use for hours of days in hot weather, may be prevented from spoiling by the like means; the same remark applies to vegetable medicines, infusions or barks, herbs, teas, &c. An excellent tooth wash or tooth powder may be made from the acid suitably diluted in liquid or solid form. It has been found that fresh milk to which but 20 or 25 grains of salicylic acid per gallon had been added, when exposed to the air at 65° F., curdled 36 hours later than milk under the same circumstances to which no addition had been made. This delay of the "turning" or curdling of milk may not only prove directly useful in preserving it for drinking at the table, but may increase the yield of butter by affording time for a larger amount of cream to rise before skimming.

The addition to butter itself of 10 or 12 grains of the acid for each pound makes it keep much longer fresh even in hot summer weather.

Eggs have in like manner been successfully prepared for keeping by laying them in water in which the acid in powder had been suspended.

Fresh meat may be placed in a vessel and covered with water, in which as much of the preservative as possible has been dissolved in the cold (only about 1 part in 300) or may be rubbed with the solid acid in powder and the latter washed off when the meat is to be cooked; meat so treated has been proved to keep at least a week in hot weather; the taste is not injured, but the natural red color is in a measure lost, the meat becoming pale or gray in appearance.

Preserved fruits, jellies, &c., may be protected from souring and moulding by a little salicylic acid in each jar.

Starch paste for laundry use may be similarly kept without sourness or unpleasant smell; ink may be preserved clear and free from mould, and mucilage prevented from spoiling by a very few grains of this useful substance stirred into the bottle.

Other applications will from time to time suggest themselves, and numerous experiments may advantageously be made to settle the amount of preservative to use in each special case and the best methods of applying it.

One point should be remembered; that the compounds of salicylic acid with alkalis do not possess the anti-fermentative power of the acid itself, and therefore in using the latter contact with alkaline substances, soap for instance, should be avoided.

University of Virginia.

J. W. MALLET.

ADDRESS OF B. JOHNSON BARBOUR, ESQ., BEFORE THE
ANNUAL MEETING OF THE VIRGINIA AGRICULTURAL
SOCIETY, OCTOBER 27TH, 1875.

When I attempted to measure my own fitness for the duty of my present position, I was somewhat inclined to suspect a keen, though lurking irony in the call made by the Executive Committee of the Agricultural Society of Virginia, until it occurred to me that a hint had been taken from the *coup de theatre* (stage trick) of temperance lecturers, where an "awful example" gives bold relief to some "shining light"; and so I fear my brother farmers who excel in the profession were willing to present me in striking contrast, that their own superiority—

"Like bright metal on a sullen ground;
Might show more goodly, and attract more eyes
Than that which has no foil to set it off."

Presently my wounded vanity offered some mitigation in the suggestion that the call was due, in some slight measure, to a kind remembrance and recognition of the humble but zealous and hearty share I had in the organization of the present system of State Fairs in Virginia. At all events, I think that our present condition, the stormy period through which we have passed, the fearful trials to which our Society, like our State, has been subjected, and the gratifying fact that over all difficulties and obstructions it has reached its majority, and is now firmly established and regarded as a fixed and beneficent institution, justify us in taking a rapid retrospect of its history, from its lusty infancy to the present time; and I might as well just here forestall and deprecate the criticism which ultimately and inevitably must fall upon my diffuse and desultory style of speech. So many topics present themselves, so many causes have combined to produce our present condition, that the difficulty lies in refusing admittance to the multitude, and in selecting the more interesting and important incidents and reflections from that vast concourse of memories which rush with the force of many waters on the mind of any Virginian who has been an actor or interested witness in the events of the past twenty or twenty-five years.

Distinctly I remember (and by the way, it was in the "bleak December" of 1852) the small and, as I must style it, the melancholy assemblage in the hall of the House of Delegates, of that resolute band who

in the darkest and most trying hours had never deserted the cause of agriculture in Virginia. It was before the days of artificial gas, and a few tallow candles gave us that "transpicuous gloom" which old Warburton thought was a better reading than Milton's "Darkness Visible," and made almost spectral figures of the few who were scattered at irregular intervals over the hall, "a world too wide" for this Spartan band. Gleaming through the semi-darkness was the unquenchable fire that glared in the eyes of our venerable President, EDMUND RUFFIN, and his still abundant locks were almost radiant in their whiteness. You can readily believe that whilst it was a determined, it was by no means an animated meeting. Presently there was a little fire, even though it were the fire of indignation, when some of the younger members ventured to suggest that though agriculture and agricultural contemplation might be its own exceeding great reward to those who looked at it as our German friends say, subjectively, that our languishing condition demonstrated the fact that it must be presented objectively to the multitude; and they ventured to contrast our Society with that of Maryland, whose State Fair they had lately attended. They were pardonably enthusiastic in the description of the brilliant scene at Baltimore; they told of the beeves, fat-fleshed and well-flavored; of the lambs without blemish, and the larger sheep, that would have graced Laban's flock or vindicated Jacob's tending; of the crowds of fine horses of every breed and description, for the service or pleasure of man; and that as for fine cows, there seemed to be a row as long and broad as the Milky Way. They said that the rush and clangor and whirr of every species of labor-saving machine was still ringing in their ears; and they essayed some faint description of the *ensemble*, where, beneath a cloudless sky, thousands and tens of thousands of well-dressed and well-behaved men and women were enjoying and adding joy to this brilliant scene. They asked how could such meetings fail to do good mentally, morally and physically? besides the more obvious results. How many good seed, said they, must be scattered, unseen of men, until they ripened into myriads of rich harvests throughout the land. How these annual meetings of town and country tended to break down the miserable prejudices which before had separated them.

Our grand old chief was too much impressed with the value of the pure gold of scientific truth to think that it required any alloy for making it tough enough to stand the wear and tear of the multitude. He despised so much that appeal to the senses which humbler minds require, that it was but a scornful acquiescence which he finally gave to our appeals, and to the last I fear he considered the Fairs as little better than the side-shows which infest them.

A mass meeting of farmers was called, which, strange to say, vindicated its title pretty well, and I am sure that none who shared therein can ever forget the emotions of that spirit-stirring time when that true Virginian and noble-hearted gentleman, J. Ravenscroft Jones, sounded the key-note of triumph by pledging his county for a specific sum of money; and how rapidly the contagion of a good examplespread! How county after county fell into line, until fifty or sixty thousand dollars had been guaranteed before the meeting closed, and we all went back to dream substantial dreams of the assured success of the Virginia State Fair in no transient form, but for an indefinite period, and, as we fondly hoped, with an increasing interest and power.

In 1853, beneath "an October sun," heaven still smiling on a noble and prosperous cause, we had our first meeting; and cold and phlegmatic indeed must have been that temperament which was not thrilled with patriotic pride and pleasure when it looked out upon that animating scene. For six years, with only an occasional check or interruption (for the best plough will clog or jump the furrow sometimes) our Society continued to grow, to fulfill, and even to surpass the most sanguine expectations of its promoters.

It became the trysting spot of the State. Keen but friendly emulations sprang up throughout our borders and in neighboring States. Improved breeds of stock, better and more numerous labor-saving machines were introduced; old systems of husbandry had their defects demonstrated, or their excellencies confirmed; good ideas, happy thoughts, were sent forth, not so much in formal addresses (which, in all candor, I must admit are pretty generally liable to that classification wittily described by Tom Marshall as a parenthesis—which, according to the grammars, is defined to be a thing which can be left out without affecting the sense), but in chance conversations, whose points spread noiselessly from county to county and from district to district, accomplishing more good than tons of congressional *placebos*, those much distributed but little read Patent Office Reports. Not least in the advantages was the renewal of old friendships, which time and absence and many cares had dimmed but not destroyed. And to all, it was a benefit to have the respite of a week from the toils and vexations of every-day life, to say nothing of those more perfect unions which derived their dates from those auspicious days, involving, with the least possible delay, a Clerk's License and a Minister's Benediction. Here, too, the merchant and the farmer learned to rise from the cold, stiff intercourse of the mere business letter to a friendly interchange of views on topics of mutual interest, and to closer communion of sentiment and opinion in matters of state and national importance. Trade thus loses much of its hardness—provincialism much of its prejudice. The townsman learns to take an enlightened interest in the hopes and plans of the farmer, and the farmer in turn learns to abandon that unfriendly criticism of habits and customs, which he finds are none the worse simply because they are different from his own. The Press too, woke up to the fact that Mr. Burke was not far wrong when he declared that in every community the first great creditor is the plough; for whereas they had inserted our first advertisement, as I took care to tell them, between a lot of tallow candles on the one side, and a lot of damaged sole leather on the other, they had come now to treat us with the pomp and dignity of type, giving us, upon occasion, all the emphasis of italics and all the grandeur of headlines.

Thus, I think, might be traced fairly to the influence of our State Fair a fuller, warmer appreciation and development of the inter-dependence of all the different interests of society; a kinder sense of mutual relations and benefits; a warmer glow of friendly feeling, powerful to the breaking down and thawing out of the coldness and jealousy and isolation which had theretofore separated and divided into hostile ranks the persons who, of all others, should be the best and most confiding friends.

I do not say that these fairs are without their drawbacks; in other words, I only claim for them that they are good human institutions. Frauds are still practiced upon the unsophisticated. Moses still meets, under some more specious guise, the worthy gentleman who is forced to

sacrifice his gross of shagreen spectacles, and the greater age of Mr. Flamborough is no safeguard for his younger friend; and I must be pardoned for saying, in no puritanical spirit, but in the fullness of a friendship which ought not to be doubted, that there is a decided and growing objection to the undue prominence that is given to what is euphemistically called in the catalogues *Trials of Speed*, but which, when brought down to its last analysis, is too much like what was formerly known as *Racing*; and under that plausible title, which seems to divest it of its grosser features, is not only far more insidious, but perhaps more dangerous than the undisguised race-course—bearing about the same relation to the latter that the lottery system does to the faro table, gradually sapping and undermining the facile character that might have been proof against the broader temptations and more vicious amusements of the former.

With this exception, I think the unanimous verdict will be that these yearly congregations, these nineteenth century Olympics, are of inestimable importance to the State.

In an article of remarkable interest by Sir Francis Head, entitled "The Commissariat of London," he invokes the aid of an imaginary witness standing on the steeple of St. Paul's Cathedral, to scan the reticulated avenues along which the multitudinous and infinitely various supplies of food, animal and vegetable, the substantial and the luxuries, are speeding to that great metropolis; and by the same token the fancy often struck me that I should like, as from some dizzy altitude, to have traced, in happier days, the splendid results of that newer life to which agriculture had been aroused in Virginia; to behold the neater and securer enclosures, the stronger and safer bridges, enabling the passenger to cross in safety where life or limb had theretofore been in danger; the better farm roads, no longer having the approach a reproach to the proprietor; the waving harvest, the fruitful meadows, the laden orchards, the gleaming flocks, the stately herds on a thousand hills, the substantial homesteads, beautified in the spirit of the maxim, that if we would love our homes we must make them lovely; and above all, to feel that these were the unchallenged and unmortgaged homes of hundreds of thousands of free, prosperous and happy Virginians.

As bearing largely upon our present changed and unhappy condition (of which I am to speak presently) I must state my earnest conviction that the failure of Virginia to improve, still more rapidly, was due mainly to two prominent causes, both springing in part from the temperament of her people; first, the spirit of adventure which through several decades, with full and steady streams of emigration, had borne to the West and Southwest large numbers of her most active and enterprising citizens, and to that end tempting and inducing those who remain to burden themselves with a double incubus of debt, incurred in the purchase and possession of these additional lands, when in the majority of cases they already had more than they could cultivate properly and prosperously. I know that it is a very gratifying feeling to see one's line fence moved out a mile or more—gives one a mingled baronial and Robinson Crusoe importance; we have added to our broad acres; we are monarchs of all we survey; but how often has the broad acre brought the narrower crop; and the tax collector, following closely on the heels of the surveyor, rudely breaks in upon your baronial feelings, and leads you to suspect that your pride has expanded more than your purse. Our people have never been sufficiently alive to the great cen-

tral truth of agriculture, that deep tillage is more than broad acres; that it is with farms as my Lord Bacon said it was with nations: "Their real power is to be measured, not by the scale of miles but by the scale of forces." In illustration, I have in mind lands bought seventy years ago, (with money borrowed at 10 per cent. interest) which have never yielded a dollar of profit, whilst the taxes and simple interest on the original investment have more than quadrupled the sum. And on the other point, I know of lands in a fine wheat region which, in the aggregate, never produced more than 10,000 bushels, and that but in one single year, and yet when divided into three portions produced regularly 15,000 bushels per annum. To hold and cultivate too much surface has been one of the great curses of Virginia; and yet we used to have enthusiastic political economists who rated a man's wealth in proportion to the land he held, a proposition, which pushed to its legitimate conclusion, would prove that Adam and Eve were the wealthiest persons that ever lived.

Another curse to Virginia agriculture was the improvident use of Peruvian guano. That grand old growler, Dr. Johnson, (in the climax of his indignation that the colonies should dare to resist Parliament), said in effect, that as yet no part of the world had any reason to congratulate itself that Columbus had discovered America. Be this as it may, I certainly think that Virginia has no reason to congratulate herself upon the discovery of the Chinch Islands. Do not understand me as attempting to underrate the power of this wonderful agent. If we had been wise in our day and generation, if we had appreciated its wonderful power properly, if we had husbanded its magic influences, if we had studied the proper combinations with the less brilliant, but more substantial phosphates, if we had made it the basis of improvement, instead of hailing it as omnipotent, if we had paused to think for a moment, we should have realized the warning truth that the supply was in the nature of things limited, and that the wonderful source, whatever it was, might suddenly cease. Then, indeed, had we proven ourselves worthy of this miraculous interposition in behalf of our wasted and impoverished lands. For the Peruvian had, centuries ago, announced the proverb that guano, though no saint, worked miracles. We had thousands of acres too low, so to speak, to respond to any other quickening power, and here was the golden opportunity of bringing the dead to life, of placing a nucleus of improvement where utter and hopeless sterility had prevailed before. As it was, Virgil's "*O fortunatos sua si boni norint agricolas,*" might, without any violence, be rendered: "Oh! too happy Virginia farmers, if you had only known how to use Peruvian Guano!" By an unfortunate natural selection it seized its appropriate victim, the sanguine and imaginative Virginia farmer; scornful of details, ever praying for some royal road to the fertilization of his lands, and to the possession of the purse of Fortunatus; and guano seemed exactly to fulfill these important duties. We raved about it; I am responsible myself for some very ambitious rhetoric upon the subject. In congratulating my countrymen, I remember how I told them that far away, thousands of miles from our shores, a kind Providence had withheld all rain from a group of islands, that in our own land it might crown the barren hill with verdure, and clothe the naked waste with golden harvests. I boasted how it would enable us to

Lead Ceres to the black and barren moor,
Where Ceres never gained a wreath before.

My brother farmers, all as frantic, joined me in this agricultural frolic. We laughed to scorn the idea that grass was the only true foundation of permanent improvement; *that* we thought was uttered under the old Dutch dispensation. If a few had lucid intervals and ventured to ask if there was no danger of the supply giving out and leaving us in a seven-fold worse condition, we either gave a contemptuous negative, or said that if the supply did become a little slack, we had no doubt that the—well! Epizooty would soon break out among the birds of the Pacific, and make all things lovely again; or else, by analogy, that if California failed, Australia would turn up at the right moment. Meanwhile we drove on fast and furious. The farmers' philosopher's stone at last had been discovered. The distinction between poor land and rich land had been broken down; indeed it was seriously urged that poor land was perhaps better than rich, as being more prompt and congenial in its response to guano, and I well remember the merry twinkle of the eye with which my honored and venerable friend, the late Judge John Robinson, of Richmond, said that he had long had a very poor piece of land which he wished to sell, but that conscientious scruples had theretofore restrained him from saying one word in its favor, but that now, with a light heart, he should advertise it as "eminently adapted to the use of guano." Hope looked joyously into the future, and told the flattering tale that broom-straw was soon to be a thing of the past. Gullies, under the gentle surgery of this great doctor, were to be speedily healed by the first intention, and all gauls were to be suddenly subdued by the *veni, vidi, vici*, of this agricultural Cæsar.

Instead of using the moderate solvent we always exhibited heroic doses, and so we wasted it with a lavishness that to our sobered senses now brings the unavailing reflection that it was little short of madness, and its intoxicating influence was two-fold—moral as well as physical; for even where the fancy did not outstrip the actual result, though the "exuberance of the imagination were not betrayed by the treachery of the half-bushe], yet we became painfully oblivious to the fact that the merchants were as much interested in the result as ourselves, and that under the influence of guano our various accounts were growing quite as rapidly as our crops. An equally fearful offset was the neglect and contempt into which the domestic sources of fertilizers fell, inasmuch that an enthusiastic convert once gravely told me that the effect of domestic manures being infinitesimal, and the labor of using them so utterly disproportioned to these results—he did not consider them worth hauling 100 yards, and with the exception of one particular class, not more than 50, and as his enthusiasm has carried him into the trade of vending under the new prescription, I fear that he is more enamoured than ever of his delusion.

In the midst of all these bright dreams, when Virginia seemed to be smiling with pleasure and waving with fertility, the tocsin of civil war was sounded; the sun of our prosperity went down and only rose through five dreary years to the bloody dawn of an uncertain day. Not mine to speak or yours to hear of those sad times, except as intimately connected with our profession. We could have no intelligent opinion of our present condition if we did not investigate all the causes leading thereto; and the first step in successful reform consists in plainly seeing and boldly stating things as they really exist, without falsehood, suppression of the truth, or illusion. We have already suffered too much in the effort to cheat

ourselves—in speaking smooth things and prophesying deceits.

With the rapid retrospect I have taken, we shall be better prepared to estimate the true state of affairs, when peace, so-called, came upon us, not dove-like, as the poets love to paint her, but rather, as we are forced to admit, in the similitude of a hawk, keen-eyed and ravenous for the remnant of the precarious harvest which the sword had left ungleaned. History had made us painfully familiar with the horrors of *flagrant* war. How the Palatinate was ravaged; indeed, how our own beautiful Valley was desolated by the red hand and iron heart of the remorseless subtlety of a congenial chief. But history has never brought to me so contemptible and dastardly a conclusion as was here presented, when the government of a people, proud and tenacious of its position among the nations of the earth, descended from its conquering car to doff its military trappings, assume the disguise of a detective, lynx-eyed for each lean mule that perchance was branded with the magic U. S., or to resume the ownership of every crazy old wagon left behind on former occasions, when important business had imperatively demanded a rapid return to some old base, or the speedy adoption of a new one. I have said that history has never furnished to me any parallel of this; but the speedy change of costume and *role* recalls the pitiable spectacle it was once my sad fortune to behold, when on his benefit night, the elder Booth, turned from the death-scene in Richard III, to enact the humiliating part of Jerry Sneak in the Mayor of Garrett. This threatened to be the *coup de grace* to Southern society, for we did not know but that it was the premonition of a fuller and completer confiscation, and we felt that the only badge of that aristocracy whose imputation is the stale staple of so much northern wit, and the only form of heraldry left us, was to adopt and write above our lintels the motto of the Warwicks: "*Vix ea nostra voco*"—we can scarcely call these things our own—and only those who can recognize the full truth of the declaration of the great Napoleon that "Civil liberty depends on the security of property," will fully appreciate the extreme torpor which now fell on the Southern people. It was already a land of lost hopes and broken hearts, as far as the aged and even the middle-aged were concerned; but it seemed as though it were the policy of the government to break the spirit, even the spirit of the youth—that spirit, which alone makes a country, and without which every thing hastens to decay and desolation.

As ever happens in the mingled web and woof of human affairs, there was something comic to relieve the sadness. I will not harass that favorite old quotation about "the sable cloud's having a silver lining," for that, even in metaphor, would have been too violent a figure; for so entirely have the precious metals in the form of coin departed from our region, that doubtless there are many well-grown youths and maidens, who, if suddenly confronted with them, would be puzzled to answer the question addressed by the tempting Pharisee: "Whose is the image and the superscription?" But there was something of ludicrous relief in the uniform dilapidation and decay of nearly everything pertaining to husbandry, but especially in the more pretentious implements which had once purported to be labor-saving machines. Frequently they lay rotting and rusting in the open air, remote from the barn as though in the plenitude of our former lavish style we had provided a set for each field; but more generally there was to be seen on each estate some dingy, leaky and altogether deplorable shed or vacated cabin which might, with

strictest propriety, be denominated an *agricultural cemetery*, sacred to the memory, and containing the remains of sundry disabled and defunct implements; *videlicet*, probably an ancient drill, perchance with one wheel off, taken to supply some sudden calamity in a decrepit cart or carriage, the sowing arrangement so fatally deranged that it would only send down the grain by eccentric jerks, or not at all; corn planters that had become sowers, at the rate of about five bushels to the acre; combination mowers and reapers, the combination being against the unfortunate owner, and warranted to break down or get out of order every fifteen or twenty yards; ploughs without handles, and mould-boards without points; separators that left half the wheat in the heads and half the chaff in the modicum of grain they threshed. Such, in the main, was the *material* with which we were expected to commence an entirely new system of agriculture, with the lively prospect that the best or rather the least worn, of these, unless put under lock and key, would, under the ill-counsel of a dark night, betake themselves to another system of agriculture, just then being inaugurated. We may, indeed, say that ours was a condition too melancholy for laughter, too ludicrous for tears. Our lands ravaged and wasted; the enclosures of vast tracts of country entirely destroyed; some sections so nearly deforested that not enough of trees remained to mark the warriors' graves beneath them; a currency that had passed away like a scroll; our entire labor-system destroyed as by an earthquake's shock, and our helots tempted to revolt as were Sparta's at the fearful moment (the physical prefiguration of our calamity) when the rocky soil of Laconia was rent and Mount Taygetus, torn by repeated convulsions, hurled its fragments into the midst of Lacedæmon, burying alike, men and treasure; but, with them, as with us, creating no chasm so dark and wide as that between the master and the former slave. Equally may we claim that history presents no spectacle more sublime or pathetic than ours. A capital in flames; a desolated country, still trembling beneath the filing off of infinite cavalades and the tread of innumerable armies; a destitute and m'ringing people, weighed down under the sense that all for which they had fought and sacrificed, was lost; but with a sickening sense of deeper humiliations, and more intolerable mortifications, not faintly foreshadowed, as still to come, every moment bringing the keener perception of their disastrous extremity, the fuller demonstration that they were still contending with a government who came less to succor than to be revenged; who applying their wondrous inventive powers to systematic torture, and finding fresh stimulus in scenes that would have totally disarmed an enmity less deadly than theirs; who tramping ruthlessly upon the institutions, habits, customs and feelings of their victims, have inflicted upon the South, what, in all calmness, and with all the intensity of conviction of which I am capable, I must denounce as the most cruel, cold-blooded and complete revenge ever inflicted, by a government claiming to be civilized, upon a conquered and prostrate people. I desire to repeat this with emphasis and deliberation, and as a consequence to declare equally my conviction, that the Northern government has committed *the* crime of the nineteenth century in the manner and time of emancipation, coupled with the legislation, precedent and consequent; and I say this as I honestly believe, in the interest of all parties, of the masters and the servants, of the North and the South, and of the whole nation. I have nothing to say for or against emancipation, pure and simple; nor have I time,

or consider it important or necessary, to discuss the relative merits of free and slave labor ; nor need I attempt to mete out the comparative responsibilities of North and South as to the existence of slavery on this continent. Let that pass too ; enough for us to know that by community of action and interest, it was here. Enough for all to know that while the Roman and Saxon slave, and Russian serf, when released from slavery, are susceptible by generations of improvement, of rising to and mingling with the blood of the superior race ; that nature has placed no irrevocable bar there, whilst she has stamped the African to a separate existence, and that by God's everlasting decree, the two races could never mingle here, until light and darkness commingled shall make twilight brighter than day. The people who are so fond of quoting the glittering generality which constitutes the overture to the Declaration of Independence must now believe that Mr. Jefferson spoke the words of literal prophecy when he volunteered to tell the Count de Marbois, that the two races could never live together upon the hypothesis of a practicable equality ; that the memory of collisions, the reciprocal and ineradicable prejudices, the real distinctions made by nature herself, would divide us into parties and produce convulsions, which would probably never terminate, but in the extermination of one or the other race. I have not struck the chord of your feelings, which vibrates with this mournful monotone, simply to vex the air with idle complaints. I am not seeking to revive a dead question, but one that is fearfully alive—as fearfully and actively alive as is Vesuvius to Naples, or *Ætna* to Sicily. If the South, by free and unbiassed decision had determined that the people brought here in a servile condition might remain upon the dread experiment of a political and social equality, then the danger would have been of our own choice. It was a question which each people had the high and undoubted prerogative of deciding for itself, and it was but gross tyranny when decided by another ; for outsiders to force the two races into an unnatural and abhorrent union ; to trample upon the feelings, habits and ingrain prejudices of one race, and fill the breasts of the other with vain hopes, vain aims, inordinate desires ; to violate logic, reason, common sense, and common humanity, by inviting the unequal contest between the race which has been on an ascending scale for 1000 years, with a race that but yesterday was in bondage ; to seek in the bitterness of jocularly to yoke the thoroughbred and the dray horse ; to seek the wanton humiliation of a people, whose sin was only the effort to obtain that separation in liberty, which their conquerors now practicably inflict in subjection ; to set back the dial of their country's progress, whilst they attempt to reverse the fiat of nature, meanwhile shutting their eyes to the daily and hourly demonstration of the absurdity of their plans ; does not this constitute before God and man *the* crime of the nineteenth century ? And standing in the full blaze of our boasted civilization, with the proofs of their criminal error, of their foul outrage upon a brave and noble people, written in the paralysis of a whole continent ; written in the languor and prostration of a people eager to be released from the spell which benumbs their faculties ; with the potentiality of scenes by the side of which the horrors of St. Domingo would fade into insignificance, and which are only kept back by the prudence of a people whom they have sought, as it would seem, to sting into ungovernable madness ; to see all this and yet through hate or hardihood, or both, to refuse the simple and patient remedy—does not all this justify me in

saying and repeating that the Northern government has committed the sin of the nineteenth century? that it has inflicted and is inflicting the most cowardly, cold-blooded, and complete revenge that a nation, calling itself Christian, ever worked upon a prostrate people? The Knout of the Russian inflicts more temporary pain, the Bow-string and Bosphorus of the Turk is more severe and silent and secret; but the most cruel punishment that one people can inflict upon another, if there be sensibility at all, is the slow, insidious sapping of the spirit—for, I repeat, that it is the spirit which makes all that is valuable in a people—for without it you may have peace, but it is the peace of apathy, of a dismal, cold, dead uniformity of servitude. There was a time with our Northern rulers, when if, as they are so fond of quoting and so slow of proving, the hour of triumph had been indeed the hour of magnanimity, all the clouds now lowering with fearful portent, might have been dissipated; there was that golden moment for reconciliation which comes but once to individuals or to nations, when every question of discord might have been solved, and the nation checked, as it were, for a moment, like our giant Mississippi by some thwarting islands, would soon have been sweeping along with its wonted volume, and resounding again with its mighty music. But, alas! in the sterner and more protracted trials decreed for us, we had to supply another instance to that mournful catalogue which proves

“How nations sink by darling schemes oppressed,
When vengeance listens to the fool’s request.”

There was a man who had only to stand by his own thrilling cry “*Let us have peace!*” and give, as he only could have given, order and repose to a country so great and distracted as ours, and there is only Washington whose name would have stood higher in the records of humanity. But, alas! it was either his sad fate not to see; or seeing, not to recognize, that higher fame which even in imagination makes the deeper condemnation of his treachery to himself and to his country.

The truly great man has yet to come who, like Edmund Burke, shall declare that “nothing less than *all America* will satisfy him.” We have found by long and sad experience that the nation in its true sense will receive no aid from one whose ambition even is but the *vis inertiae* of a sensual nature, of a man who has so little appreciation of his high position and solemn duties that, as yet, he has only made himself known personally to a large portion of the country by the threat or actual proclamation of martial law, or the presence of his legions in the halls of Southern legislatures; who exhibits his sense of justice by allowing the chief mining district of the country to remain in open insurrection for 8 or 10 months; murder stalking unchecked, and arson unpunished; sacrificing the interests not only of the people immediately concerned, but of the nation to the amount of millions of dollars, whilst the chief magistrate of the country smokes on serenely over this state of affairs, but is very willing to employ the whole machinery of the government, and to forward every available soldier upon the first notice of a drunken brawl in Mississippi. What hope have we from a President who, from his temporary residence in Washington, has the State of Virginia spread out like a panorama before him, and yet in six or seven years has only found time to make one trip, and that so flying that it would seem to have been done on a wager as to the shortest time within which a traveler could cross and recross the territory of Virginia? What hope can

we have of a man who can travel over twenty degrees of longitude to attend a festive gathering, and yet cannot traverse willingly one degree of latitude in the interest and for the pacification of his country? And what shall we hope from him who, even at the festive board was only stimulated in his first inspiration to sneer at the people whom he had overwhelmed? What hope have we from a President whose study of commerce is restricted to a dreamy, listless survey from the verandah of his marine villa of the wild and weltering waves of the Atlantic? What hope have we from a President, who, in the same spirit that Walpole told George II. that he should endeavor to forget that he was the elector of a small German Principality, and remember that he was the sovereign of a mighty empire, should be implored to forget that he is the owner of a villa at Long Branch, and remember that he is the chief magistrate of what is a great and ought to be a united country? What hope have we from a man whose idea of logic begins and ends with the selfish syllogism that as he has had possession of the White House for two terms, therefore a third term is a natural conclusion? What hope have we from a man who has so little appreciation of the dignity and propriety of his situation that if the Presidential mansion, like the Vatican, had 3,700 chambers, he could yet fill them all with a host of relatives in transitu to office! Cæsarism in its truest and best sense we could stand. It would be something to feel that though in bonds, we were Romans and might appeal to Cæsar. An elegant writer has said that if to Caius Julius, Rome forfeited her dowry of civic purity; if for him she first unloosed her maiden zone, yet we might plead as Faulconbridge, for his mother, that he was the greatest of her wooers and that such a sin was self-ennobled; but it is an insult to call that Cæsarism which is but the synonym of corruption, and under whose influence our national bird wheels lower and lower, and with an utterance that is rather the scream of the vulture than the cry of the eagle. When we find that under such a Cæsarism, corruption winked at if not shared in high places, is pervading the body politic and oozing at every pore, and that the party which claimed to be the exemplar of purity and patriotism has acted since its accession to power more like a set of burglars who have broken into a house, than like the rulers of a great country, we may learn to what base uses the name of a great but generous tyrant, can be prostituted.

Two years ago we saw this whole country suddenly prostrated as by a thunderbolt. Up to that time everything had seemed to prosper with the North. They had assumed that they would keep one half, and that the mainly productive half, of the nation poor, whilst the other should revel in the redundant wealth accumulated during the war. They seemed to be ignorant of the simplest rules of political economy, and assumed that, though prostrate, we could still be tributary. By the overthrow of the Confederacy, our currency, as I have already said, had passed away like a scroll—a currency which, however inflated, still involved all our productions and earnings for five years. Our labor was gone. In short, as I have already declared it was a social and political earthquake. All the money was one side of the line; and they fondly and absurdly supposed they could keep it there, or only dole it out twice a year to move the cotton of the extreme South or the grain of the West, but soon to be restored to New York and serve as counters in the great gambling operations of New York; but the bubble burst at last, and instead of analyzing the question, sticking still in secondary

causes, they persuade themselves that a resumption of specie payment is only necessary to restore prosperity, and in their wisdom they have named a day three years hence when it shall take place—about as absurd as though they should order an eclipse, or any other natural phenomenon. Now I know that, as Sydney Smith said, it was considered very impertinent in England for anybody with less than £2,000 a year to have an opinion, so it is still more insolent for a Southern man to express an opinion on financial topics; but, when the grievance is so glaring that none but those wilfully blind can fail to see it—when history so plainly points the moral and remedies of similar embarrassments, I trust that even a Southern man may be allowed to speak the obvious truths as they present themselves to his mind.

Can any one doubt that we are now suffering from the reaction of the war—a reaction magnified by absurd, and what I must denounce as unjust and malignant legislation? If the North had not been blinded by hate, it would have seen that interest, if no higher feeling, demanded that they should have lent a helping hand. True, magnanimity would have said at once,

“Ye are brethren, ye are men,
And we conquer but to save,
So peace instead of death let us bring.”

But let us throw magnanimity out as an unknown and purely imaginary thing; self-interest plainly and undoubtedly required that the South should be aided even for the purposes of production. But what was done? Every thing that hatred and low-flung suspicion could suggest. Our slaves put virtually over us; seedy and needy proconsuls, so-called governors, men by whose side even Verres would appear respectable, sent to insult and to plunder us, and by way of climax in this direction, Mississippi is still cursed with the son-in-law of that infamous general known to this generation as a man whose multitudinous silver-service is marked with every letter of the alphabet except the letter B, and who, on the historic page, will stand unrivalled as a general who burnt more powder, killed fewer men, and insulted more gentlewomen than all the scoundrels of the past—Haynau and Underwood included.

As I intimated, in commencing, the number of topics is so great, that I can only glance at some of the more prominent, but I cannot neglect one subject of prime and vital importance.

The excess of lands, which I have referred to, already great before the war, was fearfully increased (in proportion to the population) by the breaking down of our labor-system—and if the Northern people and Gen. Grant had desired to aid the South, and through it the nation, they could, without detriment to themselves, have compassed it by promoting a generous immigration to the Southern States, still leaving an ample share of the incoming population to themselves. They might have acted towards us so as to soothe as well as succor, if they had encouraged a generous immigration to the South.

But so far from this, every thing was done at home and abroad to obstruct, and if possible, to prevent it. Their agents abroad whilst picturing the fatness of the Credit-Mobilier's lands, the social merit and pecuniary promises of Duluth, and the semi-tropical climate and productions along the Northern Pacific Railroad, were instructed to make a dark back ground of the South, to represent that whatever might have been its former glories, “something ailed it now, the place was cursed,”

as indeed it is with a "Brother's Curse." And the President's spokesman and confidential friend, Gen. Butler, held out in so many words, the hope that the day might not be far distant when the Northern army might again descend, taking with them, this time, the *Surveyor and his Chain*—in other words that a partition of Southern lands was no improbable event. Could any better plan be devised for deterring immigrants than this threat? to say nothing of the stimulus it gave to domestic cupidity—a cupidity already whetted by such papers as Harper's "Journal of Civilization!"—which coolly suggested that capitalists should "bide their time" till Southern poverty should force a wholesale auction of Southern property.

I have no hesitation in declaring my firm belief that the South has been more injured and the national wealth thereby more largely affected during the last seven or eight years than during the whole war, including what may be styled its legitimate and inevitable effects, and equally I believe that the present prostration might have been largely diminished if the government of the United States had pursued the course dictated even by a selfish attention to their truest interests. Equally I believe that this idle proclamation, to which I have referred, of a proposed return to specie payments, will continue and aggravate the suffering; capital, naturally and proverbially timid, will continue to withdraw itself, and the idle capital that such men as Carl Schurz and Governor Dix and Reverdy Johnson adduce as an argument against what they style inflation, is a proof that some ruinous abstraction of vitality is going on. To point to piles of unused money as a proof that it is not needed, is about as sagacious as Dr. Sangrado pointing to the half gallon of blood he had abstracted as a proof that the patient did not require it. And in proof of my other statement that the announcement of a resumption of specie payment is a ruinous measure, I would be glad if time allowed, to give you, from Macaulay's history, what, *mutatis mutandis*, is a perfect parallel to our present condition. Macaulay is, I believe, considered generally but as a picture painter, and because he has described the Court of Charles II. with the gaiety of a Watteau, and the Black Hole of Calcutta with all the sombre power of Rembrandt, he is supposed not to have the requisite dullness of a historian; but those who will study the financial history of the reign of William III, will find, I can assure them, the most thorough elucidation, not only of incidental but of all the great fundamental principles of finance, and coming back to the special point to which I have alluded, they will find that the agony of three months in the adjustment of the currency was nearly fatal to England's very existence as a nation. What, then, shall we expect from the delay of three years, on the back of a war which, whether we look to the breadth of its theatre, the numbers engaged or the interests involved, is the mightiest the world has ever known? No, gentlemen, if the North wishes true peace and genuine prosperity, she must abandon her present policy in all its prominent features. If she wishes her currency restored, she must cease to discredit it herself in refusing to take it for customs. She must (gradually to be sure) substitute specie for the miserable, contemptible fractional currency which develops but discredits Mr. Webster's famous phrase that he wanted a currency which had the "odor of nationality." In truth, only specie enough is actually needed for the change of the country, and if all the notes below ten dollars were gradually retired, the specie would immediately rush in to fill

its place. Aristophanes, two-thousand years ago, noticed and criticised the fact that bad money always drives out good, though he ascribes it to the same perverted taste of the people which led them to banish Aristides and kill Socrates, and surrender themselves to the guidance of such demagogues as Cleon and Hyperbolus. Though his political economy be wrong, there is so much of truth inherent in his verses, that I must give them to you, not in the crabbed original, but in a graceful translation, (kindly furnished me by our accomplished Prof. Gildersleeve) :

“ Oftentimes have we reflected on a similar abuse,
 In the choice of men for office, and of coins for common use ;
 For your old and standard pieces, valued and approved and tried,
 Here among the Grecian nations, and in all the world beside,
 Recognized in every realm for trusty stamp and true assay,
 Are rejected and abandoned for the trash of yesterday.
 For a vile adulterate issue, drossy, counterfeit and base,
 Which the traffic of the city passes current in their place,
 And the men that stand for office, noted for acknowledged worth,
 And for manly deeds of honor and for honorable birth ;
 Trained in exercise and art, in sacred dances and in song,
 All are ousted and supplanted by a base ignoble throng.”

[Frere's trans. of Frogs of Aristophanes. vol. 3, pp. 278-9.]

Equally is it necessary that the present National Bank system should be abolished, and the more satisfactory if not safer system of one governmental currency be adopted. When we take time to consider, we know that the bank-notes are guaranteed by bonds, and, indeed, it is said, that by a funny financial paradox the notes of a broken bank sell for a little more than the notes of a solvent bank ; but the people have grown tired and suspicious of the banks, and look now as regularly in each morning's paper for the announcement of the stoppage of one of them as they do for its mimic representative, the explosion of a kerosene lamp. Establish a currency with the broad seal of the government and of no other description—stop talking about it, and as far as the currency can right us, all will be well. There would not be the same affection for it, of course, but the greater reliance would be in some measure like that of the good old rebel who, when some little cock-sparrow of a lieutenant said his pass was not regular, replied in amazement: “Why, mister, hain't it got Mars Bob's name on it?” “Yes!” said the lieutenant, “but still it's not regular.” “Why, look-a-here,” said old Johnny, “I should een-a-most think I could get into heaven on a pass with his name on it ; and that,” he added, “is what's the matter with this Confed. money ; if the notes had Mars Bob's name on them, they'd be as good as gold.”

If time allowed, I should be glad to speak somewhat more in detail on this subject, and to expose the unfairness of the advocates of a pretended resumption of specie payments. It does not require learned essays to prove the advantage of a good specie basis ; and to talk of any other measure of value were as absurd as to propose a new mariner's compass. But after all, we must remember that no country in the world has, or could have, an actual equivalent in coin or bullion for its currency. If England, for instance, has an apparent reserve of 11 per cent. of cash, it is only apparent, for this reserve has to meet the liabilities of every bank in the United Kingdom. And if France makes a better show, it is only because that, in addition to the thriftiness of her people, she has revenged her disasters in the field by cornering Germany in the money market, and making Berlin tributary to Paris in

the matter of silver. But I will not extend the discussion of this topic too far, nor weary you with columns of figures, for at best the currency is but a secondary question, or, to speak more correctly, it depends almost entirely upon a restoration of confidence between the various members of our country; nor is there any likelihood of a return to what is termed specie payments, or true prosperity in any branch, until this happy result is reached and the congestion removed which now threatens apoplexy to one side and atrophy to the other.*

If the North desires a genuine prosperity, it must cease to legislate as though the nation stopped at Mason and Dixon's line; as though all below were only outlying provinces. Is there one amongst us who has failed to observe that in all things at Washington there is a studied, we may even say a contemptuous, restriction of the discussion of national topics to that portion of the country which was victorious in the war? I need not dwell on what might be termed the bitter humor of legislation, whereby after a successful war for the union, the "rebel" States were declared out of the Union; nor need I do more than recall our own immediate case, when we were kept just long enough in the Union to be divided, with the result that one half of us fell into and the other half out of the Union. Passing over these amiable eccentricities, I must ask if you have not noticed that in the main the South is spoken of very much as Russia regards Poland, the Spaniards Cuba, the French Algeria? Sometimes this spirit has a ludicrous manifestation, as, for instance, in a paper which, though edited with marked ability, does not vindicate its comprehensive title of the *Nation*, and puts on even more than its ordinary supercilious or patronizing tone in speaking of the South. Not long since, in the notice of some horse-book, it said: "Now we as a people do not ride much." Just think of such a remark, when the people of the United States includes ostensibly a dozen States, where, except in travel, the chief style of locomotion is riding—of a people who take to riding so young that in a short time it is as natural as to draw the breath of life. If this cockney critic could attend our Fair, I think he would acknowledge that there is still some portion of the people who retain what old Ben calls,

"The Centaur's skill, the art of Thrace, to ride."

And might we not say, in strictest truth, that if the strain of Bucephalus were repeated ten thousand times, we could still furnish young Alexanders enough to tame and master them? Methinks the writer of this article could never have heard how some men rode certain black horses about fourteen years ago, and that there are other plains than those of Marathon and Blenheim, where superstition nightly hears the neighing of chargers—still sees, with heated fancy, the rushing squadrons of spectral war.

*If time allowed, and an array of figures were not so proverbially tedious and odious to a public audience, it would be easy to show how entirely delusive are the examples offered by those who have cunningly perverted our prayer for delay and plea against haste into an imputed desire for inflation. It could be demonstrated that Sir Robert Peel's bill (1819) for resumption in 1823 of specie payments under far more favorable conditions than ours, was the obvious cause of the widespread bankruptcy which followed in 1825; and that the change, effected by the same statesman (in 1844), by which the issue and discount departments are separated in the bank of England, has so far failed that in the space of twenty years it has been necessary to violate the law three times, and then relieve the business community (not by contracting, as our financiers would have us do, but) by a generous issue of exchequer notes in sufficient quantities to relieve the pressure. Equally would it be competent to show that the plea of Schurz, Dix and Johnson, that there are large sums of money lying idle, is about as satisfactory and sensible as the remark of the poor, simple Marie Antoinette, who, when told that the Parisians were rebellious from scarcity of bread, cried, "Why, then, don't they eat cake?"

To sum up and close: There can be no perfect union and no prosperity for which a freeman cares, so long as this assumption of superiority prevails. Nor is it sufficient to think that all difficulties can be removed by a Bunker Hill apotheosis, so long as they return to the same course of insult and injustice. These beautiful sentiments must become fixed in action before we learn to value them very highly. As far as I have seen yet, they are all of that same type of mournful evanescence, and call for a similar cry of lyrical despair, as when

Hans Breitmann gife a barty ;
 Where ish dat barty now ?
 Where is the lofely, golden cloud
 Dat float on de mountain's prow ?
 Where is de himmel strahland stern
 De star of de sphirits light ?
 All goned afay mit de lager pier,
 Afay in de ewigkeit.

They may have Centennials and every other style of outward show, and we may go to them, but until there is some vital and substantial change of treatment, there will be a hissing cry in their ears, "Yours is but a rhetorical liberty—ye are but the hollow chanters of a hollow Republic!" No, my friends, there can be no mere sentimental settlements of troubles. I was taught from my earliest youth to love my whole country, and I trust the day is not far distant when again it will be a joy to me wherever I go, by fertile field or prosperous village or in stately city, to feel a joy in the thought, this too is my country; but I should do injustice to my nature and to my own people, if I should gloss over the wrongs of my State. Nothing is to be gained and much may be lost by hypocrisy. When we find that it is neither in a pitying or patronizing spirit, but with a determination to remedy, as far as possible, the evils of the past, and to give the surest pledges of security for the future, then, and not till then, can we sincerely say "give us your hand my friend and brother."

Until that time arrives our duty lies here in Virginia, and thanks be to God, though her fields were ravaged and her hearths made desolate—the one can be covered with verdure and harvests, and the Great Comforter will bring peace to the other. Though our capital was swept by fire, it has found beauty for ashes—and she has jewels of which neither time and violence can rob her—the story of her defence, of her long agony and transcendent woe, can never die. Imperishable, too, will be the fame of her worthies, and we do well yearly to assemble the youth of Virginia to catch and renew fresh love and zeal for the Mother as they gaze upon the lineaments of the great men grouped here in monumental harmony and grandeur, not least among them, him* whose effigy was yesterday unveiled—a man who, for the land he could not save, was well content to die, and to die on the scene of his glory—the death which the God of battles would seem to reserve for his most favored sons, whether on sea or land, on the blue waves of Trafalgar, on the heights of Abraham, or amid the forests of Virginia. Of a truth may we say of him:

Sweet in manners, fair in favor,
 Mild in temper, fierce in fight,
 Warrior nobler, gentler, braver,
 Never shall behold the light!

*Unveiling of Jackson's statue, October 26th, 1875.

From the history of these illustrious men, the rising generation will learn the glorious lesson that Virginia will never without protest, if she be powerless, consent to be humiliated or degraded; and that whilst, with generous alacrity, she recites the praise of other States for various deeds of high enterprise, she can never forget that from her origin it has been her proud privilege, as though consecrated by God from generation to generation, and from age to age, against tyranny in every shape, to defend truth, honor, religious liberty and constitutional freedom, and even in her poverty and sorrow her heart still throbs with the immortal hope that through all the ages yet to come, she shall still be their bright exemplar and faithful custodian.

NOTE BY THE EDITOR.—This splendid effort of Col. BARBOUR is worthy the best days of the Commonwealth. When the question of its publication came up in the meeting, very considerable opposition was manifested by several worthy gentlemen, members of the Society. They feared indeed that its sentiments might prove distasteful to some people north of the Potomac. They forgot that it was the utterance not of a man who counseled a separation of the States, but of one who, during the whole war, maintained the position of a *consistent Union man*. While it was a source of the most sincere regret to the friends of the cause so dear to us, that one about whose name clustered so much glory, should stand aloof from his friends in the struggle, still no man questioned his motives. The Barbour was incapable of dishonor. Who then had a better right to utter such sentiments, and whose opinions should carry greater weight?

The eating of humble-pie has never been a wholesome regimen to anybody, and it never will be. We have no cause to resort to that regimen, and we ought to be despised if we do. Hungary refused it, and refused it for two hundred years. It was not because the Magyars deserved mercy, that the infamous House of Hapsburg was at last brought to its senses. It was the realization of the truth that a house divided against itself *could not stand*, and that a man with a musket in his hand, and no love of country in his heart, could not be depended upon as an element of defence.

The contrast between the claim urged by the North, in vindication of the war, and its conduct since, proves that no principle was involved; that it was hate, pure and simple, and that they thanked God for the pretext to give this feeling form and energy. If we remember aright, it was the late Chief Justice CHASE, who admitted that it was not slavery he hated so much as the slaveholder. Why? This slaveholder was the main source of his people's wealth, and was a man who suffered wrong to his interests, year after year, with a patience that was sublime. *He was hated because he was the superior man, and governed because he couldn't help it.*

Now, the Union is restored, or it is not. If it is, this hate must cease, and *cease forever*; otherwise the Union is the merest rope of sand, and not worth the wind of a cross-road declaimer, let alone the display arranged to take place at Philadelphia this year. As there is nothing to show that a *substantial reconciliation* is contemplated by the "Centennial," Virginia, of all other States, has no business there. Everything that made her history glorious in the past is ignored by the vulgar despotism at Washington; and she has no cause whatever to congratulate herself that she has ceased to be a colony of England. We trust, therefore, that the Legislature will refuse to appropriate a cent for any such purpose. There is no possible way in which she could stultify herself more.

Some excellent people think that a collection of our products carried there might result in material benefit to the State. We can see no such result, inasmuch as people who have means and leisure enough to enable them to go a long distance to see shows, have no inducement to change their homes, and want none. If we arrange here at Richmond, our capital, an honest collection, showing our resources, with a man in charge of it who knows nothing about rose color, and will go to the trouble and expense of putting in print a faithful account of them, *to be sent directly to the people we want to have here*, it will bring more solid returns in a single year than all the big shows in the world combined. Besides, a hungry man cannot make a satisfactory choice with a thousand tempting dishes before him, if hungry men were not seldom guests at such tables. We are absolutely amazed that so many people have permitted themselves to be blinded by the wary hotel men and shopkeepers of Philadelphia—a city intensely “loyal” because its citizens manage that it shall cost them nothing. Richmond, with her \$16,000,000 of manufactures, pays *more* by half a million to support the General Government than Philadelphia with her \$374,000,000!! *We want works, not words.* Words avail nothing—nay, more, are a mockery, when acts (ballots) persistently keep in power people whose conduct is a disgrace to civilization, and whose exponents exhibit an utter incapacity to govern where a diversity of interests prevail,—yea, to whom the value of office is measured *only* by the amount of money it will insure. Such a travesty of government may, through brute force, compel the adhesion of slaves; it can never command the love of men. The Roman mother could, with peculiar emotion, lay her hand upon her boy's head, and tell him what a place his country should have in his heart, and what it was to die in its defence. We, in the South, in rearing our children, are yet bereft of this privilege; we may not even refer to this sentiment, so utterly unworthy the love of anybody has the country become in which our lot is cast. In the hope that time will bring a change for the better, we invite people from abroad to share what our State has to offer.

We trust that every man in the State will read Col. Barbour's address. It will do him good; and make him feel that, while his troubles have been neither few nor light, he still may, with pride and honor, boast himself a Virginian.

[For the Southern Planter and Farmer.]

THE PUBLIC SCHOOL IN ITS RELATIONS TO THE NEGRO.

No. II.

So different anatomically and physiologically are the two races from each other, that we are told on the highest medical authority that the treatment which is demanded for the recovery of a white man in fever and other forms of disease will be fatal to the negro; that the most successful practitioners educated at the North or in Europe, when they first come in contact with the negro and proceed to treat him in sickness on general principles, uniformly fail, and frequently with disastrous results, until by observation and trial they learn that special treatment is demanded by congenital peculiarities, both in organization and functions. We have already seen that the negro, both in his intellectual and moral attributes is conspicuously inferior to the white man, so that there is a perfect correlation between his physical peculiarities and his immaterial nature. Inferi-

ority is stamped plainly and indelibly on the negro alike in his intellectual, moral and physical being.

This line of demarcation between the races is not accidental or the result of outward surroundings; it has been fixed by the finger of God. Since the negro has been known to history, he has always been as we see him now. In our dealings with him, shall we ignore or attempt to obliterate this line of separation? It is greatly to be deplored, says modern philanthropy, that these differences exist. They constitute a great barrier to the success of its pet schemes of equality and iraternity. There have always been men, as there are to day, wiser than God, and ready at a moment's notice to reconstruct the work of the matchless Architect. A distinguished scientist of our day has told us that the eye is a bungling piece of optical mechanism; and that, under his direction, the construction of that organ would have been vastly better. Not long ago, carpens and critics were fond of attacking the divine cosmogony, because three-fourths of the earth's surface is covered with water, an arrangement which restricts, they complained, our race to a small part of the planet. They, wiser than he who "spake and it was done, who commanded and it stood fast," would at farthest have covered only one-fourth of the earth with water, an arrangement which, we now perfectly know, would have rendered the land an absolute desert for lack of sufficient evaporating surface. I do not belong to the fanatical crew that dares to assail the Infinite wisdom; that would

"Strike from his hand the balance and the rod,
Rejudge his justice, be the god of God."

As far as I can understand the forms and forces of matter, I see the most wonderful harmonies, manifold adaptations of material things to our wants and happiness, and even in many phenomena, which bring sorrow and suffering, a vindication of the ways of God to man. When and where I cannot understand, I am equally content to wonder and adore; believing, knowing that when the unknown becomes the known, as at last it may, it will equally attest the infinite wisdom and boundless beneficence of the Great Contriver.

It does not, however, appear to me difficult to explain why the negro, not by accident but by the act of God, is made inferior to the Caucasian. It is in perfect harmony with the whole economy of the world. The law of nature, which is always the law of God, is inequality, not equality; diversity, not uniformity; and the happiness of the whole animal kingdom is best subserved by this arrangement. "One star differeth from another star in glory;" no two trees in the forest, no two leaves even, are exactly alike; and every man is different from all other men, that live, or have lived, on the surface of the earth. Civilization requires an infinite variety of work, which in turn requires for its performance infinite gradations of intellect. The man who, accepting his destiny as indicated by his humble capacity, performs the lowest kind of menial labor, does work just as necessary in the economy of civilization as the profound

astronomer who measures and weighs suspended worlds, and marks out their circling paths. The truth is that the number of those required to do the loftiest work of which the human intellect is capable, is very small; while larger and still larger numbers are required for lower and still lower work, so that those occupations are most thronged which least require intellectual strength and activity. It always has been so; and, dream and speculate as we will, it always will be so. When Christ said: "The poor ye have always with you," he stated a general truth, applicable not only to the age and country of which he spoke, but to all ages and to all countries. Of necessity it must be so, it is right that it should be so. Bootblacks and scavengers, cooks and chamber maids, farm hands and operatives in manufacturing establishments must continue until chaos comes again. These and kindred occupations, constituting the very foundation of civilized society, require for the utmost efficiency of the work, little or no scholastic training on the part of the mere laborers. Nor can it be said that such work would be better done if the laborers were educated. So far from this being so, the difficulty of having it done at all would be greatly increased; and when done, it would be done by no means so well. For several reasons, this must be so. The fact that a laborer is educated, or thinks he is educated, beyond his calling, unfits him for that calling. If a man is engaged in work below his education, he feels degraded by it, and that sense of degradation compels him to do inferior work. No laborer can do good work unless he is proud of his work. I know of no spectacle more pitiable than that of a man compelled by necessity to engage in menial labor for a support, whose education, either in fact or in his conception, fits him for a higher plane of life. He is far less happy, and does less work, and that less efficiently, than the simple laborer by his side, whose thoughts never rise higher than his calling, and whose guileless heart is made happy by a word of praise from his employer.

Again, the more simple a piece of machinery is, the more manageable it is, and the better it does the work for which it was designed. When we complicate it so as to render it capable of doing several things, it will not do any one of these things so well as the simple machine constructed solely with reference to that thing. A mower and reaper combined is less efficient as a mower than a simple mower; is less efficient as a reaper than a simple reaper. And so that intelligence and culture, and only that, which is required for one's calling, best fits him for the duties of that calling. The bootblack is not a better bootblack, but a worse one, the ditcher is not a better ditcher, but a worse one, if he can also calculate a solar eclipse or read with a critic's ken the choral odes of the Greek dramatists.

A higher than human authority hath taught us that we cannot serve two masters. Faithfully and well to discharge the duties of one sphere of life positively disqualifies us for those of a lower or of a higher sphere. Contentment in our allotted place—and a place

is allotted to us all—is at once the plain dictate of reason and the positive injunction of inspiration. A laborer will never do full and efficient work unless he finds not only his support but his happiness in his labor, content to leave to those, more gifted than he, the problems of science and the perplexities of finance. And such a course is always the laborer's choice, unless the vile spirit of unrest and discontent has been stirred within him by the constant teachings of a blasphemous philosophy.

The practice of men in the employment of menial labor is in entire harmony with our doctrine, and at once attests and demonstrates its truth. The farmer always prefers as laborers in his field those accustomed and competent only to such work; nor will he employ, except from necessity or as a matter of charity, applicants whose thoughts have taken a wider and a loftier range. To succeed in work that is below one's capacity and attainments is just as impossible as to succeed in work that is above one's capacity and attainments; and this the practical man, who, in all matters relating to his business and interests, has more sense than all the philanthropists and reformers in the world put together, well knows, and acts accordingly. Not long ago, I had a conversation with a prominent gentleman, a farmer and preacher, who combatted this view; and yet in the conversation it cropped out that he had just refused employment, though greatly needing labor on his farm, to two strong young men, fresh from the Normal School at Hampton, on the ground, as acknowledged, that persons engaged as they had been would not suit his work, nor it them. What this man did, everybody else, under similar circumstances, does. The simple fact that men uniformly so act, proves that such action is based on the strongest and most conclusive reasons. The cook, that must read the daily paper, will spoil your beef and your bread; the sable pickaninny, that has to do his grammar and arithmetic, will leave your boots unblackened and your horse uncurried.

Some—and a great many too—are and must be mudsills. Some are and must be “hewers of wood and drawers of water.” Such is the decree, and the language quoted is that of the Almighty. This doctrine, so unpalatable to our fanatical optimists, has been most fiercely attacked; but these assaults, hot with wrath, have made no impression on the thick bosses of Jehovah's buckler.

Society, left to the operation of natural causes, will take its proper order of stratification. Each member, according to his inherent energy and capacity, will find his proper place in just gradation. To protect the individual in his rights, not to form society, is the function of government. As individuals have or lack capacity, they will rise or sink; and they will rise who ought to rise, and they will sink who ought to sink. To check, or attempt to check one from sinking who ought to sink, is as great a cruelty to him and as disastrous to society as to prevent or attempt to prevent one from rising who ought to rise. That father would be cruel in the extreme and inflict a great damage on the community who

should hold, or attempt to hold, in lowly life, a son competent to the grandest achievements; but not more cruel nor more injurious to society than that other father who places his son in a position above his capacity, and, say, holds him there, a position which requires of him duties that he cannot discharge, and devolves upon him responsibilities, that he cannot meet, rendering worthless, and, from a sense of worthlessness, wretched, one who, in his proper place, would have been both useful and happy. That every man should promptly find his proper level is demanded alike by the happiness of the individual and the general interests of the community. An attempt on the part of the State to place all on a common level, is beyond the range of its just powers, and is as silly as it is vain. The great Father of Waters, as he moves to the sea, bears on his turbid bosom many thousand tons of solid matter, which is accurately assorted and distributed along his course and at his mouths by the operation of physical laws too powerful for human agency to contravene; and so the laws of God's moral government, not less constant nor less powerful than those that control the physical universe, determine the stratification of human society. We may endeavor by legislation, as weak as it is wicked, to prevent this stratification or to make it homogeneous and uniform; but as sure as God is stronger than man, the attempt will end in failure, inflicting, however, untold misery on individuals and crippling, it may be, the industries of the globe.

We have drifted far from the simplicity of our fathers. They held that government is instituted for the protection of individual rights; now the individual is the prey of government, which crushes him with tyrannous exactions, while the highest aim of statesmanship consists in the discovery of new subjects of taxation. And now, when the President of the Republic, (can we call it a Republic?) "whereof," he sapiently tells us, "one man is as good as another," recommends in his last annual message to Congress, compulsory education by the Federal Government; and, with a logic, of which I will only say that it is worthy of its source, proposes to tax the church to support the school, backed in this latter matter, I regret to add, by the feeble support of the Governor of Virginia, it is high time that thoughtful men should bestir themselves, demand a new reckoning, and make the supreme effort, lest the ship of state drift into worse than Prussian absolutism. The fact that the President makes such a proposition, and that, too, in the most solemn and formal way, ought to arouse us from our lethargy and make us open our eyes to the alarming drift and tendency of the times. It is nothing less than that the Federal Government should stretch out its Briarean arms from the St. Lawrence to the Gulf, and from the Atlantic to the Pacific, and lay its cold and heavy hand upon all the children of "the nation," compelling them to schools supported by universal taxation, prescribing what they shall learn, and what they shall not learn, forbidding the reading of the Bible and the bare mention of the name of Christ, forming their minds and their morals, taking charge of their health and their habits, constituting itself a sort

of wet nurse to the little urchins, and leaving to parents, upon whom alone is devolved, as well by instinct and affection as by the repeated and most solemn injunctions of Inspiration, the education of their children, little more than the function of reproduction. Under such a system, the path to despotism is short and plain; and we may expect to see, as we most abundantly do see, wherever the scheme has been long intrenched and so has had time to fructify, an utter relaxation of parental and filial obligation and manifold forms of atheism and irreligion. But the Federal Government has as much right to intervene in this matter as the State Government; it belongs to neither. The education of children belongs to parents and to them only; nor can they delegate or surrender it to the civil authority, State or Federal, without guilt.

But, it is maintained, that a necessity is laid upon Virginia to support the public school because of the presence of negroes as citizens in our midst, whose equality is asserted by the law and maintained by the power of the Federal Government.

Let us look into this. When an inferior and a superior race come into contact with each other, one of these three things will take place. 1st. The inferior race will disappear; or 2d. The races will amalgamate; or 3d. The inferior race must submit, under forms more or less despotic, to the domination of the superior race.

1. When Europeans landed on this continent their instincts demanded that so vast and fertile a domain, pregnant with such mighty and brilliant possibilities, should not be left to the proprietorship of wild savages, incompetent to cultivate the soil or explore the mine. They were but cumberers of the ground, and must give way to those who could utilize the gifts of nature to the general benefit of mankind. On the other hand, the proud spirit of the haughty Indian, after many a bloody protest, it is true, sullenly recognized the inevitable logic of this demand, and so he has constantly retired before the advancing wave of civilization. Taught by instinct, he felt that he was unable to compete, for the means of living, with a race whose superior sagacity moulded the forms and bent the forces of nature to their will. Thus, the mighty tribes that once lorded it over this continent, following the course of the sun, and vanishing, as they retired, like April snows, are represented now in our western wilds by only a few degraded and broken spirited remnants, the miserable victims of the cruel charity of the Government—for governmental charity is always cruel, and corrupting too—famishing on fibrous beef, and poisoned with putrid pork. As the tide of life moves further westward, the Indian, as heretofore, must abandon his reservation, and soon his only place will be in history. This is one method of solution, which we have witnessed with our own eyes, and, so sure as the laws of nature are constant, we shall witness it again, unless we change the hideous policy to which we are committed.

2. Under favoring circumstances and conditions, the races will amalgamate. Nature implants in the superior race antagonisms and antipathies to the inferior, which, except under abnormal circumstances, effec-

tually protects the purity of its strain. The greater the disparity, the stronger these antipathies, and therefore the less the liability to amalgamation. But how great soever the disparity, amalgamation is inevitable under certain conditions, as where the inferior race vastly outnumber the superior, or when the two races are kept together by external force. The amalgamation of the blacks and whites—a crime against blood and lineage, against man and God, against which I raise my hands in horror and disgust, and exonerate my conscience, if I can do no more, by a solemn and indignant protest—is encouraged and invited by the law, which recognizes the political equality of the negro, and ties the races together in the bonds of political partnership.

If the negro, as the law assumes, is equal to the great functions of citizenship, is a copartner with us in a common government, to discharge the same duties, meet the same responsibilities, and share the same destiny, then the races ought to assimilate as thoroughly as possible, and every bar to their perfect blending ought to be removed. Mixed schools, which we barely escaped—if, indeed, we have escaped—only because race instinct, though weakened and blinded by the hot passions born of strife and blood, was stronger than the logic of the law, in which the same training and instructions should be given and antagonisms worn off by constant contact and association, is the necessary, the logical demand of the doctrine of equality. Nor let us deceive ourselves by saying that political equality is one thing and social equality another. An adjective will not save us. Equality is equality. If the negro is fit, as the law in question declares he is, to make laws for the control of our conduct and property; to give orders as a colonel or general, which we must implicitly obey; to sit in senatorial robes; to wear the spotless ermine; to occupy the chair of Washington, he is certainly fit to eat with us at our tables, to sleep in our beds, to be invited into our parlors, and to do all acts and things which a white man may do.

The intent and animus of the law, the pressure of the whole machinery of the Federal Government, and of the State Government too, in so far as it recognizes the equality of the negro in its insane attempts to qualify him by education for the rights and duties of citizenship, tend to a common point, viz., to wear off race antagonisms by contact and association, to pave the way consequently to assimilation and amalgamation, and thus degrade into mulattoes and molungeons, the noblest type of the noblest race that ever floated on the tide of time. No thanks to the law if this result does not promptly and fully ensue. It is as criminal as if miscegenation were the order of the day; for it plies all its logic and displays all its seductions to effect that object, from which we are saved, in so far as we are saved, only by those antagonisms and antipathies of race, stronger than human legislation, implanted in us by our Maker to protect purity of blood and accomplish the "survival of the fittest."

If it be said in reply that this very principle of race antagonism is an effectual bar to hybridization, I answer:

1. That if such be the tendency of the law, it must produce its effect; that it is as impossible to annihilate a force in morals as it is to annihilate a force in physics; that the law makes its fiercest assaults upon the very principle which is relied upon to combat or modify its tendencies, and that this principle is liable to be so weakened and emasculated by the varied appliances operating against it, as to be unable at last to antagonize the baleful tendencies of the law. The law, however weak in comparison with the antagonizing principle, must produce its effects, which will become more manifest and more disastrous as the law becomes stronger and the opposing principle weaker. And this is exactly the tendency of things. As we submit to this legislation, and applaud and adopt it, its power over us becomes greater and our repugnance less to it and to its results, so that a time may come when, both from the increasing strength of the law and the growing weakness of human virtue, our race may be hopelessly ruined.

2. Beware how you subject human nature to temptation. For us, as weak as we are sinful, the only safe philosophy is found in the prayer of our Saviour, "Lead us not into temptation." How dare we support and sanction a law which daily displays before society and our children a constant temptation to corruption of blood? It is a crime against decency and morals, against race and blood, against God and nature.

If we are not utterly debauched by the temptation, the law is not the less criminal; for we are saved, so far as we are saved, by a principle outside of the law, antagonistic to it, the eradication of which is the supreme object of the law, and of those who conceived and framed it.

But we have no option, we are told, except submission. I reply that we can submit without guilt to any thing that we cannot prevent; but that when we adopt, and applaud and defend this law, and, with superserviceable weakness, extend its application, we are as guilty, we are more guilty than its original framers. And this thing, and nothing else, we are doing, when we go to the exhausted Exchequer of the Commonwealth, and take from it money—money that does not belong to the State, but to its creditors—and apply it to the support of the public school that the asserted doctrine of negro equality may be made good. In this we cannot offer the plea of compulsion; no federal law requires it; we do it of our own volition; and in doing it, we grant that the negro is competent to political sovereignty and endeavor to prepare him for it; and thus we commit ourselves to the dogma of negro equality and become responsible for all its hideous consequences. This law, born of blood, is destined to die, as the passions engendered by war subside, unless we adopt it and approve it, and so infuse new life into it, and proceed with supreme guilt and folly to incorporate it into our State legislation. Shall we do it? God forbid.

3. A third course has been indicated, the discussion of which is reserved for another article.

CIVIS.

[For the Southern Planter and Farmer.]

ON THE USE OF PLASTER OR SULPHATE OF LIME.

In my article on Commercial Fertilizers, published in your October No., (the views in which I am pleased to see endorsed by "Henrico" in your last,) I promised to write you on the subject of Plaster as a Fertilizer. I have been prevented doing so before, by constant employment. I will begin by saying it is a subject that I do not believe any agriculturist fully understands. I confess that I do not, and can only give you my experience and crude views on the subject for what they are worth. I have been using plaster for thirty years, and of late years as much as 100 tons a year; sometimes with no perceptible benefit, generally with good results, and frequently remarkable, equal to that of Peruvian guano—depending, in my opinion, (now that I have more experience,) on the *quality of the article and the fineness of its grinding*. Using plaster so largely, five years ago I bought a mill near me, and have been grinding from 2,000 to 3,000 tons a year for sale, and find that all the plaster that is imported from Nova Scotia and all that is called the Blue Windsor, is not of the same quality. The best, of course, is pure sulphate of lime, but much of it has a large proportion of silica in it, and much baryta, and is, consequently, less valuable as a fertilizer. Of the many quarries now worked in Nova Scotia, there are only three, of my knowledge, that are valuable, and one of them of much better quality than the other two, and there are some the plaster from which I would not go to the labor of sowing if it were delivered to me free of charge. Hence I believe are the various opinions as to the value or worthlessness of plaster by farmers, and it is impossible to tell, after it is ground, of what quality the rock was. Then plaster is generally ground too coarse; it should be as fine as flour, if possible, so that it will more readily *dissolve*. I will say presently what I mean by *dissolving*.

Now, as to my experiments in the use of it. Before the war the benefit was more perceptible than since, I believe because then the farmer selected his choice of rock; it was ground in the country mills and ground fine. All the mills in this section being burnt during the war most of the plaster is ground now by steam mills and ground entirely too coarse and of every sort of plaster-rock they can buy, thinking it all equally good. I have used it on all the grasses, and on wheat, corn and oats, and find it beneficial to all when of good quality and properly applied. I have seen the most marked results on clover, next on sod land. On wheat it should be applied as soon as it comes up in the fall or early winter; if applied in spring it is apt to keep it too green and make it more liable to rust; on sod land, any time in the winter or early spring; on clover, early in the spring, as soon as it begins to cover the ground; on corn, after the last plowing, just when the corn is laid aside. I think plaster should always be applied on the surface, never under the ground, unless mixed with some fertilizer containing ammonia,

then it may be beneficial to prevent the too rapid escape of the ammonia, as in drilling Peruvian guano with wheat. I believe plaster is beneficial to all soils, but more particularly on land where there is much vegetable matter decomposing. I had been told it was worthless in our Tidewater section. Five years ago I sent ten tons to my farm in Essex Co., Va., on the Rappahannock river, (plaster manufactured in Baltimore,) it had no perceptible effect, nor was I surprised, when I saw a remnant of it that was left, it was as coarse as sand. Last year I sent thirty tons to the same farm—ground fine at my mill—of rock that I knew to be the best, and the effect is very marked, almost as distinct as would have been an application of 100 pounds of Peruvian guano. I have seen a part of a clover field unsown and persons passing would ask why I did not sow the balance of the field in clover, when it was all well set alike, but a part had no plaster on it. I have seen stripes in corn as far as you could see the field, where the plaster was sown being a foot or two taller and several shades darker green than where it missed. I have also frequently seen no effect whatever from its use. Formerly I thought its action owing to peculiar seasons; I still think the season has a great deal to do with it, but more the *quality* of the plaster.

Now, as to *how* plaster acts, no chemist or agriculturist agrees. I have a mere smattering of chemistry, but will have to use the little I have to help out my experience and observation, and out of the combination give you my crude ideas. The best plaster is the purest sulphate of lime, that is, sulphuric acid and lime. Pure sulphate of *lime*, (not combined with silica and baryta,) when finely ground and distributed over the land may act thus: the sulphuric acid, having a greater affinity for ammonia than for lime, will let go the lime and unite with the ammonia contained in rain, more particularly in snow, which is said to contain more ammonia than rain, and especially with the ammoniacal and nitrogenous vapors arising from decomposing vegetable matter—of which there is a great deal the first warm weather in spring—forming *sulphate of ammonia*, which, being soluble in water, is taken up by the plant as food, or stimulant if you please, but if a stimulant, is so by utilizing the escaping ammonia from vegetable matter, rain and snow, which would otherwise be lost; the lime left free, and though in small quantities, does its part in producing chemical changes in the soil and vegetable matter. This is what I believe is the "*dissolving*" of plaster. If correct you see the necessity of fine grinding in plaster, and that it should be pure sulphate of lime uncombined with anything else, and the greater redundancy of sulphuric acid the better. If this theory be true, then the *best plaster* will act, and I believe does act, on all soils, especially where there is much decomposition of vegetable matter.

Mr. Editor, this may be all theory, but it is certain that all farmers, experienced in the use of plaster, *know* that there are different kinds of it; that the kind which gives out the strongest sulphuric acid smell in grinding, has the best effect on vegetation; that some

plaster, in some seasons at least, has no perceptible effect; that sometimes the effect is greater than at others, and sometimes equal to that of Peruvian guano; that if it is thrown over or mixed in a fermenting dung-pile, it at once stops the strong pungent smell, which is the escape of ammonia, and thus preserves the manure. These are farmers' facts, and not theory, and chemists will tell you there is great difference in the analysis of different kinds of plaster-rock, all from Nova Scotia. Then I claim that the best plaster, properly ground, is the best fertilizer we can use for its cost. And, as I said in the *Piedmont and Tidewater Farmer*, bone lime, and plaster are the only fertilizers (always excepting *our own home manures*, which are best of all) that will pay the farmer in the "long run." Having already made this article too long, I will only say in addition that I usually apply from 100 to 150 pounds plaster to the acre.

Fauquier Co., Va.

ROBT. BEVERLEY.

NOTE BY THE EDITOR.—Col. BEVERLY's opinion, as to the reasons underlying the action of plaster, is exactly corroborated by the learned LIEBIG, and he, the father of agricultural chemistry, was certainly worthy to express an opinion in this line. Necessity is the great creator, and now that it presses our people at so many points, we are not surprised at the inquiry so apparent everywhere throughout the State. As we have before observed, there is no sign of the times fuller of solid hope than this desire of the farming community to get at *the reasons of their business*; for they *must* produce the best returns with the least expenditure of money. Col. Beverly is so thoroughly posted in the agriculture and capabilities generally of his region that we trust he will not abate his efforts, so auspiciously begun, but, from time to time, let his brother farmers hear the results of his experience, observation and study.

LORD KINCAID'S EXPERIMENT WITH STABLE MANURE KEPT UNDER COVER AND EXPOSED.

Lord Kincaid, a Scotch land owner and farmer, had the good sense to learn by direct experiment the relative value of stable manure, kept some months under shelter and protected from all rain or snow, and similar manure exposed to the weather in a way once very common in Great Britain, and still not very uncommon in the United States. Four acres of good soil were measured, two of them were manured with ordinary barn-yard manure, and two with an equal quantity of manure from a covered shed. The whole was planted with potatoes. The product of each acre was as follows:

Potatoes treated with barn-yard manure:

One acre produced 272 bushels.

Another acre produced 272 bushels.

Potatoes manured from the covered sheds:

One acre produced 442 bushels.

Another acre produced 471 bushels.

The next year the land was sown with wheat, when the crop was as follows:

Wheat on land treated with barn-yard manure:

One acre produced forty-one bushels, eighteen pounds (of sixty-one pounds per bushel).

One acre produced forty-two bushels, thirty-eight pounds (of sixty-one pounds per bushel).

Wheat on land manured from covered sheds:

One acre produced fifty-five bushels, five pounds (of sixty-one pounds per bushel).

One acre produced fifty-eight bushels, forty-seven pounds (of sixty-one pounds per bushel).

The straw also yielded one-third more upon the land fertilized with the manure from the covered stalls, than upon that to which the ordinary manure was applied.

The *Nashville American* concludes its remarks upon the above by saying, that the salts saved, my merely sheltering manure, gave Lord Kincaid about one hundred bushels of potatoes more to the acre than he would have raised without the shelter. Even in the next crop of wheat the gain was nearly fourteen bushels. The best plant food is often volatile, and always soluble in water. It is easily lost by a stupid man, who takes no pains to raise full crops of grain, vegetables, cotton or fruit. To make a poor article of manure, and waste two-thirds of that, is calculated to bring manure making on the farm into disrepute. Learn to produce manure worth more per one hundred pounds than good hay. Concentrate fertility as you would bring the rays of the sun to a focus in a sun-glass.

NOTE BY THE EDITOR.—Not a few of our folks in the South not only expose their stable manure to the action of the elements, *but actually mix lime with it!* These two operations render it almost absolutely valueless. Stable manure has been examined thoroughly by men not less famous than LAWES, GILBERT, VOELCKER, HUXTABLE, WAX, VILLE and GOESSMANN, and none of them succeeded in getting as much as fifty pounds to the ton of what are universally accepted as indispensable elements of plant food, namely: ammonia, phosphoric acid, and potash. Now, if it is allowed to decompose at pleasure, and be subjected to washing rains, these valuable elements will very probably all wash away; and when lime is added, if any ammonia has been left, it will be at once expelled. We have urged, again and again, that *no farmer can possibly know too much about his business*; and yet we see that ignorance of the simplest elements of science involves to him, every year, the loss of hundreds of dollars in deficient crops from material that ought to give him a bountiful return.

[For the Southern Planter and Farmer.]

ABOUT FENCES.

I have been greatly annoyed several times to *fall upon* some plan by which I could always keep the first panel of a staked fence on each side of a gate or bars in as good repair as the other panels of the fence, but never succeeded in doing so until a few days ago. It is this: instead of having a cap and single pair of stakes, as we usually find at the end of rails next to the gate, &c., have two pairs of stakes and cap to each pair, placed four to six inches from each other, then rocks or blocks placed between the ends of the rails, and also between these two stakes, will remain there a long time, and of course cause that part of the panel to be kept as high as the other parts of the fence.

STUDLEY.

TENNESSEE'S EXAMPLE TO VIRGINIA.

The State of Tennessee has given to the world the "*Introduction to the Resources of Tennessee*," a volume of 1200 pages, accompanied by geological, crop and transportation maps, and giving a description of what every county in the State has to exhibit in the way of lands, timber, mines—indeed, everything that an immigrant would like to know. It is the work of its Bureau of Agriculture, Statistics and Mines, of which Dr. J. B. KILLEBREW is chief. The work is an honor to the State, and has gone forth to foreign lands to show them what it has to offer to men of energy and means who wish a field ample enough to give their talents the fullest scope. Dr. KILLEBREW, hearing that our State contemplated the arrangement of a similar bureau, addressed a letter to Mr. OTT, the Secretary of the Southern Fertilizing Company, on the subject. Mr. OTT has furnished us with the following extracts, which we are satisfied will prove interesting to every reader of the *Planter and Farmer*:

"The time has come when the South can no longer be dependent upon the North without complete prostration. The habit of selling the very fatness of our soil, in the shape of raw material, year by year, and buying almost everything we use, from the hat on our heads to the shoes on our feet—everything, from a cradle to a coffin, cannot be longer continued without making us slaves to the North almost as absolutely as the negroes were to us. We are indeed giving the labor of three men for one, when we exchange the raw product for the finished article. Our prosperity must in the future depend upon a diversification of our industries. We need more industrial talent, that can bridle the foaming rivulet and make it obedient to the will of man; that can direct the operations of the forge, the furnace, and the rolling mill; that can subordinate all the forces of nature to man's use. We are vainly striving to make muscle compete with machinery, directed by intelligence. The *per capita* productive capacity of each man, woman and child in Massachusetts is \$400, excluding the gains of commerce; while in Tennessee it is \$96, and in Virginia \$74. In other words, each person in Massachusetts may spend as much as each person in Tennessee makes, and have \$304 left, or as much as a citizen of Virginia, and have \$326 to deposit in a savings bank. If the people of Virginia had the same training and the same natural forces at work, with all the diversity of manufactures, as the people of Massachusetts, they could have an annual income greater by nearly \$400,000,000! a sum, I suppose, nearly double the value of all your taxable property. There can be but one remedy: we must have more skilled labor, and must cease to "sell a hide for a penny and buy back the tail for a shilling." We cannot be prosperous in the South as long as we pursue the present ruinous policy of giving all the benefits of the high protective tariff to the North. Virginia, Tennessee and Kentucky pay at least \$30,000,000 of the internal revenue of the country—fully one-tenth—while they represent only one-twentieth of the wealth of the United States.

"I am rejoiced that you in Virginia are about to take one of the most important steps towards relieving yourselves of this state of

vassalage. Gather up the facts pertaining to your resources; publish them to the world; show your advantages in climate, in variety of productions, in the cheapness of your lands, in the value, extent and variety of your mineral wealth and timber, in the excellence of your great harbor, &c., &c., and you cannot fail to have an accession to your population which will turn all these now mere possibilities into tangible wealth, and make old Virginia, my fatherland, whose very name I venerate, bright, as of yore, with intellectual and material splendor."

A BROAD VIEW OF THINGS AT HOME.

An esteemed correspondent in Montgomery county, Va., in a private letter to us, says:

"There is no reason why we should not have as good agricultural writing in Virginia as in any other portion of the country; for, as a class, our farmers are better educated than the majority of farmers in the other States. But, woe to us, ours too generally devote their best talents to local political matters, to the neglect of those vital interests that politics were intended merely to conserve.

"If we cannot, as we ought to be, a manufacturing State and people, we should, by all means, be a thriving agricultural people, as we have all the advantages of climate and convenience to all the principal markets of the country. We must show ourselves to be a *producing people* before we can hope to have capitalists come among us to engage in manufacturing. *The profits of manufacturing at this day frequently turns upon the facilities existing for the supply of necessities without cost of transportation.*

"During my visits to Richmond in the last few years I have met several farmers from the North and West, who expressed to me their astonishment at seeing the vast amount of land lying idle around our capital, and between it and Petersburg. Indeed, it should be a matter of surprise to any one to see land within gunshot of Capitol Square thrown out as commons, and the owners complaining of hard times. I do hope there is a better day coming for us, and I know of nothing that will aid its advance more than the efforts the *Planter and Farmer* is making to disseminate among the people practical agricultural information and words of good cheer."

[For the Southern Planter and Farmer.]

CORN-SHUCKING.

Why is it that farmers will continue to pay the negro ten cents per barrel to shuck their corn when there is little or no expense attending that operation? Let the corn be "slip-shucked" as it is gathered and thrown into the crib. This can be done with safety three weeks earlier than when it is shucked. The rats do not injure it anything like so much, and there is not that vile scent upon it caused by them. It is the best plan upon earth to keep weevil from it, and in fact there are many reasons why it should be so housed.

When you wish to prepare the crop for market or the mill, pass it through the corn sheller and through your wheat fan, *with the chaffer only in it*, and there you have your corn *shelled, shucked and cured*, and your shucks hackled and ready for your stock, than which nothing is better for them, always provided you have them slightly impregnated with water, into which you have cast a *modicum* of salt. What pleasure to see them eat it, all the time remembering that you have in your pocket \$10 save upon every 100 barrels of corn you may have made, which would have gone into the pocket of some low vender of lightning, who always manages to clean out every negro to whom the farmer pays money.

Spotsylvania Co.

GRANGER.

[For the Southern Planter and Farmer.]

INJURY TO TOBACCO PLANT BEDS BY FLIES.

A REMEDY.

[The following article appeared in this journal in 1854, and at the request of a friend we reproduce it. We have arranged to have a series of articles, by the best tobacco growers in Virginia, on the cultivation of tobacco from the plant bed to its delivery to market. ED.]

“The ravages of the fly on the tobacco plant beds of Eastern Virginia have so much increased of late years as to call for a more certain preventive or remedy than any heretofore suggested. A first, and sometimes a second series of plants is devoured by the insects, and before a third can attain a growth sufficient for transplantation, the early seasons have passed. The loss occasioned by the delay alone in planting must have been immense; and during the present year many growers of tobacco wholly failed in occupying a part of their hills made for that purpose.

“During a recent visit to the county of Amherst, I met with Mr. James W. Phillips, an intelligent citizen and planter of that county, with whom I conversed at large on the best modes of rearing and managing tobacco. From him I learned that he was in possession of a remedy against the fly, which he had tried with unvarying success for thirteen years past, with the exception of one year, when no flies appeared. He had not divulged it before, but is willing that it should be made public now; and as it is both simple and cheap, I send for publication in the *Planter* a copy of what was written down from his dictation.

“As soon as the cattle are taken in from grazing and put up for winter feeding, as we may be certain that their manure will be free from grass seeds, a quantity of this is collected and stored in several barrels. Old flour or lime barrels will answer the purpose. Over each layer of eight or ten inches thickness, pour water until it is moistened through and then sprinkle a handful or two of slaked lime. About

four or five handfuls generally suffice for a barrel. These are either to be kept under shelter or covered during wet weather. As soon as the fly makes its appearance—which is generally from the last week in March to the middle of April—sprinkle the mixture, which will be now thoroughly pulverized, over the beds so as nearly to cover the plants. The flies will cease to trouble them and the manure will stimulate their growth as well or better than any other he has ever tried.

“Mr. P. covers his beds with brush, as is the general custom, and rather thicker than usual; but never removes it entirely until shortly before the plants are drawn. He thinks it better to have *two* layers of brush, one across the other, as in case the plants are too much shaded, the second may be removed without disturbing the first, and thus injuring the plants.

“The remedy here proposed may not be as new to all your readers as it was to myself, but I doubt if it be generally known, and Mr. Phillips assures me that, as thus compounded, it is original with him. I have heard of liquid manure, or a weak solution of guano, or the brine of fish being poured over the beds—of lime or plaster of Paris, either singly or successively, sprinkled over the plants—but not with uniform results. It has been said that if brush fires be kindled at night to the leeward of the beds the flies will be attracted by the flames. Recent observers of the habits of these insects also tell us that they rarely or never rise more than three feet from the ground, and that beds enclosed by a tight plank fence of that height will keep them out. Of the efficacy of either of these modes I know nothing; but the first, I suppose, would be but temporary, and the other both troublesome and expensive. Mr. P’s continued success was attested by several of his neighbors, and his preparation may be considered worthy of trial by many others during the coming season. Should it prove equally efficacious under a variety of circumstances, he will have entitled himself to the thanks of our planters generally, and perhaps to some more solid testimonial of their obligations.

“*Nelson*, Dec. 7, 1853.

“N. F. CABELL.”

[For the Southern Planter and Farmer.]

DITCHING.

In ditching I should find no use for a “mud scraper,” but where the clay is too stiff to use the spade, there is economy in breaking it up with the coulter, and some advantage in removing it with the scraper in common use on roads.

Since I have occasion to recur to the subject of ditching, I may be pardoned a few remarks on the principle, novel to me, expressed by your correspondent, “*Southside*,” in, as I remember, these words: “It is a well-known fact to all practical farmers, that a straight ditch will fill up sooner than a crooked one.”

Now, if there is anything in the world my reason clearly teaches me, and my experience as a "practical farmer" confirms, it is that a straight ditch, other things being equal, will and *must* keep open longer than a crooked one. That a ditch, cut straight where the lay of the land demands a crooked one, will fill up, is readily granted; but here we have another element introduced; it is no longer a contest between straight and crooked.

Having mistaken mere coincidence for cause and effect (*post hoc propter hoc*, if you'll excuse the Latin), "Southside" has to invent a queer philosophy in explanation of his assumed phenomenon. It amounts to this: A ditch may fill up because it has too much fall. The current will be strong enough to bear with it large quantities of sand, which becomes deposited in bars wherever the current is checked. But there is a medium grade, sufficient to move mud indeed, but not sand, and the mud will pass off and form no bars. This does not square with my experience. I have never seen a stream, not even a canal for navigation, with so little fall that it had not strength to move sand when swollen. And both reason and observation teach me that every current of water, whether impetuous enough to move stones, or so sluggish as to move only silt, when it is checked, deposits its drifts, be it what it may. People ditch streams, in great part, to make them straight, and call it "straightening." But other considerations induce them to put up with an approximation to straightness. The location must also approximate the lowest land, for the lowest land defines the course of the freshets, and it is the freshets breaking out of the channel or rushing across it at low places that cause the deposition of sand and other debris, by checking the current along the ditch. It is not often a straight ditch can be cut without being exposed to these cross currents. Then it is apt to be filled up. But if it has plenty of fall, so soon as the current is again confined within the banks the new-formed bar is swept out, and when the stream subsides to its usual tide no obstacle remains. I have often seen this process going on. But when the fall is barely sufficient to carry the water, the course of the ordinary and of the flood-tide must strictly coincide, for any washing across the stream would fill it up irretrievably. If I am wrong in these notions, please set me right; but if right, my only object is to guard against that embarrassment to correct practice, even in plain cases, which is apt to result from the adoption of false principles. In the main, I endorse the views and applaud the object of your correspondent. T. P. L.

[For the Southern Planter and Farmer.]

GRAPES AND WINE,

By LOUIS OTT, OF NELSON COUNTY.

No. II.

VIRGINIA AS A GRAPE AND WINE COUNTRY.

Grapes are raised either for the purpose of selling them as a table fruit, or for manufacturing them into wine and brandy.

The selling of grapes as a table fruit is a paying business only in localities which are situated near the cities, or on the lines of railroads leading to the cities. But even in these localities only early varieties are profitable, as the price of grapes is falling very low when peaches are coming into the market. Grapes being a perishable article they must be sold as soon as they reach the market, without regard to the condition of the market. I have seen ship loads of grapes thrown overboard into the Hudson river at New York, which were unsalable on account of the glutted market.

The most natural and safest way of converting a grape crop into money is to manufacture it into wine and brandy, but this business can never, for several reasons, be carried on in connection with the sale of grapes as a table fruit. A first-class wine grape is rarely eligible for the table, and those grapes which are excellent in dessert make generally very indifferent wine. Only early grapes pay as fruit, while they never make good wine, like early apples never make good cider, early table fruit being always deficient in some respects. The season in which early grapes ripen is too warm for the manufacture of wine, in consequence of which the fermentation of the must is too rapid and violent, which is injurious to the quality of wine. It is furthermore not to be expected that a good wine can be manufactured out of a crop of grapes, the better part of which was picked out for selling as a table fruit. The only way of combining the selling of grapes and making wine is to have a separate grape-lot of early varieties for the first purpose, and leave the vineyard untouched for making wine.

The medicinal properties of the grape, and particularly the fact that grapes are the best remedy against dyspepsia, a disease which in no other country is found more frequently than in the United States, are highly appreciated in Europe. Thousands of visitors, and among them a great many Americans, are to be found every year in the famous establishments which are carried on for the grape cure at Meran (South Tyrol), Nice (Piedmont), Duerkheim (Rhenish Bavaria), and other places. This offers another chance to make the cultivation of grapes very profitable in localities which are favored by nature with the requirements of a summer resort. I call the attention of those gentlemen from Richmond who recently bought the Mountain Top House, near Afton, to that matter; this delightful place, on which a considerable vineyard is already in operation, being pre-eminently suited for that purpose, and declare myself willing to give them any further information about it, if they call on me to do so.

THE FRENCH WINE CROP IN 1875.

The *Journal des Debats* says that the summer solstice was marked by wet, showery weather, which was followed by continuous sunshine, presenting, on the whole, a remarkably good season for the maturity of the fruit and the excellence of the wine product. The

noted wines of Bordelais and Burgundy promise their usual standard. In Central France, Lower Burgundy, and Champagne there has rarely been in the past a promise of larger yield than during the present year. Vine-growers in this region confess themselves perfectly satisfied. In the South the damage from inundation, though serious, was not so great as was at first stated. The prolific yields of the past few years have placed the vine-growers in comparatively easy circumstances. On the whole, the French wine product will be abundant, and at least of medium quality; it will probably reach 60,000,000 hectoliters, or 1,585,060,000 gallons, worth, at 20 francs per hectoliter, \$240,000,000. France exports wines to the amount of 250,000,000 francs per annum, but this represents less than one-tenth of the home consumption in a productive year. About one-tenth of the total product is used for the manufacture of brandy, and scarcely 1 per cent. for vinegar. Yet this mighty productive interest stands aghast at the ravages of the *Phylloxera*, which threatens to undermine its prosperity.

The Paris correspondent of the *Mark Lane Express* estimates the French vintage at 80,000,000 hectoliters, (2,113,424,000 gallons.) The distribution is quite unequal. The floods in the South have cut down the crop, while in the interior the yield is above an average.

The vineyards of France cover 4.27 per cent. of her area, and are found in all the departments except ten. This culture has notably increased since 1788, when from 3,873,943 acres 132,088,000 gallons of wine were produced, averaging nearly 35 gallons per acre. In 1873 the acreage had risen to 4,975,842, and the production to 943,528,080 gallons, averaging 189 gallons per acre. The most abundant year, 1875, yields about 2,113,000,000 gallons, while 1854, the poorest of late years, yielded only 285,044,601 gallons. In 1806 the average price was 20 cents per gallon; in 1873, 41½ cents. In 1837 the importation of common wines amounted to only 14,318 gallons, valued at \$1,442, and the exports to 31,224,281 gallons valued at \$3,503,694. In 1873 the imports amounted to 15,976,303 gallons, valued at \$4,913,448, and the exports to 106,652,195 gallons, valued at \$55,453,249. Wines are imported mostly from Spain, Italy and Germany. The bulk of the export goes to England, Belgium, the United States, Germany, and Algeria and other French colonies.

NOTE BY THE EDITOR.—The above summary we extract from the December report of the United States Commissioner of Agriculture. That Department is gaining in the public esteem with a rapidity its honest efforts to arrive at facts so richly deserve. To return to the wine question: we see that *less than one-twentieth* (4.27 per cent.) of the area of France produces something worth \$240,000,000. We in Virginia have the same natural advantages as France in respect of *all* the elements essential to the cultivation of the vine. Will we allow such a capability to remain barren of fruit a single moment longer than we can help? If the "Bureau of Agriculture, Statistics and Mines" were established, the facts in this behalf could be collected and presented, *with absolute exactness*, to the attention of the French people; and who can doubt of a response? Their skill and experience, transplanted to Virginia, would enable us to compete successfully with their mother country in the markets of the world.

HOW GRAPES ARE PRESSED IN SPAIN.

All the finer qualities of the pale, delicate, dry, tonical tasting wine known as Manzanilla are vintages in the neighborhood of San Lucar, just as the finer Amontillados are the produce of the Jerez district. As the vineyards of Torre Brea enjoy the reputation of yielding a superior wine of the former character, we carefully followed the vinification of it from the beginning to the end. The pressing of the grapes commenced between seven and eight o'clock in the evening, and was accomplished in a detached building under a low tiled roof, but entirely open in front. Passing through the gateway, and stumbling in the dim light afforded by an occasional lamp fixed against the wall over a rudely paved court yard, we found ourselves beside a row of large, stout wooden troughs, some ten feet square and a couple of feet deep, raised about three feet from the ground, and known in the vernacular of the vineyard as *lagares*. The bottoms of these receptacles were already strewn with grapes lightly sprinkled over with *yèso* (gypsum), which, if spread over the whole of the bunches, would not have been greatly in excess of the amount of dust ordinarily gathered by that large quantity of grapes conveyed in open baskets on the backs of mules from the vineyards to the pressing places in the towns. Rising perpendicularly in the center of each of the four *lagares* to a height of about seven feet is a tolerably powerful screw, which is only brought into requisition after the grapes have been thoroughly trodden. A couple of swarthy, bare-legged *pesadores* leap into each *lagar* and commence spreading out the bunches of grapes with wooden shovels; and soon eight of them, in their short drawers, blue striped shirts, little caps, and club-nailed shoes, are dancing a more or less lively measure, ankle deep in newly crushed grapes. They dance in couples, one each side of the screw, performing certain rapid pendulum-like movements which are supposed to have the virtue of expressing the juice more satisfactorily from the grapes than can be accomplished by mechanical means. Their dancing ended, the trodden grapes are heaped up on one side and well patted about with the shovel, like so much newly mixed mortar. This causes the expressed juices to flow out in a dingy brown turgid stream through the spout fixed in front of the *lagar*, and after being duly danced upon are shoveled on one side, and this kind of thing goes on until sufficient trodden murk has been accumulated to make what is called the pile. The *pesadores* now retire in favor of the *tiradores* or pressers, who, springing into the *lagares*, collect all the trodden grapes together and skilfully build them, by the aid of wooden shovels and that readier implement, the hand, in a compact mass around the screw, just as an expert plasterer would build up a circular column of Compo. The form taken by this in the first instance, owing to the weight of the murk, is necessarily conical. Consequently the base has to be neatly trimmed and the detached fragments built round the upper part of the column until this attains a height of some five feet. When perfected it is bound round with a

long band of *esparto* about four inches wide, from base to summit, and a flat wooden slab being placed on the top, with the nut of the screw immediately above it, the handles of the screw are rapidly turned, causing the juice to exude between the interstices of the *esparto*. For the first few minutes the labor is light enough. Presently, however, it becomes severe, and, although the pressers strain with all their might, they can only succeed in turning the nut by a series of successive jerks which necessitate the binding of their hands to the handle in case, when exerting their utmost strength, they should lose their hold of it, together with their footing on the slippery floor of the *lagar*. This treading and pressing of grapes goes on nightly for fourteen hours, with occasional intervals for refreshments, until the end of the vintage, lasting together for sixteen days.

[For the Southern Planter and Farmer.]

SYMPHYTUM ASPERRIMUM.

Experiencing the great want in this State of some good fodder plant, I was induced to place myself in communication with a gentleman in Europe who has devoted many years to this subject, and who has, after considerable expense of time and money, succeeded in introducing the above named plant into pretty general notice in France, Germany and England, where it is daily becoming more appreciated and valued.

The common name of this plant is Prickly Comfrey. There are several varieties of *symphytum* indigenous to Great Britain, but none of them are of much value for feeding purposes; but the true *symphytum asperrium* is a native of the Caucasus, and produces enormous crops of the best fodder, which, both in the green and dry state, is greedily eaten by horses, cows, sheep, pigs and poultry.

The culture of comfrey is simple and inexpensive. The ground is dug or plowed six or eight inches deep, and well manured at the same time. The crowns, or root cuttings, are then planted like potato sets, three feet apart. In winter the roots should be well dressed with farm-yard manure or sewage.

The comfrey, when dried into hay, makes good food for all kinds of stock, and the branches and leaves, made into bundles, are excellent for winter feed. The juice of the plant contains much gum and mucilage, but very little sugar. Cattle fed upon this plant are free from the ravages of lung and foot and mouth diseases. Its curative properties have long been known. It has been noticed that the plant thrives in all kinds of soil and aspect. The leaves, as they reach maturity, are torn off without injury to the coming crop. It is a hardy and free grower, the roots taking firm hold of the soil. After being once established they are difficult to eradicate, and the leaves, which are most abundant, can be gathered from the beginning of May to the first frosts without injury to the plant.

C. E. ASHBURNER.

NOTE BY THE EDITOR.—We know nothing of the above plant, but publish it as an item of interest. Mr. A. is an intelligent Englishman and a good farmer, living in Henrico county, near Richmond.

Stock Department.

[For the Southern Planter and Farmer.]

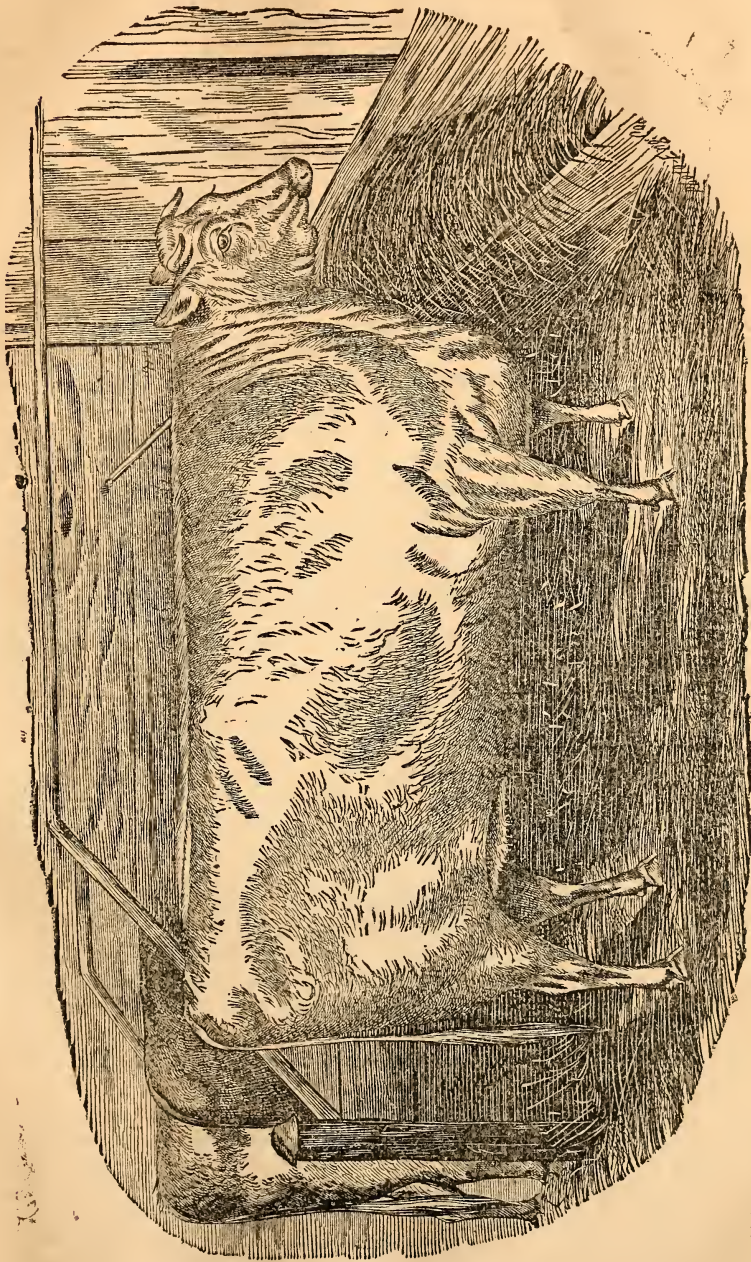
IMPROVE YOUR STOCK.

There is no fact in agriculture so fully established as that it will not pay to keep scrub stock on the farm. The cost of keeping an inferior cow is the same as that of a good one. A good horse will always bring more money, and is more valuable to his owner than a poor one. The cost of the keeping is precisely the same. Why should our farmers raise steers that at four years old will not weigh over 1110 lbs. and bring but \$55 per head; when by simply using a thoroughbred bull upon their native cows they can raise steers that at three years old and with the same cost per annum, will weigh 1500 lbs. and bring \$90 per head. We saw weighed on yesterday, a lot of twelve steers which had been raised together on the same farm, and had precisely the same treatment from calves up. Nine of the number were grade Shorthorns, the produce of a thoroughbred Shorthorn bull upon common cows; and three were natives. The average weight of the grade Shorthorns was 1460 lbs. whilst that of the natives was 976 lbs. showing a difference in favor of the grade Shorthorns of 484 lbs., which, at 6 cents per pound, would amount to \$29.04 per head; but this is not all the difference; the former would command at least a cent per pound more than the latter upon any market, which would add \$9.76 per head, or an aggregate of \$37.80 per head in favor of the grade Shorthorns. This is not an isolated case, but is about the experience of all who have ever handled Shorthorn cattle.

It may be said that our farmers cannot afford to pay from \$150 to \$200 for a Shorthorn bull to breed upon native cows, but a glance at the above figures will show that it will not take the profits of six grade calves to pay for him, besides, he will bring from \$75 to \$100 at the butchers when no longer fit for service. Another source of profit would be the fine grade cows that could be raised from, which, by the continued use of thoroughbred bulls for three or four generations, a class of cattle could be obtained scarcely distinguishable from thoroughbreds.

To those who are prejudiced against the Shorthorn and fear that he is not adapted to the wants of the Virginia farmer (an idea which we know to be wholly unfounded), and who persist in advocating the merits of those "little uglies," the Jerseys, or of the more profitable and useful Devons; as well as to those who insist upon following in the footsteps of their ancestors, and for fear that it might be termed a reflection upon their judgment hold on to the descendants of the "importation of 1607," we would say, by all means use a thoroughbred bull of whatever breed you believe to be best adapted to your particular wants. *But whatever you do, abandon scrubs.*

Whatever is true of improved cattle as compared with natives, is true of improved swine and sheep as compared with the miserable "land pikes" and "grubbers" that now infest the majority of our old Virginia farms. At no period since the close of the late war has pork raising been



Shorthorn.—Property of A. M. Bowman.

so remunerative as now, and judging from the large falling off of receipts at both Cincinnati and Chicago, and the almost general prevalence of cholera in the West, we would say the prospects are even better for the future. No farmer should be without a thoroughbred boar. The very best boar pigs can be had at \$15, and bred even upon a scrub will soon pay for himself the first litter, besides bringing from \$25 to \$35 for pork when no longer fit for use. When our farmers are brought to see the great difference between improved pigs and the miserable scrubs now so common with us, the cry will no longer be heard that pork raising don't pay in Virginia, and western bacon will have to be shipped to some "other seaport" to find a market.

In a future article we shall give some facts and figures showing the results of some crosses made with thoroughbred rams upon native ewes.
Augusta County, Va. A. M. BOWMAN.

[For the Southern Planter and Farmer.]

WINTER CARE OF STOCK.

The usual indifference in this latitude in housing and sheltering stock in winter is a grievous fault, and in these days of *should be* penny savings, farmers cannot make a wiser improvement on the past, than looking to the improvement in the care and quality of their stock.

Whatever breed of stock may be adopted, let it be good and well bred, and of a fixed type, and suited to the section and purposes it is intended for. For most purposes Shorthorns and their grades are best.

Milch cows should be allowed a space of five feet wide and ten to eleven feet deep, or if in double stalls, of nine feet, and two in each, haltered to the corners, and their halters to allow them to feed in the trough, with a division midway, and the trough of roomy size to hold a good supply of food, with several bars across the top to avoid waste of food by each cow. The double stall of nine feet is better than single stalls of five feet, as there is more room for milking and feeding. Light, old, worn trace chains, two and a half feet long to the fork, with a T at one end and rings at the other, with a link between each of several rings to suit the size of the necks loosely should be used as halters.

These temporary stalls may be made in various ways, and the shelters may be of straw or frame work rather than not at all. The buildings of the farm may suggest other plans for feeding and milking under shelter. The stalls should be littered and the droppings thrown out each morning, and, if not too cold and stormy, let the stock out each day for exercise and to graze old sods, if to be had near by. Forage cut up, is of advantage to the stock, and *economy* in its use, and meal and bran sprinkled on it, after dampening the cut food, renders the food more acceptable to stock and beneficial to milk producing.

Calves should be cared for and fed with bran or meal twice a day on thin cut food, and not allowed to get poor. The same is important in their yearling form, as they must be sustained at that early age, and it costs but little to keep their little frames. This also applies to weanling colts; neither should they be crowded together, and of different ages.

Older stock should be housed or sheltered as far as practicable, especially in stormy weather, and so fed that each gets its share. Stock cattle may be sheltered from storms and falling weather by various cheap modes, and there is no better work done on a farm than uniform care of

stock in winter, and it is astonishing how a little meal or bran will show a marked effect on young animals, in the better and earlier start they take in the spring. Even a gill of meal or bran to each calf on its forage, cut up of chaff or sheaf oats, will show in a short time in the oily texture of their coats of hair.

To older stock, short corn, nubbins, slips, &c., judiciously fed, is next to meal with them in value, and the waste of corn passing through them is not lost, but will be valuable to shoats or hogs that may be allowed to range with them. If the hogs are disposed to root where they should not, the rings now to be had generally is a preventive, and cheaply procured and put in their noses.

The advantages of shelter is particularly valuable for cows and calves, that the milking may be done in rooms of warmth produced by animal heat, and then each animal may be better cared for. This, too, applies to cows that are to calve in a few months; care of them is highly valuable to start them into their fresh milking periods in good flesh. The various turnip and sugar beet crops are of great value to be fed as a mixture with the dry food of winter, which adds to the milk.

Shelter and separate apartments for work oxen is most important, and snug stalls, pens, or something to protect them from the sudden change from heat at work to cold, cheerless nights—the young and timid being whipped away from already a poor allowance of inferior food, when, too, the weaker oxen are more tired, and thus the more easily robbed of their share of food—whilst, on the other hand, if each one is to himself, he will eat his share at will, and rest to suit his wants.

This subject is one of great farm value, and is worthy of the thought and practice of all who own few or many animals of the kinds named.

Albemarle Co., Va.

S. W. FICKLIN.

[For the Southern Planter and Farmer.]

“GUENON'S ESCUTCHEON THEORY.”

There seems to be great reluctance on the part of scientific men to accept this remarkable indication of the milking qualities of the cow. They refuse all consideration of it because they “can't see the philosophy of it,” or indeed any philosophy in it.

But the history of science should teach us that observed fact should never, on this account, be rejected or disregarded; for how often has not our ever progressing philosophy unravelled the mysteries of facts which at one time seemed wholly inexplicable. Many yet remain unexplained, but they are, nevertheless, as surely *facts* as if they were well understood.

Of the truth of this interesting theory, the subject of this paper, based, as it unquestionably is, upon observed facts, and which asserts that the upward-growing hair in the vicinity of, or rather above, the udder of a cow does furnish an indication of her milking qualities, quite an extended observation has convinced me. My regular routine of professional labor having been interrupted by the war, and having been thus driven into the country just after I had studied all that Guenon had written upon the subject, I gladly availed myself of the ample opportunity thus afforded of comparing the escutcheons of cows with their reputed milking qualities. The result was so sat-

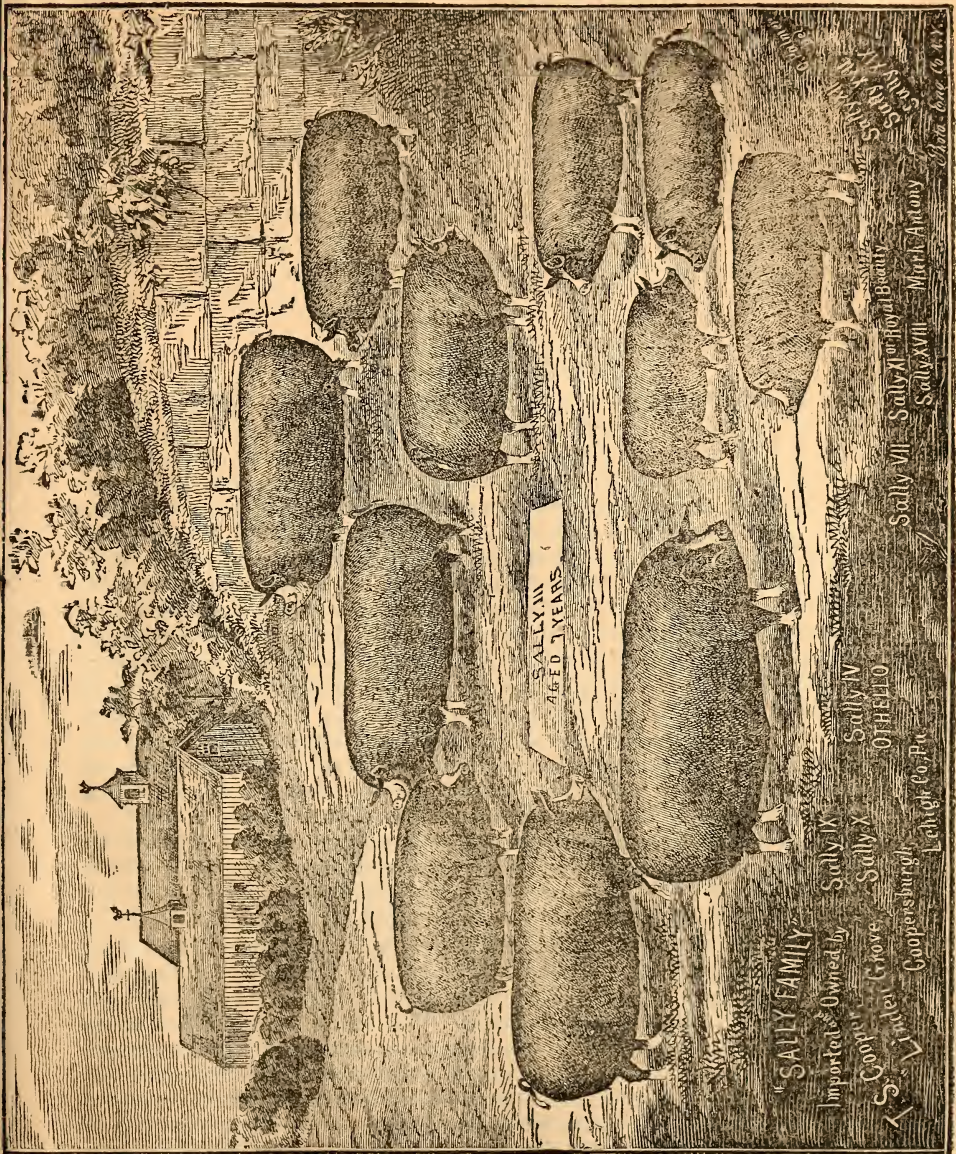
isfactory that, after a little experience, I was enabled to discontinue my interrogatories, and would in the most oracular manner tell the astonished milkwomen as much about their cows as they themselves knew; how much milk at the height of their flow they would give, and how long would remain dry between their calves. I might give some amusing instances of their wonderment and of their considering me a wandering "fortune teller."

My object now is not to attempt either to convince unbelievers or to give a philosophical explanation of this sign, but wish merely to remind the scientific sceptics of a few analogies in the animal economy which may, at least, incline them to think that there may be some philosophy in it, and make them less reluctant to accept it as a verity.

I look upon the abnormal direction of the hair in the escutcheon of the cow as an indication of the amount of circulation supplied to the mammary glands, the extent of the inversion depending on the degree of vascularity.

Now, instead of rejecting this proposition as an absurdity, let us look around for its analogies in nature. One of the first that strikes us is the upward tendency of the hair covering the brain of a highly intellectual man as contrasted with the downward turned hair of the idiot; and in cases of great mental activity, accompanied, of course, by great vascularity, we see the hair standing stiffly upwards, as in the case of "Old Hickory," and also in many living persons that might be mentioned. Indeed, a temporary "standing on end" during the great flow of blood accompanying the excitement of either fear or anger, is familiar to every one; that it should remain permanently erect in cases of habitual cerebral excitement need not be wondered at. Many cases of abnormal growth of hair, consequent upon great vascularity, whether temporary or abiding, occur to the physician, one of the most remarkable of which is that which takes place in the eyelids during ophthalmia, or from exalted action of whatever kind. The erythism of the hair-bulbs give rise to an abundant growth of ciliol or eyelashes, and in unnatural directions, producing the affection called by oculists "trichiasis." I have seen this state of things supervene even upon inflammations having a traumatic origin, and which proved of great obstinacy until this singular complication was removed. This abnormal growth of hair is very common in eyes overstrained by reading or sewing, and though often but temporary, is most frequently chronic and permanent, and affords a good illustration of the subject of this paper.

In horses of high metal, of great nervous power, abnormal growth of the hair on the forehead or on the neck, near to the brain or in the course of the cervical spinal column, are not uncommon. These whorls have always been a popular sign of a high-spirited horse. The "cow-lick," an upward-growing lock of hair, which occurs frequently in children at an early age and remains through life, may be adduced in opposition to my position, as it sometimes exists in persons not remarkable for mental activity; but it, too, really furnishes



an illustration of the principle for which I am contending. This unnatural growth was probably occasioned by an inflammatory action supervening upon a fall or blow upon the head, which may have resulted in some concretion, which, pressing upon the brain, may be the cause of intellectual dullness. The upward-turned hair in this case is not an indication of present vascularity, but of an exalted circulation that existed at some previous time.

I hope that few instances of the abnormal growth of the hair of animals will lead the scientific observer not to reject this theory as unphilosophical, but may stimulate some investigator to further research into its connection with the blood supply of the adjacent organs.

S. K. JACKSON.

Virginia Agricultural and Mechanical College.

[For the Southern Planter and Farmer.]

LEICESTER SHEEP.

The attention of many farmers at the present time being turned to the sheep question, and many candidates for their favor being in the field, I hope you will give me space for a few words on the Leicester. At the recent State Fair there were exhibited fair specimens of Cotswolds, South Oxford and Shropshire Downs, but the Leicesters were very third raters, and could only convey a faint idea of what superior sheep they really are. More than a hundred years have passed away since the days when Bakewell, of Dishley, was a living name, and his experiments, conducted with rare skill and judgment, resulted so successfully in the production of the improved Leicester. Mr. Bakewell's aim was an animal whose shape would yield the largest proportion of valuable meat and the minimum of offal, the most and finest wool, and whose rapid growth and fattening was attained by the smallest quantity of food. These qualities the modern Leicester retains, and, though the fancies of holders and breeders of divers strains of blood have stamped it with many local and other features, the foundation is the same, and the good points of a century ago are the traits of excellence of to-day.

The importance and influence of a superior male is acknowledged by all breeders; so I shall here specify the requisites of a good Leicester ram, hoping the tyro in sheep husbandry may secure such a one for the sultan of his flock. His head should be small, with wide expanded nostrils, his eyes prominent; broad shoulders, well set on and well filled up behind; straight legs, with fine bone standing wide apart; the back and loins broad and straight, with belly ditto, a deep, full twist and soft bright wool clothing a thin, fine skin. The nearer any breed of sheep comes up to this standard the nearer it is to perfection; and an animal having so many of the attributes of excellence as the Leicester undoubtedly has, must be the one to stamp its characteristics on native and other races. To paraphrase Mr. Curtis' (of Michigan) opinion of Shorthorns: "It (the Leicester) improves everything," it touches. It is the best known breed for improving native stocks. They are kind and gentle, easily handled, good breeders and good mothers. I make no war on any breed—they have all good points; but the *Leicester* indubitably has the most good points."

In sheep-breeding, wool has sometimes been sacrificed to mutton—

mutton occasionally to wool, with champions on either side. But ought we not to use an animal growing the maximum of both without prejudice to the quality of either? Much skill, energy and money have been expended on this breed since Mr. Bakewell's days, and many breeders, including Messrs. Sanday, Cresswell, Inge, Wiley, Jordan, Turner and Pawlet, have reaped great profits and distinction in the cause. Messrs. Burton, &c., head the list of the present day, and the prices of fashionable rams are very high and beyond the reach of most; but good blood is to be had at moderate rates, and it should be the shrewd farmer's aim to make the less costly animals as useful, handsome and excellent as the most expensive. This end attained, and their virtues transmitted to their progeny even as the good qualities of the choicest are handed down, the farmer's success is at least a solid one; and if he does not attain fashion and sensational prices, he finds a profitable result in the produce of his own judgment and industry. R. J. F.

SHEEP HUSBANDRY.

Some cautions are necessary to those who think of turning their attention to sheep husbandry. There is no use of attempting it with inferior sheep, unless pure-bred bucks are at once used to improve them. It is useless to attempt this husbandry, unless the flock is sufficiently large to deserve attention. The planter must give his personal attention to the business, unless he has absolute confidence in his shepherds. The flock must be the object of as constant attention as the corn or cotton field.

The cotton and grain crops on the plantations need not be reduced—in fact, they will be greatly increased, and be made on less surface of land, by the heavy manuring from the sheep. It is estimated that a flock of 1,000 sheep, folded on one acre of land, will thoroughly manure it in two nights; or, in round numbers, 180 acres of land will be so thoroughly manured in one year as to easily produce one bale of cotton to the acre. The manure of the sheep alone will more than pay for their keeping.

There is another view to take of sheep husbandry that is not often mentioned. As soon as we have an abundance of fine wool on each farm, woolen factories will spring into existence, and a large proportion of our wool and cotton will be manufactured at home for home consumption. We will retain at home vast sums of money that are now sent abroad for woolen and cotton goods. The Charlottesville and Fredericksburg mills are now manufacturing superior woolen goods, and we have no doubt there are other factories in the State that are doing the same thing. If these factories could be assured of a regular and constant supply of fine wools, they would greatly increase their manufacturing capacity, and make not only a home market for our wool and cotton, but for a thousand other things that can be profitably raised on a farm.

To make sheep husbandry successful at the South, the sheep ought never to be without a shepherd. One shepherd can easily attend to five or six hundred sheep, and no extra labor will be required, except at time of shearing.

AN Ohio hog grower says that the following treatment will make the biggest hog out of a pig in twelve months: Take two parts of barley,

two of corn, and one of oats. Grind them together; then cook and feed cold. He says it is the cheapest food, and that any pig of good improved breed can be made to gain a pound a day until a year old.

HOW TO IMPROVE YOUR STOCK.

We publish the following private letter as an example of what all our farmers should do who wish to improve their stock.—Ed.

* * * I have recently purchased a thoroughbred Alderney bull, sired by "Our Fritz," of New Jersey, and in a few months I shall order from F. W. Chiles, of Louisa, a thoroughbred Devon heifer, and then you shall hear from my success. I have a thoroughbred Southdown buck, purchased from him last summer; he is doing well. I have also recently introduced into my swine a full blood Berkshire boar.

I have grown and exhibited in Franklin the largest and heaviest turnips of any planter in "Goode's district;" the largest weighed 14 lbs., top off. Can you do better than that?

Southampton county, Va.

M. L.

SHEEP vs. DOGS, WOLVES, BEARS, WILDCATS AND RED FOXES.

Ex-Governor Letcher presented a bill in the House of Delegates, entitled a bill "to raise revenue for the support of the government, the payment of the State debt, and the encouragement of wool-growing." It provides, first, that a tax of one dollar shall be imposed on every dog, and of two dollars on every bitch (unless she be spayed), to be paid by the owner or harbinger thereof; second, that the assessor of every district shall enumerate the dogs and bitches therein at the time of making the assessment of personal property for taxation, and that he shall have power to take the sworn statement of any owner of dogs, &c., as to their kind and number; third, that the Treasurer shall collect the tax thus imposed, and any person failing to pay within ten days after lawful demand shall be guilty of a misdemeanor, and finable on each dog, &c., a sum not less than \$3 nor more than \$5, in addition to tax and costs—but may be relieved of the fine on agreeing to immediately kill the dogs, &c., and paying the tax and costs; fourth, that it shall be a misdemeanor to keep or harbor a sheep-killing dog, &c., on a penalty of not less than \$10 nor more than \$20, &c.; fifth, that in payment of the dog tax the following scalps may be received: wolf scalps at \$2 each, and the scalps of bears, wildcats and red foxes at \$1 each—provided the animals be killed within the limits of the State, by the citizens thereof.

NOTE BY THE EDITOR.—This is a move in the right direction, but we fear the "commutation" clause will utterly defeat its purpose. The very people the law is intended to reach, namely: the idle negroes, who like noxious weeds cumber our soil, would wish nothing better. They could devote, if need be, an entire month to finding a red fox, when the delivery of his scalp would pay the tax

on their dog; leaving the poor sheep as badly off as they were before. The love of the chase, peculiar to our people, will take care of the game mentioned in the law. *We want a money tax, and no commutation whatever.* A compromise is no compromise at all if its benefits all go to one side; and they certainly do if the above is a fair synopsis of the bill proposed by Ex Governor LETCHER, and we think it is.

Poultry Department.

"WHICH BREED IS THE BEST?"

Scarcely a mail is taken by us from the postoffice that does not contain one or more inquiries similar to the above, in tenor. Beginners all over the country ask "What shall I commence with?" "What do you consider the best varieties?" "How shall I begin with a choice of breeds?" etc.

A general answer to this sort of a query can only be given in brief, inasmuch as it depends largely upon what the amateur intends to attempt to do, what his facilities may be, what his location is, and whether he purposes to breed as a fancier for the show rooms; as a farmer for marketing simply; for egg-producing mainly, or for eggs and chickens in a general way. For the reproduction of the largest quantities of eggs, the Leghorns, Spanish, Houdans and Hamburgs may be counted as the best. These varieties are generally non-sitters, and during the milder portions of the year, they lay generously and satisfactorily, if attentively cared for. If fowls are intended to be raised for marketing purposes, with a view to produce the most meat at a given age, a cross of those lesser-sized varieties with the Cochins and Brahmas is desirable to get good average chickens.

The Asiatics are usually more hardy than the others, and the infusion of this blood with the small breeds not only increases the size of the progeny, but the cross approaches maturity more rapidly if well fed from chickenhood up. The Brahmas and Cochins are persistent sitters, however, and though they are good winter layers if the pullets are got out early in the season, they are not so good a fowl (pure-bred) as the others first mentioned, for summer layers; while as mothers, or for hatching purposes, they are unrivalled. We have found the Partridge Cochin and Dark Brahma varieties excellent layers in cold weather, and this is a desideratum with many fanciers.

For the show room, as a general thing, the Cochins of different colors from black to white, and the Light and Dark Brahmas, taken as a class, have long been foremost in the consideration of American breeders. They are placed at the head of all the premium society

lists, and probably more in numbers of these huge birds are bred than of others. Then come the Grey Dorkings, the Plymouth Rocks, the White Dorkings, the French fowls, and the lesser-sized ones. We have hitherto advised, and still recommend to amateurs, the policy of commencing with but one or two kinds only, at first. And in answering the general question, "Which are the best?" we can only first decide the object had in view, and this will determine whether the novice should try sitters or non-sitters, pure-bred or cross-bred birds. Having so resolved, a choice of kinds, as above enumerated, will result in satisfaction and profit, if any of these popular varieties are properly cared for.

We have bred nearly all kinds, first or last, and bringing it down to a fine thing, we have found that, taking the year through, the Asiatics will lay as much in value, on an average, as any of our domestic varieties. For numbers of eggs, the Leghorns will excel the others, perhaps, in a twelve month. The French fowls lay a good-sized egg, but not so many as either of the other varieties, and the chicks of the latter are far more tender and difficult to rear than those of any of the Asiatic varieties. The Dorkings, crossed with the Brahmas, give a good-sized chicken the first year, and this makes an excellent farmers' fowl. But the crossing of the various Leghorns with the Brahmas and Cochins is one of the very best certainly for general use, where "fancy" breeding is not attempted. For this latter purpose, it is hardly necessary to add that only pure bloods should ever be bred together, of the *one* chosen variety.

WOMEN AS POULTRY RAISERS.

The special capacity of women for caring for pets is so well established that it is a matter of surprise that a larger number do not make their natural inclination a matter of profit in the raising of poultry. There is no reason why woman may not be as successful as man in this branch of productive and profitable industry. Indeed, when it is considered that the business requires close attention to minute details, patience and gentleness of manner, woman seems to be peculiarly fitted for the business. The Danbury man's humorous description of the different ways in which a woman and man attempt to get a hen into the coop, and the superiority of the former's method is as true as it is funny. After the hennery or coop is built, there is no department of the work that a woman cannot perform without exhausting labor or too heavy demands upon her time. "Down South" poultry raising is woman's special department, and one need not go farther South than Baltimore or Washington to find the markets thronged with the female venders of their own feathered products. That the business is profitable, the experience of hundreds testifies, and that it is healthful, and may be attractive, is susceptible of demonstration.

COOK YOUR POULTRY FOOD in part, and feed it, at least once a

day this cold weather (in the morning is the best time), while it is hot. Mix with this soft feed, which should be composed of meal and vegetables, a little salt, and occasionally a small quantity of powdered charcoal and pepper. This renders it warming, cleansing and palatable to the birds.

The value of potatoes, turnips, etc., thus cooked with bran and corn-meal, is not generally appreciated; it keeps the fowls in good heart, and is altogether economical, as well. The scraps from the table can be used up with this feed, and all the dry bits of the family may thus be utilized. If you keep but a few fowls, one-half their cost of feeding may thus be saved. If you have large numbers to provide for, the expense for food is greatly lessened, in the long run, by this process, and your birds will be quite the better for this treatment, instead of limiting them to dry grain and "cold victuals" continually. Fresh vegetables are valuable for their nutritive material, and for the assistance they afford in digestion.

FEEDING-TROUGHS FOR POULTRY, properly constructed, ought to be generally substituted for the wasteful practice of feeding from the ground. The "reasons why" are obvious. Where there is a scramble for the food that is thrown helter-skelter, the weak are prevented by the strong from getting their share until the latter are satisfied, and the food is trampled into the dirt. It is no advantage to fowls to eat sand, dirt or gravel mixed with their food. The gravel and other indigestible substances necessary to the proper trituration of their food in the gizzard, can be given separately, and should be. A simple trough may be made, defended by slats placed vertically, or on a convenient angle, with spaces sufficient for the passage of the head, thus preventing the trampling and soiling of the food, which will not be wasted, as in the case where it is thrown carelessly on the ground.

CHICKEN CHOLERA.—In response to several letters asking for recipes for disinfecting mixtures to use about poultry-houses and yards, where the above-named dreaded scourge prevails, we give the following: Eight or ten pounds of sulphate of iron (copperas) dissolved in five or six gallons of water, with half a pint of crude carbolic acid added to the solution, and briskly stirred, makes the cheapest and best disinfecting fluid for common use. It can be procured in every town, and by any family, and if the carbolic acid is not at hand, the solution of copperas may be used without it. Sprinkle the walls, nest-boxes, and perches daily, with the above.

For the disinfection of ground on which any excremental matter of diseased fowls (or of those suspected of disease) has been cast, use the "dead oil," (heavy oil) of coal tar, or coal tar itself. It is a good plan to use coal tar as a paint for the inside of poultry-houses, in districts invaded by chicken cholera.

ORGANIZATION OF A POULTRY AND PET STOCK ASSOCIATION OF VIRGINIA AND NORTH CAROLINA.—A meeting of a number of gentlemen interested in the breeding of poultry and pet stock, was held at the office of the *Southern Planter and Farmer* December 15th. An Association was organized to be called the Virginia and North Carolina Poultry and Pet Stock Association, and the following officers were elected: A. M. Bowman, of Augusta county, president; First Vice President, R. T. Fulghum, Raleigh, N. C.; Second Vice President, Dr. L. R. Dickinson, Richmond; Third Vice President, V. M. Firor, Charleston, W. Va.; Fourth Vice President, Dr. E. C. Withers, Danville, Va.; Fifth Vice President, W. S. Thorn, Wythe county; H. Theodore Ellyson, Richmond, Secretary and Treasurer.

The following persons were elected members of the Executive Committee; Dr. T. J. Wooldridge, of Hanover county, chairman; T. L. Payne, Chesterfield county; W. H. H. Lynn, Staunton, Va.; J. McL. Anderson, Caroline county; F. W. Chiles, Louisa county; S. W. Ficklin, Charlottesville, Va.; J. L. Hill, Richmond, and W. F. Pattullo, Farmville.

A committee on Constitution and By-Laws was appointed, which will report at a meeting of the Association on the 11th of this month, at 4 o'clock P. M., in the office of the *Planter and Farmer*.

We gladly publish the above, with the hope that all of our farmers who feel any interest in the matter will become annual members.

When we consider the real value of the poultry interest to our people it does appear strange that Virginia has never before established a Poultry Society. All of the States, North, South and West have their State Poultry Societies, besides, in many cases, local societies. If facts could be ascertained, we venture the assertion that with most of our farmers (who pay any attention at all to raising poultry) it forms the most *profitable department* of their farms, in proportion to the labor and capital invested in it. Then, taking this assertion for granted, let us imagine what an amount of profit could be realized from it, if pursued with energy and in a systematic manner.

Mr. Louis Ott, of Nelson county, Va., in a private letter, writes: "I will furnish you with a description of a *henery* in Bohemia, where 5,000 hens are kept for the production of eggs, and an enormous number of fowls of all kinds are fattened every year. In the year 1859, I spent several weeks on that place for the purpose of studying the matter and making extracts from the books of the establishment. From that henery \$33,000 worth of eggs and fowls were sold during the year 1858, while the expenses amounted to about \$10,000, leaving a net profit of \$23,000. I suppose a description of that henery might be interesting to many of your readers."

THE POULTRY WORLD is the best poultry journal published in this country. We are indebted to it for some of our best *poultry* matter in this number of our Journal. We advise our readers to subscribe to it. Address H. H. Soddard, Hartford, Conn.; price \$1.35.

No GARDEN is complete without a supply of all the small fruits. What an addition to the luxuries of the table are the luscious fruits of the garden throughout the entire summer. They promote health. The acids of the fruits separate the bile from the blood, and ward off bilious complaints, promote health and ward off bilious complaints, promote health and prevent doctor's visits. Every one should have a fine garden.

Horticultural Department.

[For the Southern Planter and Farmer.]

PLAN FOR A WHOLESALE MARKET FOR VEGETABLES IN RICHMOND.

Having returned from a visit to Philadelphia, I thought I would give you a sketch of their wholesale produce market. I think if something similar could be introduced here it would be of great benefit to the farmers supplying the Richmond market, and the people of Richmond also. Along the Delaware river, in Philadelphia, are several markets for the sale of fruit and produce, most of which comes from New Jersey and Delaware. These markets supply most of the hucksters, grocers, hotel-keepers, and many private families with fruit and vegetables. Most of the fruit and produce sent to these markets are put up in baskets and crates, with name of consignor, consignee, destination and point from whence shipped marked plainly on each package. The consignee marks on his books so many packages of fruit or vegetables to the consignor; as they are sold the amount received is placed to his credit on the books, less five per cent., which is charged for commission. The goods are well taken care of and protected from the weather until sold. Money is remitted as often as may be agreed upon. To persons buying in large quantities a reduction in price is made; but a person buying several packages must pay the same price per package as if buying only one. Many persons with large families often buy a basket or crate of fruit or vegetables at a time, and save a great deal of money, as the hucksters and grocers must charge more to make any profit, being obliged to retail in small quantities. There are other market-houses in different parts of Philadelphia for the retail trade, but even there some men sell any goods consigned to them on commission in the same way as before mentioned. Besides the markets spoken of, there are some of the best business streets allotted to farmers *free of charge*. On streets running east and west they occupy the shady side in summer, and sunny side in winter, but are not allowed to stand within three squares of a market-house.

How different here! You pay ten cents for the privilege of nearly roasting in summer and freezing in winter, the same side of the street being occupied all the time. How much better the wholesale market would be for many farmers. As it is now, many of them bring large quantities of the same kind of produce at the same time, and glut the market; but they must sell at a great sacrifice or haul it home. Another time the same article, or others very necessary, may be very scarce in market, although the farmer may have plenty at home; but he is not aware of the fact in time to avail himself of it. Now, if such a market was established here, the commission merchant could keep the farmer posted so as to know what kind of goods was needed, and when to send them; and what is more, he could send them by any person capable of driving a cart. The markets would be better supplied, and should they be overstocked with any particular article, the merchant might ship to other points and realize a fair price in the end for the farmer. It would

also be a check to any extortion of middlemen, as any person, by taking a package or bushel of fruit or produce, would get it nearly as low as the huckster. The system works well in Philadelphia, and I do not see why it would not here. It is worth a trial, at least. Let the Grangers combine and start it; the other farmers will soon join in when they see the benefit of it. But let us have the opinions of others on this subject.

Hanover county, Va.

J. S.

[For the Southern Planter and Farmer.]

POTATOES.

The soil best adapted to this crop is a good clay loam, rich in organic matter, with a little sand by way of shortening. A rich piece of new ground will produce potatoes of extra quality, but not in extra quantities. Land which has been highly manured, or is of great natural fertility, and which has been well cultivated for a number of years is desirable for this crop. A good clover sod is hard to beat. Potatoes love a mellow soil, therefore the land which is to be planted in potatoes should be well plowed in the Fall or early Winter, so that it may be thoroughly mellowed by the frosts of Winter. If stable or barn-yard manure is to be used on the crop, it should be well rotted and applied to the ground after plowing in the Fall. Of commercial manures a good super-phosphate is best, applied in the drill; wood ashes and well rotted wood pile manure are excellent fertilizers for this crop.

Plant your early potatoes early, and your late potatoes late; so that the early potatoes may mature before the heat and drouths of midsummer; and so that the late potatoes will not mature until the heat and drouths are passed and before the coming of frost. The early varieties should be planted in February or March or as soon as the ground can be worked in the Spring, but be careful not to work your potato ground when wet. For *very early* potatoes plant in the Fall and cover deeply, and then mulch the ground to prevent freezing. The late varieties should not be planted until after the first of June.

Having prepared the ground well, lay off the rows with any convenient implement, two and a half or three feet apart, and from four to six inches deep, cut your potatoes in small pieces, with one or two eyes only to each piece. Each eye makes a vine, and many vines make few and small tubers. Plant the pieces in the bottom of the furrow about one foot apart. My own practice is to walk in the furrow, setting one foot close in front of the other and planting a piece of potatoe close to the toe of each foot as I put it down. In planting always put the cut side down and the eye up. Cover with a turn plow or any convenient implement. Cultivate thoroughly at least once in two weeks until the blossoms appear and the vines begin to break down. A coulter or a bull-tongue is preferable, because it loosens the ground to a considerable depth. A little dirt may be thrown to the vines, but don't hill or ridge. On land of only average fertility, mulching will be found to be of very great

benefit. Having planted and *covered* your potatoes as for cultivation, but in rows only two feet apart, cover the whole surface of the ground with a mulch of leaves, short straw, rotten chaff, very coarse strawy manure, or other litter about six inches deep. Your potatoes will then be secure against drouth, and will need no other manure, and no cultivation whatever. If your ground has been well prepared before planting there will be no weeds of any consequence, and the few that force up through the mulch may be easily pulled by hand. On lands suffering much from drouth this will be found to be the best of all ways to grow potatoes. It will require considerable labor and time to haul sufficient litter to cover the ground effectually, but you will be well repaid for both; if mulched in this way, the potatoes will, for the most part, grow just on the top of the ground and under the mulch, and they can easily be dug by hand, a small pronged hoe being the best implement to use. If not mulched use a two-horse plow to raise the potatoes, letting the team straddle the row, keeping the plow canted over a little on the land side, and running it in the middle of the row. After picking up all the potatoes thrown out by the plow, run back in the same furrow, and you will get them pretty much all. Dig your potatoes as soon as the tops begin to die, or the potatoes will sprout in the ground. If planted in March the early varieties will ripen perfectly by the tenth of July; and the ground may then be plowed and sown to turnips, making the best preparation for this crop of which I have any knowledge. Put your potatoes under cover as fast as you dig them, especially if the sun be hot; for exposure to a hot sun materially injures them both for table use and for seed, causing them to blister and become watery, and making them liable to rot. Store in a cool dark place; a good cellar, cool in summer and frost-proof in winter is best; do not put too many in a pile or they may heat and rot. I use bins three feet wide and eight inches deep, arranged like shelves around the sides of the cellar. If kept in a dark cellar, or covered from the light with old carpets, bags, or straw, they will not sprout so soon in the Spring.

Select medium sized potatoes for seed, and it is best to select them soon after digging the crop. Potatoes deteriorate rapidly in our climate and soil, our winters not being long enough to keep them well, and it will be found advisable to secure fresh Northern seed as often as once in three years.

On suitable land potatoes pay quite well as a market crop, not requiring as much labor as tobacco, and bringing in fully as large returns. Besides being so important as subsistence for the farmer's own family, they are excellent feed for cattle and pigs, either boiled or chopped fine and mixed with meal. For feeding to young pigs the small unsalable potatoes are worth at least half as much as corn. They are also much relished by chickens if boiled, chopped fine and fed warm, and are highly recommended by some poultry fanciers as feed for hens, especially during the winter and spring.

Albemarle Co., Va.

A. A. MACD.

MARKET GARDENING NEAR LARGE CITIES.

No matter how favorable the location, nor what the character of the soil may be, he tills to great disadvantage who fails to make a liberal annual application of manures. The question for the gardener is, How much manure can I use with increased profit? and, if he is alive to his own interest, he will soon discover that the quantity that can be so applied to an acre is large.

Of the bulky manures, that from stables where the horses are fed on grain and hay is of most value. This quality of manure, almost free from straw, we buy at Newark, N. J., at an average of one dollar and thirty-eight cents for a two-horse load. This is hauled and thrown in heaps, sometimes composted with tanner's refuse and woods earth, turning it over two or three times before applying it. Market-gardeners will use from fifty to seventy loads of this manure to an acre, besides a top-dressing of five or six hundred pounds of a special fertilizer.

For the past four years we have contracted for all the refuse from a large soap factory, and have found this waste lime, potash and fatty matter a valuable top-dressing, applying it at the rate of three or four tons to the acre. We have also used a compost made by decomposing muck with the salt and lime mixture,* then adding to this compound an equal bulk of yard-manure. At the end of six months the whole mass is homogeneous, and, when turned under for garden-crops, is fully equal, load for load, to pure horse manure.

Gardeners in our section use "slaughter-house" manure with profitable results. This is usually composted with other manures and left in a pile for several months before using it. It costs about one dollar and fifty cents a two-horse load, and in quality is about the same as a load of horse manure.

We have used as much as seventy-five tons of dried blood, or sugar-house scum, in a single season; when this is broken finely and composted with horse manure and woods earth, it is a powerful fertilizer for all kinds of crops.

Wood ashes are always highly esteemed, but of late years the supply has been very limited. Unleached wood ashes are worth from forty to fifty cents per bushel; for fertilizing purposes, using ten to twenty bushels to an acre. A top-dressing of lime every third year, thirty or forty bushels to the acre, spread broadcast, and harrowed in just before planting, pays handsomely.

Every available substance that will make manure should find its way to the compost heap or hog-pen, to be worked over, and thus add to the capital for the garden; on this will greatly depend the success.

Of the concentrated fertilizers now in general use, both for the kitchen and market gardens, are finely-ground bone, Peruvian guano, superphosphate of lime, and last, but not least in value, fish guano. The required quantity of these will depend on the condition of the soil. Besides the main supply of yard manure, we use annually from three hundred to one thousand pounds to an acre, and find that such an application of a pure article pays well.

CAPITAL.—With the farmer, the laying out of a kitchen-garden should

* The salt and lime mixture is made by dissolving one bushel of salt in water, and then slaking three bushels of lime with the salt water. This mixture should be turned over two or three times under a shed; one bushel of it will be enough for a cord of muck.

be of the first consideration. In spare moments a fence can be put around the garden, which should be located convenient to the dwelling. With a full supply of the leading kinds of vegetables, farmers could board their help for about one-half of what it costs when only meat, bread and potatoes form the principal food. With the farm work properly arranged, the kitchen-garden can be kept in good order without any extra cost for labor.

For the market-gardener, capital is very important when the proprietor knows how to use it—an art learned only by experience. It does not make much difference how intelligent a man may be in other respects, nor how much capital he has to start with; if he has had no experience in the business, he lacks the main element of success.

We know personally a large number of well-to-do market-gardeners—men now worth from ten to forty thousand dollars each—none of whom had five hundred dollars to begin with. Industrious, hard-working men, these, who at first turned every available dollar into manure and reliable seed. In fact, he who would be successful in market-gardening must take the lead in all kinds of weather and all kinds of work—late and early, rain or shine. To stalwart young men, even with a limited capital, willing to work industriously, the chances of making “money in the garden” are as promising as ever they were. “Whatever is done, let it be well done.”—*Quinn's “Money in the Garden.”*

CULTURE OF CRANBERRIES.

Where do all the cranberries come from, is a question often asked, and on investigation we are fairly astonished to witness the rise and remarkable amount of business now transacted in this small fruit. To those having low lands, useless for any other purpose, the cranberry, once planted, often yields the possessor a greater profit than any similar area of other crops on the same farm.

The consumption of this fruit is extending rapidly into all parts of the world; is becoming more and more a household necessity. No tea-table is now considered complete without it, and on ship voyages it is of almost indispensable utility. New Jersey raises the largest bulk of cranberries in this country, employing about six thousand acres for the purpose, the value of the crop raised on which, last year, was \$600,000. The whole cranberry crop of the country is estimated at about \$1,500,000. Massachusetts raises not less than ten thousand barrels a year. Within the past five years Wisconsin has made rapid progress in the culture of the cranberry, and the crop in that State this season is estimated at \$300,000. The average price per barrel of this fruit is \$10, Cape Cod cranberries commanding the highest price. The fruit raised on the Cape is the best of its kind in the world. It is exported largely to England, and finds its way to the Queen's dinner-table.

Those who have spots usually regarded as waste places on their farms, places too wet to plow or to mow, may, by proper management, have their cranberry patch, and grow for home consumption and for market. Let such waste places be utilized by growing cranberries.

FRESH TOMATOES GROWN AND CANNED.—We are glad to know that John B. Davis, Esq., of this city, has proved, after several years' experience, that the canning of tomatoes can be as successfully and profitably conducted in Virginia

as elsewhere. His magnificent estate, "Leslie Manor," in King William county, had hundreds of acres in this fruit during the past year, which he has successfully canned and sold at profitable prices.

Mr. Jas. T. Tinsley, of Hanover, also commenced this business the past year, and he is pleased with the results. Both of these gentlemen have promised to give us an article on their systems of cultivating and manufacturing this fruit for our next number.

"*Gardening for Pleasure*" is the felicitous title of Mr. Peter Henderson's new work on the cultivation of vegetables, fruits and flowers. It has proved equal in interest and value to his two previous books, "*Gardening for Profit*" and "*Practical Floriculture*." Price, \$1.50. For sale by Orange Judd & Company, New York.

Grange Department.

OFFICERS OF THE STATE GRANGE.

Master—J. W. White, Eureka Mills, Va.
Overseer—T. T. Tredway, Prince Edward, Va.
Lecturer—J. W. Morton, Eureka Mills, Va.
Steward—Wm. McComb, Gordonsville, Va.
Asst. Steward—I. B. Dunn, Washington county, Va.
Chaplain—J. C. Blackwell, Buckingham, Va.
Treasurer—W. B. Westbrook, Petersburg, Va.
Secretary—M. W. Hazlewood, Richmond, Va.
Gatekeeper—M. B. Hancock, Charlottesville, Va.

EXECUTIVE COMMITTEE.

A. B. Lightner, of Augusta.
 R. V. Gaines, of Charlotte.
 A. M. Moore, of Clarke.
 R. L. Ragland, of Halifax.

SOME THINGS WHICH THE PATRONS PROPOSE TO DO.

1. To secure for themselves, through the Granges, social and educational advantages not otherwise attainable, and to thereby, while improving their condition as a class, ennoble farm life, and render it attractive and desirable.

2. To give full practical effect to the fraternal tie which unites them, in helping and protecting each other in case of sickness, bereavement, pecuniary misfortune, and want and danger of every kind.

3. To make themselves better and more successful farmers and planters, by means of the knowledge gained, the habits of industry and method established, and the quickening of thought induced by intercourse and discussion.

4. To secure economies in the buying of implements, fertilizers

and family supplies, and in transportation, as well as increased profits in the sale of the products of their labor, without enhancing their cost to the consumer.

5. To entirely abolish the credit system in their ordinary transactions, always buying and selling on a cash basis, both among themselves and in their dealings with the outside world.

6. To encourage co-operation in trade, in farming and in other branches of industry, especially those most intimately connected with agriculture.

ARBITRATION.

Among the benefits to be derived from the organization of the Order of the Patrons of Husbandry, we desire to draw the attention of our readers to the system of "arbitration." Why should our farmer, on the slightest provocation, "go to law?" Has any one of them made anything by it? Even if they have gained their case, have they not generally been the losers? And how many, if not the majority of law suits, have sprung from some trifling cause? All this, brother farmers, can be avoided by simply consenting to appear before a commission of three, selected by each Grange, whose business is to hear and decide such cases as may be brought before them, it being understood that all the members of the Grange agree to abide by the decision rendered by this committee. Hasty actions will be prevented, and all of us will acknowledge that many law suits are the result of passion, often bitterly repented of. We would beg our Granges to consider this subject well, and try their best to have a "Committee of Arbitration" established in each Grange. It should be made a law that any case not amounting to more than the value of \$— should be brought before the committee. We have seen the salutary influence of such committees. In the kingdom of Denmark, where it has existed for more than thirty-five years, nobody can go before the court with a case without first having submitted it to the committee. If this fails to settle the difficulty, then they can proceed to law. Seldom does a minor case fail to be settled before these committees; thus fortunes are saved to the people. But it does not only save money; it prevents the growing of ill-feeling and enmity. Prolonged law suits create and nourish them; a speedy settlement destroys these feelings in the bud. Thus, morally, the system of arbitration has a beneficial influence on society.—*Our Home Journal*.

PROFITABLE GRANGE WORK.—An Alabama Grange has appointed a committee to visit the farm of each member of that Grange, and to report in writing the state of the growing crops; the condition of farm and fences; quality and condition of stock; methods of cultivation; rotation of crops; kinds of crops raised and the varieties of each; varieties of fruits raised, and the general condition of farm buildings. These reports are not for publication, unless the

owner desires, but are to form the subjects of discussion at future meetings. Such Grange work cannot but be profitable to the community in which it is situated, and could be imitated by other Granges with much benefit.

THE WAR ON RAILROADS BY THE P. OF H.—A certain Grange, thirty miles from New York City, recently attempted to procure a reduction in the price of railroad tickets, the round fare being \$1.80. Last week its purpose was accomplished—the road offering to sell five hundred tickets for five hundred dollars, which offer was promptly accepted, the operation effecting a clear saving of four hundred dollars and nobody hurt. The tickets are good during the current year, but will all be used long before the expiration of the time. This is the kind of war Patrons are making on railroads. The road in question seems to like it, and is likely to have more of it.—*Rural Carolinian*.

NOTES FOR THE MONTH.

JANUARY.

This month received its name from *Janus*, whom the Romans recognized, at one time, as a king of ancient days; at another, as a hero; at another, again, as a God of nature. On the first day of this month, an offering, consisting of wines and fruits was presented to Janus, and on the same day, the image of the God was crowned with laurels, the consul ascended in solemn procession to the capitol, and friends made presents to one another. As a God of nature, too, he was represented as holding a key, and presiding over gates, and openings; and as opening the course of the year in the heavens, and every gate upon earth; even those of private dwellings, being supposed to be under his superintending care. On New Year's day, which was the principle festival of the God, people took care that all they said and did was pure and favorable, and ominous for the occurrences of the whole year—an example worthy of imitation by the denizens of this nineteenth century. And why should not this be applicable to the farmers also of the present era? On this day, let him commence his operations aright, and lay his plans wisely for the year. Let him reflect what is to be done by him for the next twelve months, and how it should be done; what his resources are, and how they are to be applied. Let him put aside complaints and repinings; let him understand his difficulties, and lay his plans to overcome them; not overestimating or undervaluing what labors lie before him, but fully comprehending what perseverance and labor and energy will accomplish.

PLANS FOR THE YEAR.

Let the farmer then, thoughtfully, deliberately and wisely, lay his plans in this month for the year. The garment, of course, must be cut according to the cloth; but as far as in him lies, let him endeavor to improve his lands, both by proper culture, the application of all the putrescent manure he can obtain, and the use of such other fertilizers as his means will admit, and as experience has proved, will pay on lands similar to his own. Let him mark the effects of all the fertilizers he uses, leaving out portions of land where none are applied, to compare with that where fertilizers are used, so that he may go to work intelligently for

another year. Ashes must all be saved and applied—so of all the hen house manures to be obtained; these two last to be composted with rich dirt, and gypsum. Indeed, all putrescent manures should be composted where materials can be gotten together without too much cost. Our Northern neighbors talk much of “swamp muck” for composting. Our Southern farmers know little of its use, or the mode of obtaining it. If obtainable it should be hauled out during the dry weather of the summer and fall, and suffered to dry in a measure, if wet, before composting.

Soap suds, and everything that will promote growth of vegetation, must be carefully saved. The soap suds must be put on composts heaps, or applied directly to the roots of fruit trees or grape vines.

HAULING OUT MANURE

Must be done whenever in this month the ground is dry enough, and particularly when frozen. When frozen, top-dress wheat and winter oats, and rye and clover, and grasses. Do not credit the opinion of some not being wise farmers, that hauling out putrescent manures will not pay, for if they do not pay, no fertilizers in our opinion will. For gross feeding plants, and in winter, it is not so important that manures have fermented and decomposed much. For vegetables, the manure should be piled up, occasionally forked over, and suffered to lay until spring, and then to be lightly turned in with a one-horse plow.

LIMING

May be done in all available weather this month, where the land requires it, and almost all our lands are benefitted by it. All lands not previously sufficiently limed or having enough lime in their composition, or unless greatly deficient in vegetable matter, require lime. The quantity depends on the quantity of vegetable matter on the land, and on the lime already in the soil, and perhaps on other conditions. Lime it is known makes soluble, and available for plant growth, mineral, and other matters found in the soil. As a general rule, 100 bushels is a liberal application to an acre. If the surface to be limed is large, then it will be better to apply 50 bushels, and another year 50 bushels more.

PLOUGHING

Must be pushed forward this month (if not already finished) in all suitable weather. Do not neglect to prepare for the corn crop, an all important crop, we think, for the farmer. The late William Hill Carter, one of the most judicious farmers we have ever had in Virginia, in reply to an article in this journal, “Corn Growing not Profitable,” in which the writer states “no one pretends that it pays to grow less than 50 bushels to the acre, and at \$1 per bushel, says, “insure us \$1 per bushel for corn in Virginia, and we can make more money by it, than by any other crop.” Mr. Carter speaks of corn as “the bread and meat, the hay or fodder, the manure, the cleaner of land, the bedding for man and beast, the most important thing on a Southern farm,” and expresses the opinion that “any farmer in Virginia, who buys western corn, will soon have to move out West.”

PREPARATION FOR VEGETABLES.

Manure should be gotten ready for hot beds, which should be put down the last of this month, or first of February for early cabbage and tomatoes. Sticks for peas and beans should be prepared, and the garden cleaned up. Some of our Hanover friends who desire very early garden peas, sow them the first good weather this month, that the land can be worked. Holes for watermelon planting should be opened this month, and one bushel of good, partly rotted stable manure put in them, and the dirt drawn over, to remain until time for planting.

CARE OF STOCK.

Much attention should be paid to stock now. Good feeding and good feed must be provided, so that our animals may come out of the winter in good condition. August pigs farrowed this month must be kept in warm, dry, well littered quarters. If this is done and the sow well fed with washes and corn, the pigs will thrive and make fine hogs by 1st of December. Towards the latter part of the month lambs will be dropped, and they and the ewes will require constant attention. They should be separated from the rest of the flock, have good shelters, and the ewes be well fed, and the lambs in a week or two provided with meal or some good mill-feed in a trough, from which the mothers are excluded; they will then grow off rapidly and be ready for market when prices are high. Cows to calve in the spring must be well fed and sheltered, and mares in foal should be separated from the horses, provided with large roomy quarters, well littered, and be well fed on hay and grain, with occasional feed of mill offal or a peck of carrots or rutabagas twice a day, to keep their bowels in good condition. They may be moderately worked, but not overstrained or driven hard; as foaling time approaches they should be watched and be kept quiet and undisturbed; the shoes should be removed to prevent injuring the colt.

TREE PLANTING

May be done this month in good mild weather, and grape vines be trimmed and tied up. Raspberries may also be set out.

PUTTING TOOLS IN ORDER.

Tools and wagons and harness should be attended to in bad weather this month. Every farmer should keep a small shop and tools that are needed for this purpose. Brass rivets, to be gotten from all hardware stores, are very useful for speedy and secure mending of harness.

DITCHING, GRUBBING AND FENCING,

Must all be tended to on good days this month.

READING.

No progressive farmer, or one who wishes to progress, should neglect agricultural reading. Now is the time to provide good journals and good standard works on farming, and to read them carefully. Do not be afraid of "Book Farming;" the objections to it are all nonsense.

Editorial Department.

ABOUT THE BUREAU OF AGRICULTURE, STATISTICS AND MINES.

It will be observed that we lay great stress elsewhere in this book upon the immediate establishment of a "*Bureau of Agriculture, Statistics and Mines.*" To our mind, we cannot afford to wait a year longer.

Virginia now occupies *but two-ninths* of her original proportions, and hence it is not at all necessary that we should have a multitude of offices of any kind. We want no special "Board of Public Works," nor any special "Board of Immigration." One office, properly conducted, could attend to the whole business. The Bureau above mentioned might, without any confusion, because the subjects are kindred, combine under one general head, public works, agriculture, mines,

immigration and statistics, and it would not be difficult to find men exactly suited to the work. We do not want there, of course, any old political dead-wood; they have had their good time, and ought now to be content to rest on their laurels. *We do want live men*, and the Bureau will be a failure if they are not secured. Chloroform is not the medicine we need, but tonics that will put new life in things, and show the world that Virginia, in the arts of peace, can be no less glorious than in the deeds of war; in few words, that *she is equal to any emergency*.

THE PUBLIC SCHOOL IN ITS RELATIONS TO THE NEGRO.—As “good wine needs no bush,” so we have little to add to the powerful argument of our correspondent “CIVIS” on this subject. It is a business our people have plunged into without considering *at all* what it involved. We owe, as a State, a great deal of money, and have put up “a poor mouth” so persistently since the war about paying even the interest on it, that our credit (before the war ranking with the best on earth) has sunk so low as to authorize our friends abroad to recommend no further dealings with us where money was concerned. In the face of this appalling state of affairs, we have undertaken a stupendous charity, in the way of negro schools, costing thousands of dollars every year to sustain it, and with nothing gained by it but the burnishing of a cudgel with which to beat our own brains out. We cannot make a white man out of him, and spoil a very good negro. This creature has been studied, in the abstract, by men as able as BURR, NOTT, MORTON and WYMAN, and their conclusions may be summed up in the homely saying that “you can’t make a silk purse out of a sow’s ear.”

THE UNIVERSITY OF VIRGINIA:—SHALL IT GO DOWN?

It is with peculiar pain (giving expression to our feelings as a Virginian), that we hear of Prof. GILDERSLEEVE’s decision to quit the University of Virginia and accept service in the Johns Hopkins University at Baltimore. When we consider the uncomfortable condition of the University, in the matter of its “sinews of war,” we are apprehensive that the early future may witness also the exodus of Prof. MALLETT, and other members of the faculty, whose eminent abilities Virginia *cannot afford to lose*.

We disclaim utterly all idea of depreciating in the least the merits of the other excellent institutions of learning in the State, but there has attached to the University, through its illustrious founder, and the evidence of rare excellence involved in its diploma, such a *prestige*, that whereas we might be content with “half a loaf” in most other things, we can never consent to any diminution here. If we must have economy, in respect of the demands upon the public purse, and this necessity no man will gainsay, let it not be exerted in the destruction of this chief custodian of the public spirit of Virginia. This spirit gave form and execution to the Revolution, and the nerve latterly to maintain, through a struggle that turned her fields to wastes, and her homes to ashes, the vital principle it proclaimed; that governments derive their just powers “FROM THE CONSENT OF THE GOVERNED.”

As a conservator of this spirit, the utopian contrivance called public schools affords no compensation for the loss or decay of such an institution. They level down, but *never level up*, otherwise Massachusetts, the peculiar home of the public school, would have disdained to scour Southern plantations during the war for

negroes to act as "substitutes" for men unwilling, in the dread arbitrament of the sword, to back their claim by their lives. If this levelling business was really productive of good, this same home of the public school would not have insisted, against Southern protest, upon maintaining the slave-trade by constitutional enactment until 1808, and afterwards deliberately set on foot arrangements to destroy this very property (the sale of which had made their people rich) with no pretense whatever of refunding any portion of the money paid for it. In general, they can hardly be considered wholesome fruits of the system, looking at regions in which time has given it the fullest test, where a faithful officer, public or private, is the exception; where the marriage bond has become so weakened as to be broken on the most trivial pretext; where the birth of children is systematically prevented, and where adulterous "sons of Eli" are elevated to the position of heroes.

It is by no means the least frightful result of the war that, through reconstructed constitutions and other advantages taken of a prostrate people, the pernicious institutions of the North should have found a lodgment here. We cannot, therefore, afford to dispense with *any* lawful means that will prove effective in preventing the spread of their baleful influence.

The children of the University are to be found in every county throughout the State. Let them, before the pressure of necessity causes the transfer of its noble faculty to States more favored in material prosperity, see that their representatives in the Legislature devise some feasible means by which this peculiar Virginia institution may be placed, for all time, to come, on a footing unembarrassed for perfect usefulness.

THE DEATH OF MR. CRENSHAW.

Death hath no respect of persons. LEWIS D. CRENSHAW, of the "Haxall Mills," is no more. His name is familiar in every farm house throughout the State, and this news will bring sorrow to them all. He died on Monday, December 27th, after several months of ill-health, aged fifty-nine. The grass will grow green over him, for he loved not himself only.

In a few short months, three of the four men who, for so many years, gave direction to the milling interest of this city, have passed away: ABRAM WARWICK, JAMES DUNLOP, and LEWIS D. CRENSHAW. Only THOMAS W. McCANCE remains, and we pray it may be God's will to spare him yet long to the people in whose hearts he holds so large a place. Few cities have been blest with four such men. Their names are written on every page of our history for the last forty years, and they shine bright with an integrity and honor that knew no shadow. Of large public spirit, and alive to every movement that gave promise of prosperity and dignity to the city, and through it to the commonwealth, the loss of the three who have gone from us hath brought us most heavy hearts. In these days, when old landmarks have been washed away by blood, and the economy of our State is undergoing rearrangement, the absence of their counsel will be sorely felt, and who shall stand in their places! Let us hope that the same Providence which raised up these men will not leave us bereft, but vouchsafe us others, who, encouraged by the example of the departed, will take up their work and crown it with the success they strove, with such singleness of purpose, to accomplish.

VIRGINIA WILL NOT BE AT THE CENTENNIAL.—The refusal of the Legislature to appropriate any money for this purpose, should be hailed with thankfulness in every part of the State. Aside from the manifest impropriety of lending countenance to an act of hypocrisy (see present condition of South Carolina), the people's money should not be wasted any more on a show than in the effort to make white people out of negroes. Besides, no man can be credited with generosity when the only means at his disposal for its exercise is other people's money. Every dollar, above what is needed to conduct the State Administration in the most economical matter, and to render available our resources, both material and in the direction of our public spirit, belongs to the people who have waited these many years to receive their just dues; and this obligation should ever prevent our listening to *anything* that would in the least interfere with our duty in this behalf. When the North shall show, *by its acts*, that it is well disposed towards us in the South, we will not fail to meet the overture with the heartiest response. Until then we have no concern with anything but our own immediate business.

BIOGRAPHICAL SKETCH OF GEN. WM. H. RICHARDSON:

In issuing the first number of THE PLANTER AND FARMER for the present year, we feel that we cannot perform a more pleasing and acceptable office than that of accompanying it with an accurate likeness and a biographical sketch of Gen. WM. H. RICHARDSON, whose venerable form and strongly marked features are familiar to thousands of the people of Virginia. Happy are we in being able to say that a character so pure, and a life so useful, are yet spared to us. Although he has passed those limits allotted by the Psalmist as the duration of human life; and although he has borne more than the ordinary share of the labors and vicissitudes incident to human life, we may say of him what is said of the Jewish leader—"His eye was not dim nor his natural force abated."

For able and faithful service through a long series of years, in the several public stations he has filled, the people of Virginia owe him a debt of gratitude;—but for his energetic, persevering and well directed efforts in the cause of Virginia agriculture, their obligations to him are still greater. At all events, we feel that in thus presenting him to our readers, and in thus marking our appreciation of a character unsullied by vice, a name untarnished by defamation, and a life devoted to useful labors, we are performing a simple duty, and one that will be acceptable to all classes of Virginians, more especially to those constituting the large, intelligent and respectable agricultural class.

WM. H. RICHARDSON was born in the city of Richmond, on the 18th of December, 1795. His father, Maj. George Richardson, was an officer in the war of the Revolution. His mother, Francis Bacon Whitelocke, was descended on the mother's side, from Nathaniel Bacon, the famous rebel of colonial times. She lived until April, 1861, and at the time of her death was in her ninety-first year. His first participation in public affairs was at an interesting and exciting period in the history of the country. This was in the year 1813, the second year of what, no matter how many wars we may have, will, perhaps, always be known as "The Last War." When the British fleet occupied the waters of Virginia, there was a great stir among the people of the State. The martial ardor and patriotic impulses of both old and young, were quickened into action. The Richmond troops were ordered to Norfolk, and the subject of this sketch, then a youth, volunteered for the service. The company to which he attached himself was one of the

finest companies in the service. Three months afterwards, and on the return of this company to Richmond, he was elected its first lieutenant, and soon afterwards succeeded to the command of it. At the close of the war, and after having declined promotion more than once, he resigned. His natural military taste was stimulated and nourished by the scenes through which he had passed, and has clung to him through all the peaceful and laborious business of his life. To have served in "The Last War," has ever in Virginia been regarded as a high mark of merit and patriotism, and in many instances has been rewarded with public station. To this cause, in part, at least, may be attributed his unanimous election, in the year 1821, to the office of Clerk of the Council of State, a position of trust and confidence, in which had been merged the duties of Secretary of State, under the constitution of 1776.

The Council of State was one of the old institutions of Virginia, inherited from colonial times. It was composed of nine of the most prominent and trusted citizens of the Commonwealth; and to be chosen a member of that body, was reckoned a high honor. Modern innovation has swept it from existence, but many of our comparatively young citizens remember when it existed.

Upon the creation in 1832-33, of the office of Secretary of the Commonwealth, Captain (for such was then his title) RICHARDSON, was unanimously elected to it, by the Legislature.

At the session of the Legislature of 1827-28, without any solicitation on his part, and even against his wishes, he was made ex-officio State Librarian, when indeed, there was no State library. This library had to be formed. To select, purchase and arrange the books was an arduous undertaking, involving as much of taste and literary, scientific and historical knowledge, as of labor. It is true that the Librarian had the assistance and co-operation of a committee of the State Council, especially appointed for that purpose, but it is not assuming too much for him, to say that upon him chiefly devolved the delicate task of selecting, while the burdens of purchasing, collecting and arranging these books fell exclusively upon him. Under his auspices the admirable Library of Virginia was built up. It was a rare, valuable and happily chosen collection of books, being confessedly the finest library, of its extent, in the United States. So successfully was this institution conducted by the Secretary of the Commonwealth and ex-officio Librarian, that his administration of it drew from the Legislature frequent expressions of its approbation.

In 1841, Captain RICHARDSON was appointed Adjutant General of the State, and to that hitherto neglected department he imparted his characteristic vigor and energy. This continued until the act of the Legislature of 1853, which broke down the military force of the State. Under Kemper's bill, passed March, 1858, he rapidly and thoroughly organized the military forces of the State so that within less than eighteen months, 143,000 militia had been enrolled and organized, as appears by the annual report of 1860. At the time of the secession, or rather attempted secession of Virginia, she had twenty thousand volunteers uniformed and armed. By virtue of his office of Adjutant General, General RICHARDSON was a visitor of the Military Institute, and so high an estimate did the society of the Alumni place upon his services, that they caused his portrait to be painted by a distinguished artist, and presented it to the Institute.

At length, after a faithful and laborious service of thirty years in these several positions, and when party feeling had grown intolerant, leading to proscription on account of political opinions; and when the Democratic party was greatly in

the ascendant, General RICHARDSON, an old line Whig, in was the year 1852, ejected from office, or to speak more correctly, failed of re-election before the Legislature. Detesting the arts of the demagogue, a stranger to convivial scenes, and with manners too independent, if not stern, to conciliate favor, General RICHARDSON owed his elevation entirely to his sterling worth, and his unquestioned business qualifications and habits. He left office as he entered it, with clean hands, a clear conscience, and an empty purse.

The chief design of this sketch, however, is to present him in connection with the subject of agriculture—a subject more congenial to his, as it is to our taste, and one in which he has signally illustrated his own usefulness, as well as the eminent capabilities of his State.

During his official incumbency, and notwithstanding his numerous and onerous duties, he so managed his affairs as to be able to devote a portion of his time and attention to agriculture. So true is it that he who systematizes his labors, and economizes his time, no matter how exacting the demands of his business, will be able to command leisure to devote to a favorite pursuit. It was this methodical turn of mind that enabled the great Bacon in the midst of his absorbing legal and political occupations, and while conducting numerous intrigues for place, power and wealth, to devote a portion of his time to science and philosophy—to write essays on gardening, and to prepare that enduring monument of his learning and genius, the *Novum Organum*.

In the year 1841, we find General RICHARDSON the proprietor and occupant of a farm in the vicinity of Richmond. It was then that he devised and prepared a plan for the organization of an Agricultural and Horticultural Society. It was chiefly through his active instrumentality that it was carried into successful operation. For several years he was an efficient member of the Executive Committee, and succeeded the Rev. Jessee H. Turner as President. That eccentric but useful man, known to old and young as "Parson Turner," was one of the most untiring and successful agriculturists of his day. Plain, honest, sensible, and well informed, he did as much to stimulate agricultural improvement as any man in Virginia, at that period. The exhibitions of this Society were successful. After service of one or two years, as its President, General RICHARDSON resigned, and about 1846 the Society went down. On referring to the published accounts of its transactions, we find that its most important committee, that "on farms," was composed of Wm. H. RICHARDSON, Chairman, Francis Staples and Warner W. Guy. A report drawn by the chairman was received with the warmest demonstrations of approbation, being copied from the *Southern Planter* into many Northern agricultural journals. The venerable Thomas Ritchie, the founder and editor of the Richmond *Enquirer*, and a member of this Society, was so much pleased with this report that he published it in full in his newspaper. This report called attention to a class of laborers "hitherto overlooked"—"the men who guide their own ploughs, drive their own produce to market, and in time of danger, shoulder their muskets and take the field." It quotes from a distinguished prose writer, who remarked of the people of a great commercial city of the North, "that there the lawyer looks down upon the merchant, the merchant upon the grocer, the grocer upon the green grocer, and the green grocer upon the apple woman, who don't care a straw about any of them"—and adds—"We trust it is not so among us—but these sturdy citizens of ours, who have as much sterling merit and independence of character as any men on earth, who regard with indifference or contempt the trappings of wealth and station and ask

no favor but of the Almighty, have been left to drudge on, generation after generation, without any effort to improve or to aid their agricultural labors." The report thus concludes:—"Give our people the lights of practical knowledge, improve our system of education, our agriculture and our mechanic arts, and our old dominion will be once more in the ascendant!"—every word of which deserves to be written in letters of gold.

As late even as the period at which this report appeared, October 1841, agriculture in Virginia was in a low state. The slow and slovenly old modes of culture, were unquickened by enterprise, and unresponsive to the impulses that had vitalized, improved and expanded agriculture in other less favored sections. Virginia had not been without successful farmers, here and there, who availed themselves of all the aids of science, and adopted all the modern improvements. But to the agricultural masses of the State, science was a sealed volume. New ideas were unwelcome, and were even condemned and derided as foolish vagaries. There had been several distinguished agricultural theorists and writers. The celebrated John Taylor, of Caroline, and the scarcely less distinguished James M. Garnett, of Essex, had written books and essays on the subject. They did not, however, reach the masses, and were unproductive of general results. The truth is, that to these speculative minds, agriculture was rather a diversion than a business. It afforded recreation to their active and ingenious faculties, and constituted a field in which the leisure left by political occupations, could be pleasantly employed. They were like Athletes, who practiced their strength and activities as a pastime. The late Edmund Ruffin was then prominent as a farmer, and subsequently became the most conspicuous agriculturist in the United States. He was not simply a theorist. He was both practical and scientific, and his essays on agricultural subjects are among the most valuable contributions that this age has produced.

General RICHARDSON was not an agricultural theorist or writer. He has not, like those first named, published a book; nor like the last named, Mr. Ruffin, can he point to a model farm, but it will not be going too far to assert that he did more for Virginia agriculture than all that have been, or can be named. He did what they could not do. He organized all the influences that they severally originated, and carried them among the people. He went from county to county, from neighborhood to neighborhood, as the apostle of agriculture, and placed himself in contact with the people. How he came to this, and how effectually it was accomplished, we will now proceed to show.

The spirit of agricultural improvement was abroad in Virginia. What it wanted was organization, embodiment and direction. It was struggling and panting for the realization of its noble aspirations. Against ignorance, prejudice and, worse than all, indolence, it soon commenced a contest, and sought the succor of organization and association, those indispensable aids to all great and valuable enterprises.

In January, 1845, by means of strenuous exertions in which General RICHARDSON actively participated, a State Agricultural Convention was held in the State Capitol. It was a highly respectable body, in numbers and in character. It organized a society, appointed officers, and passed resolutions asking the aid of the Legislature. Whether from reasons of State policy, or from indifference, we cannot now undertake to say, the aid thus solicited, was not accorded by that body. Of the society thus formed, the late venerable Edmund Ruffin was elected President. Although the acknowledged head of the farming interests of Vir-

ginia, and a most zealous agriculturist, he for some reason not known to us declined the office. Andrew Stevenson, who had been speaker of the House of Representatives of the United States, and Minister to the Court of St. James, was chosen in his place. Although a zealous and skilful farmer, the administration of Mr. Stevenson was by no means a success. The enthusiasm manifested at the first meeting soon subsided, the Society languished, and by the end of the year it had only a nominal existence. In the year following the organization of the Society a few members assembled and continued to hold cold and feeble meetings until the 18th of February, 1852, when another convention met, but smaller in numerical force than that of 1845. The two fragments united, and Mr. Ruffin was again elected President. The number of members was three hundred and thirty-nine, and the amount of funds collected was \$268. Mr. Ruffin's administration was directed mainly to the dissemination of practical agricultural knowledge, as in his opinion the necessary condition precedent to the successful advance of agricultural improvement; and, as a consequence, the pages of the Society's transactions were enriched with many valuable essays, principally from his pen, but in other respects it was as barren of results as that of his predecessor. At the ensuing annual meeting he resigned, and the office was conferred upon Colonel, subsequently General Philip St. George Cocke. Almost contemporaneously with this, the motion of General RICHARDSON from the office of Secretary of the Commonwealth occurred. Relieved from the trammels of office, he was now, fortunately for the agricultural interests of his beloved State, in a position to dedicate his time, energy and talents to the advancement of those interests. Between himself and Colonel Cocke a warm friendship existed, and they had frequently conversed together upon the subject of the failures of the Society, and the causes of those failures. They both concurred in the opinion that the cause to which they were chiefly referable was the difficulty of finding a suitable person to canvass the State. No sooner was Colonel Cocke apprised of his election to the presidency of the Society, than he bethought him of General RICHARDSON, and at once urged upon his acceptance the position of Commissioner or General Agent, with the authority to appoint sub-agents, to canvass the whole State. To ensure General RICHARDSON's acceptance of this position, the most liberal pecuniary offers were made to him by Colonel Cocke, which he declined, but he accepted the position and immediately entered upon the canvass, associating with him his son, Wm. H. Richardson, Jr., Esq.

To procure the services of a commissioner, was an easy matter. There were then, as there are now, many persons who would have esteemed it an honor and a privilege to represent the imposing agricultural community in that character; but to get a suitable person—a man of talents, of character, of social standing, of untiring activity, and who had the cause of agriculture warmly at heart, was, and up to this time had been the difficulty. In General RICHARDSON was presented the right man in the right place. Known and respected throughout the State, on terms of intimacy with many, and acquainted with nearly all of the prominent men in every quarter of it, he was of all men the particular man for the occasion.

As was well said by a newspaper of that day, "This was the master stroke which gave vitality to an institution that had hitherto dragged out a sleepy and precarious existence." General RICHARDSON engaged in this work with his accustomed energy. A copy of the *Rockingham Register* of that day says: "He

visited the people at their court-houses, the farmer at his plough, the mechanic at his shop, the manufacturer at his loom, and from February to November he was busily engaged in traversing the State, and promoting by all possible means the interests of the Society. He was everywhere received with cordiality and kindness, and excited among the people an enthusiasm that was really extraordinary." The newspapers caught the enthusiasm. They assisted in promoting the good work, and lavished encomiums upon General RICHARDSON for his public spirit, energy, and unparalleled success. It may here be mentioned that, owing chiefly to his extraordinary efforts within the first nine months of Col. Cocke's presidency, the members of the Society increased from *three hundred and thirty-nine* (many of them men of straw) to five or six thousand; the capital from \$268 to \$40,000! and through subsequent accretion now amounts to \$60,000!!*

The object was to build up a State Society, and in the approaching fall to hold a Fair on a scale of magnitude and completeness never before known in the South—an industrial exhibition in which not only agriculture, but all of the mechanic arts should be represented. These were the instrumentalities by which it was contemplated to construct an enlightened and general system of agriculture. As General RICHARDSON progressed in his travels, he corresponded with various newspapers, encouraging the people by stating the incidents and results of his efforts, and by picturing the prospects for the contemplated Fair. Our space does not admit of the reproduction of these interesting letters. We cannot refrain, however, from extracting from the *Lynchburg Virginian* some passages from a letter to his son, who was operating from Lynchburg to the Southwest and across into the Alleghany region: "There is plenty of fine stock," wrote he, "within convenient access to Richmond; but that is not all, or nearly all, that we must bring out. The industrial products of the State, which lie almost concealed in holes and corners, and are beyond anything I had conceived, and many of them of surpassing excellence. I have been searching them out everywhere, and have 'compassed sea and land' to get them to the Fair. If all come who are pledged to me, we shall be overflowed; but we had better have ten stall-pens or compartments too few than one too many. Plows of all kinds, harrows, threshing and cleaning machines, drills for small grain, with or without plaister or guano, [attachments] a simple but most effective machine for cleaning seed wheat, woolen fabrics of surpassing excellence, from negro blankets to fine carpeting, are among the productions of this region. All these, with red free-stone dressed for front-steps and side ornaments, I have engaged to be forthcoming. * * * The Society is seeking to promote, and will promote not one only, but all the great interests of the State. Its cause, therefore, is the cause of every work ng man, whether he tills the soil or plies the saw and hammer, the spinning jenny and the loom. * * * Stimulate producers of every kind to be present at Richmond with specimens of their productions, be they what they may."

In a letter to the *Richmond Dispatch*, General RICHARDSON said: "My efforts are now mainly directed to getting farm stock, agricultural implements, manufactures, specimens of all our industrial as well as agricultural productions to the Fair, AND GETTING THE PEOPLE THERE. I saw long ago that without such exertions the Fair would be nothing—it *will not grow of itself*, but must be worked for, and that pretty hard. * * * If I am not mistaken about the *cattle show*, that

*The first presidential term of Mr. Ruffin was of only ten months duration. He declined a reelection at that time on account of physical infirmity. He was subsequently elected annually for three years successively, fulfilling the constitutional term, and realizing the highest expectations of his friends.

will be the crowning stone of the edifice. The masses must have something visible and tangible. * * The annual assembly of so many farmers and working men of so much intelligence and industry must have an important influence upon the great interests of the State."

These extracts show the ardor, as well as the enlightened and comprehensive views which inspired the State Commissioner's unflagging efforts.

The result realized his most sanguine expectations. A more signal success never crowned and rewarded industrious and disinterested efforts. That Fair exhibited an august spectacle—a great and imposing assemblage of the worth, intelligence, wealth and enterprise of the whole State. At no period of her history, perhaps, before or since, has there been witnessed such an assemblage of the gentry of Virginia. It appeared that by common consent a suspension of politics, business and pleasure was determined upon, in honor of this occasion. Nor were the graces of female loveliness wanting to complete its attractions. The ladies thronged to this city from all portions of the State, and such an array of beauty had never been seen in the Old Dominion—the result of which was that matrimony, as well as agriculture, received a powerful stimulus. The exhibition itself surpassed all expectation, in the display of stock, cattle and agricultural, horticultural and mechanical productions. The whole State was delightfully startled at the un hoped for evidences of its own skill, industry and wealth. A season was now inaugurated when agricultural ideas, improvements and enterprises expelled all other ideas and thoughts from the public mind. It may almost be said that agriculture became the point of honor with our people.

The progress made in this State, in the study and practice of agriculture, as a science, dates from this epoch.

The man who bore the chief part in this good work was WILLIAM H. RICHARDSON! A tribute more valuable than any we can render him, was paid him by President Cocks in his report to the society at its second meeting, October 31, 1854. From this report we present the following extracts :

"I have another duty to perform. It is to render to a late valuable, devoted and most efficient officer of this Society that full measure of praise due to him for the part he bore a year ago in building up your society, from the agency he had in the successful accomplishment of what had, for forty years before, been in vain attempted to be realized. My official position enabled me to know better than any one else could know, the duties and labors performed by each officer of the executive department of the Society; in fact, the operations of your Commissioner or General Agent, were scarcely known at all to any other member of the Executive Committee than myself, and it has happened that whilst others have received the credit and honor due on account of their meritorious conduct, he whose effective and devoted labors rank second to those of no other officer in the Executive Department of the Society, yet remain to be made known, at least to many members of your honorable body. And, as "it is never too late to do right," I shall here speak out that I do know." I can assert, without fear of contradiction, that in consequence of the ability and untiring zeal with which the agency was conducted, it proved to be one of the main levers by means of which was imparted the first successful movement to the whole machinery of the society.

"It has been thought and said by some that the General Agent was fully paid for his services, by commissions received on money collected. This I know to be as mistaken as it is an unjust view of the matter; and I can confidently state that that officer lost more by the neglect of his private business than he received whilst laboring for the Society. Besides, THE LABORS OF SUCH A MAN IN SUCH A CAUSE, AND IN THE NOBLE SPIRIT WHICH ANIMATED HIM CANNOT BE MEASURED OR REPAID BY MONEY. I happen too to know that whilst all others who served the Society, had each some ample means of support, and experienced no material sacrifice of their private affairs, it was he alone, who, throwing himself generously into the work, gave up for the time almost everything else, whilst canvassing a large portion of the State, aided by Wm. H. Richardson, Jr., at great cost of time and labor, making widely known the purposes and objects of the Society, enlisting members and life members, securing stock and articles for exhibition, obtaining the aid of the newspaper press, conciliating the railroad and other transportation companies, spreading his correspondence too, over the whole State, through an acquaintance as wide as it was influential, and never tiring in these efforts, even to the last. And I can say that these efforts formed a most essential part of the system of executive operations, which caused your first exhibition to result in a triumph which led to your first great annual meeting."

The eminent agriculturist who thus bore his disinterested testimony to the

valuable services of General RICHARDSON, now sleeps beneath the sod. Among the many titles to the respect of his fellow citizens, none was more prominent than that founded upon his services in the cause of agriculture.

From the period to which we have traced him, up to the commencement of the war, General RICHARDSON continued to take a lively interest and active part in all agricultural movements. We should not omit to mention here, that he materially aided in organizing the Petersburg and North Carolina Society in 1854, believing that every such society was a pillar of support to the whole system. War, that formidable enemy of all the forms of peaceful industry, that jealous tyrant that claims supreme and exclusive allegiance, arrested the onward march of agricultural improvement, and returning peace has, thus far, brought no amendment, its first result being the subversion of the labor system of the whole South. Chaos now reigns supreme over this fruitful region, but we hope we see indications of the dawning of a better day, when a new labor system will be organized, and when the seeds sown in that happy era, before the war, will produce an abundant harvest. The spirit of improvement then awakened, was not extinguished, but simply suspended by the war.

During the continuance of the war, General RICHARDSON devoted himself to his arduous duties as Adjutant General of the State, and at no period of his life and in no position in which he has been placed, did he evince greater ability, perform more onerous labors or achieve greater results, than in that.

No sooner did the chaos that sprung from the war begin to assume form and organization, than we find this zealous agriculturist again turning his attention to his favorite subject. Like the dove, after the subsidence of the waters, appeared the bearer of the olive leaf. The *Richmond Whig* of October the 4th contains a letter from General RICHARDSON, urging the establishment of a first-class agricultural journal in this city. In the same article he argues against the division and sale of the large landed estates of Virginia, and recommends the adoption of measures for settling them with an English or Scotch tenantry. With a view to this, he warmly advocates the encouragement of emigration by Legislative measures as well as by individual enterprise. The Legislature of 1865-'66 passed an act creating a State Board of Emigration with authority to appoint a commissioner, which office was tendered to, and accepted by, General R., who conducted a laborious and extensive correspondence, both foreign and domestic, until the act was superseded by another passed during the session of '73-'74.

A NEW BOOK ON THE SCIENCE OF AGRICULTURE.

Messrs. A. S. Barnes & Co., New York, have sent us a copy of a work they have just published, entitled "*a Text Book of Scientific Agriculture; with Practical Deductions*," by E. M. Pendleton, M. D., Professor of Agriculture and Horticulture, University of Georgia. Price, \$2.50 postpaid. As far as we have been able to examine the book, we find the Doctor has availed himself of all the trustworthy sources of information, at home and abroad, and that the material has been arranged with singular compactness and simplicity, enabling the reader to refer to any point discussed with the greatest ease. The work was prepared to meet the want existing in the Southern country for something divested of technicalities; something indeed that would prove valuable to the unscientific reader.

THE January "Galaxy" will contain the first part of a new serial story by Wm. Black, author of "A Princess of Thule," "Strange Adventures of a Phaeton,"

etc., etc. It is called "Madcap Violet." The same number will also contain a very important article on our National Surveys, by Capt. Chas. W. Raymond; and the English Interregnum," by Justin McCarthy. Articles by Prof. H. H. Boyesen and Albert Rhodes will also be found in the same number.

THE AMERICAN FOOD FOR CATTLE—PREPARED BY ROBERT HUME.—The attention of horsemen, teamsters, cattle breeders, and graziers, dairy-men, poultry, and dog fanciers, &c., is directed to this food. It is a spicy condiment, possessing many virtues, and has had unusual success wherever used. It is put up in a cheap portable form of 30 pound boxes 100 packages, and the merciful man can be merciful to his beast at a very cheap rate, and make it pay besides.

HOME CORN SHELLER.—We call attention to the advertisement of this sheller, we have one in use and find it a cheap and handy instrument. The "*American Agriculturist*" highly recommends it.

MR. J. R. MINTER, of Unionville, South Carolina, has some IMPROVED COTTON SEED for sale. Any one desiring to improve their cotton would do well to communicate with him in regard to the matter. At the late Union county fair Mr. Minter received the premium for the largest yield of cotton on one acre (3,000 pounds picked), also for the largest yield on five acres (12,080 pounds). Our next number will contain an article from him on the cultivation of this staple.

We will publish in our forthcoming numbers the following prize essays given by the State Agricultural Society at its last meeting: "Sheep Husbandry," by Frank H. Gayford; "Manures," by Frank H. Gayford; "Grasses," by Geo. T. Tayloe; "Experiments with Fertilizers," by Dr. Robert Harrison, of King George.

The improvement in the general tone of the *Planter and Farmer*, as shown by this No. has involved an expense that will render it impossible for us to continue this improvement with the subscription price at a figure as low as \$1.50 per annum. We have carefully examined the matter in all of its details, and find that it cannot be compassed for less than \$2, at which price this Journal will hereafter be furnished. To clubs of FIVE subscribers, \$1.75. To clubs of TEN OR MORE, \$1.60, each.

The aggregate number of pages for the year will be over 700; and this considered in comparison with the cost of the same number in any other publication, will show that the margin left over the expense of paper and printing, is *extremely reasonable*.

It shall be our aim to submit, from month to month, a journal worthy of the Southern Country; and we claim, at the hands of our friends who have the interests of these States at heart, their assistance in sustaining, by personal good offices, our efforts in this behalf, and beg that you will give us the benefit of a good word in your neighborhood. The larger we can make our subscription list, the greater addition of valuable material we can put into our journal. We propose to present not only the experience of our own people, but a general summary of agricultural progress elsewhere in this country and in Europe.

We shall deal with all questions bearing upon the interests of our people *without fear or favor*. Our condition demands the very best at the hands of every one of us; and there is nothing to show that these efforts will be in vain.

L. R. DICKINSON.

Market Garden for Sale.

A market garden of 10 $\frac{1}{2}$ ACRES of VALUABLE LAND for sale in Rocketts, 500 yards from corporation limits of Richmond. Has a

Two-Story House, with Good Outouses.

LAND VERY RICH.

PRICE, \$4,000.

Address,

T. L. P.,

Care "Southern Planter and Farmer," Richmond, Va.



THE

VIRGINIA

WINE

AND

CIDER MILL

Is superior to any MILL now made, and more sold annually in this market than of all other kinds combined. It does not grate, but thoroughly crushes every fruit cell, insuring all cider the apples will yield.

Send for Catalogue.

1891

CHAS. T. PALMER,
1526 Main Street, Richmond, Va.

G. F. WATSON'S FURNITURE WORKS, RICHMOND.

Having timber tracts in this State sufficient to last several years, with a complete lumbering, rafting, and saw-mill organization of fifty men, together with one of the most complete factories in the country located in this city, can furnish Poplar and hard wood (no soft pine) low-priced FURNITURE as cheap as any factory North or West—and fine Walnut FURNITURE cheaper. A stock of one million feet of lumber insures seasoned work, warranted in this and every respect. Manufacture MATTRESSES of all kinds.

Lumber-mill, Indiantown, Va.; Factory, Rocketts street; lumber-yards, Ash and Poplar streets; warerooms, No. 18 Governor (Thirteenth streets,) Richmond.

STOCK FOR SALE.

Constantly on hand, Short-horn

BULLS, COWS, AND CALVES,

of the most approved strains. The pure Bates Bull,

FIDGET'S OXFORD 12th


at the head of the herd.

BERKSHIRE PIGS

from sows either imported or bred direct from imported sire and dam. The recently

Imported Boar "AYLESBURY CHIEF,"

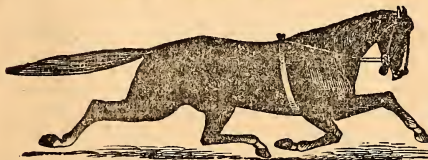
at the head of the herd. Prices low. Send for Catalogue.

 Fine Bronze Turkeys, at \$6 per pair.

A. M. BOWMAN,

Waynesboro, Augusta county, Va.

Dec—6m



GORDON'S FOOD

FOR

HORSES & CATTLE.

THE GREAT ECONOMICAL FOOD FOR STOCK.

Reduces the cost of feeding, both for cattle and horses, one-fourth. Being a perfectly nutritious, health-giving preparation from the seeds of grasses and herbs, in combination with tonic and invigorating root barks, we claim it to be the one thing needful to make a perfect feed. Horses are improved in FLESH, WIND and ENDURANCE. The principle of the action of the food is that PERFECT DIGESTION produces PURE BLOOD, and upon this depends HEALTH, and often life itself. Cattle intended for the knife fatten more rapidly, and the flesh is more solid. Cows increase their milk yield at least one-fourth in both richness and quantity, the final result being much more butter.

GERALD GORDON & CO., Patentees and Proprietors.

New York, Philadelphia and Baltimore.

SIMPSON, BASS & CO., State Agents, 1327 and 1331 Cary st., Richmond, Va.

nov—

1875. WHOLESALE and RETAIL. 1873.

500,000 FRUIT TREES.

Our stock of Fruit and Nut Trees, Grape Vines, Small Fruits, Etc., is large and fine.

THE ORNAMENTAL DEPARTMENT

is filled with Beautiful Evergreens and Deciduous Trees, Shrubs and Roses, and

THE GREEN-HOUSE DEPARTMENT

contains everything desirable for the Conservatory and Flower Garden.

Prices low, packing well done. Catalogue full.

M. COLE & CO.

CAMPBELL WALLACE.

MOSES COLE.

ATLANTA NURSERIES, Atlanta, Georgia.

Dec—2m

SOLUBLE PACIFIC GUANO, FOR TOBACCO, CORN AND OTHER CROPS.

After ten years' continuous use, throughout Virginia and the South, Soluble Pacific Guano has acquired a reputation for reliability equal to that formerly enjoyed by the Peruvian Guano, and the quantity used annually exceeds that of any other fertilizer.

It has been the aim of all connected with this Guano to produce the best possible fertilizer at the lowest possible cost, and we claim that the unusual resources and facilities of the manufacturers have enabled them to approach this more nearly than has been done in any other fertilizer with which we are acquainted. Those who have been using it unite with us in the opinion, that by its use the consumer gets

THE GREATEST BENEFIT FROM THE SMALLEST OUTLAY.

We offer it with great confidence for use on the Tobacco and other crops to be grown in 1875, with the assurance that it is, in all respects, equal to what it has been in the past.

PURE PERUVIAN GUANO, AS IMPORTED.

We have a full supply of **No. 1 Guanape Peruvian Guano**, from the Government Agent in New York, selected from one of the finest cargoes ever imported. It is dry and in beautiful order, and contains within a fraction of **13 per cent. of Ammonia**, which is within two per cent. of what the old Chincha Peruvian used to contain—in fact, it would be difficult to tell one from the other.

We offer these standard and thoroughly tested fertilizers for Tobacco, Corn, and all Spring Crops, and are prepared to sell them at such prices as will make it to the interest of consumers and dealers to purchase their supplies of us instead of sending their orders to New York, or elsewhere.

For further information and supplies, address,

ALLISON & ADDISON,
Seed and Guano Merchants, Richmond, Va

mar—tf

ST. JAMES HOTEL, RICHMOND, VA.

Pleasantly located on Twelfth Street, facing Bank Street and the Capitol Square. In the centre of the business portion of the city, within one square of the Post Office and Custom House, it is, by its retired location opposite the southeast corner of the beautiful park surrounding the Capitol of Virginia, the most quiet hotel in Richmond.

The proprietor having had a life long experience in hotel business—first at the Everett House, New York, and afterwards as proprietor of the Spotswood Hotel, Richmond, in its best days—and now assisted by Mr. JOHN P. BALLARD, the popular veteran hotel-keeper of Virginia, assures visitors of the ST. JAMES that no effort on his part will be spared to make them comfortable and to keep the house in first-class style. Coaches will attend the arrival of all trains. Elegant carriages are at all times at the service of the traveling public.

june

T. W. HOENNIGER, Proprietor.

FALL STYLES, 1874.

CHARLOTTESVILLE WOOLEN MILLS SAMPLE CARDS

Are now ready for mailing. Our assortment embraces

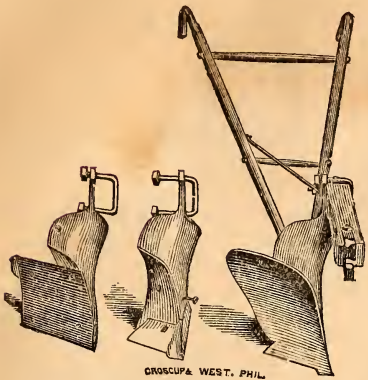
TWENTY-FOUR PATTERNS.

Merchants desiring samples, will please address,

CHARLOTTESVILLE WOOLEN MILLS,
CHARLOTTESVILLE, VA

THE WATT PLOW

VICTORIOUS ON EVERY FIELD!



A combined TURNING PLOW, CULTIVATOR, SUBSOILER, ROW-OPENER, PEANUT-DIGGER, TOBACCO and COTTON SCRAPER and SWEEP.

No CHOKING when bright and smooth; no LABOR to the plowman; ONE-THIRD LESS DRAUGHT to the team; thorough BURIAL of Weeds, Grass, &c.; great STRENGTH, Durability and Economy in its use, and complete pulverization of the soil.

FARMERS WHO USE IT WILL USE NO OTHER.

Awarded all the Premiums at every Fair attended in 1873.

Awarded First Premiums at every Fair attended in 1874.

Virginia State Fair, Richmond—FIRST PREMIUMS ON THREE AND FOUR-HORSE PLOWS.

Right and Left Hand—ALL PREMIUMS AWARDED THEIR SIZES.

Also at the Plowing Match ALL PREMIUMS AWARDED WHITE PLOWMEN were taken with WATT PLOWS of ONE, TWO, THREE and FOUR-HORSE SIZES; and COLORED PLOWMAN by ONE, TWO and THREE-HORSE SIZES; being SEVEN PREMIUMS OUT OF EIGHT.

The superior work done by the WATT, and the complete ease with which it is handled, was apparent to all.

NORTH CAROLINA STATE FAIR, Raleigh, October 10th;

GEORGIA STATE FAIR, Atlanta, October 19th;

SOUTH CAROLINA STATE FAIR, Columbia, November 10th;

STAUNTON, VA., October 13th;

LYNCHBURG, October 20th;

WELDON, N. C., October 20th;

ORANGEBURG, S. C., November 3rd;

CHARLOTTE, N. C., November 3rd;

DANVILLE, VA., November 3rd;

POINT PLEASANT, W. VA., October.

Thus, with its great reputation before, it has gained new laurels this year, which must convince every farmer of its vast superiority over other plows.

We warrant every plow sold to be as represented or to be returned to us. We solicit a trial. Catalogues sent to any address.

WATT & CALL,

SOLE MANUFACTURERS,

1452 Franklin St., Richmond, Va.

Special Agents for "The Best" Spring-Tooth Horse-Rake and Gleaner; also for sale of our own manufacture, HARROWS, CULTIVATORS, and all kinds of IMPLEMENTS at lowest prices—all warranted.

**DOMESTIC
SEWING
MACHINES.**

Liberal terms of Exchange for Second-hand Machines of every description.



"DOMESTIC" PAPER FASHIONS.
The Best Patterns made. Send 5cts. for Catalogue.

Address **DOMESTIC SEWING MACHINE CO.**

AGENTS WANTED. NEW YORK.

500,000 GRAPE-VINES FOR SALE.

CHEAPER than any where else.

Concord—1 year, \$30 per 1,000; 2 years, and extra select 1 year, \$45 to \$55 per 1,000. No one dare undersell me.

Delaware, Martha, Iona, Diana, Eumelau, Norton, Herbermont, Catawba, Croton, Hartford, and all other varieties cheaper than anywhere. Also all small Fruit Plants. Address Dr. H. Schroder
Bloomington, Ills. Dec—2t

ALBEMARLE NURSERIES,

Near Greenwood Depot, C. & O. R. R., Va.

October 13th, 1875.

TO THE PUBLIC:

In estimation of the constantly increasing interest manifested in the culture of fruits in Virginia, I desire for a mutual benefit to extend and make more widely known my occupation and facilities to supply **RELIABLE FRUIT STOCK** at moderate prices.

This being one of the oldest establishments of the kind in Virginia, which has never changed proprietors in a quarter of a century of its existence, I claim a practical skill in propagation, and an acquaintance with successful varieties, unexcelled in Piedmont Virginia. And when it is remembered that this is locally the heart of the great fruit-growing region of the South, it must be pre-eminently the place to obtain the most reliable fruit stock. But the great wonder is (as I have been told to the prejudice of the reliability of my stock,) how I can afford to sell good and reliable trees so much lower than the same sort of stock can be had at our city nurseries. I will tell to all how I can afford to take only a fair price for my goods: I am at less expense to live and grow my stock in the country than those who live in and conduct near a city; I deal directly with my customers without the intervention of agents, clerks, and foremen at high salaries and costly outfits, and, therefore, save to my customers from 50 to 75 per cent. which is credited to them on my prices, and they get the benefit of all that which would go to pay the agents, &c., so the net proceeds is not far from being the same at last, but the difference to the purchaser is great. I am pleased to say that I have a thrifty and handsome stock of most of the leading kinds of "APPLES," including about 10,000 WINE SAP $3\frac{1}{2}$ to 7 feet, 2 and 3 years old, at \$10 per 100; 1 year, 2 to $3\frac{1}{2}$ feet, \$6 per 100. The stock of WINE SAP, I learn, is about exhausted elsewhere for this season in Virginia.

Of Dwarf Apple I have a great variety, 3 and 4 years old, 25 cents each. My new Piedmont Pippin Dwarf, and Extra Standard, \$1 each. No such apple as this has been introduced in this country lately. It resembles Albemarle Pippin, but the tree is different, being a much better grower. I possess the entire stock. This is priced high enough for those who have doubted my stock on account of low prices.

PEACH TREES.—Common choice early and late kinds from Hale Early to White Heath Cling; 1 year, $3\frac{1}{2}$ to 4 feet, 15 cents each, \$13 per 100; Early Beatris, Louis Rivers and Fosters, 25 cents each, \$20 per 100.

PEARS.—Standard and Dwarf, 50 cents each.

CHERRIES.—Standard and Dwarf, 50 cents each.

TERMS.—One-half the amount cash with the order; balance on Od livery. If all the bill is sent with the order, if to the amount of \$3e- and upwards, I will pay the freight charges through to the purchaser's depot.

Send remittances by registered letter, P. O. Order, Bank Check, or Express prepaid, at my risk. And direct all orders and communications to

JOHN DOLLINS,

Greenwood Depot, C. & O. R. R., Va.

G. W. ROYSTER.

J. B. LIGHTFOOT.

G. W. ROYSTER & CO.,
Commission Merchants,
RICHMOND, VIRGINIA.

Solicit Consignments of Tobacco, Grain, Flour and Produce Generally
 Refer by Special Permission to J. W. LOCKWOOD, Cashier National Bank of
 Va., Richmond; ISAAC DAVENPORT, Jr., Pres. First National Bank, Richmond.
 Grain Bags furnished on application. augly




ASK FOR THE
"LOCKWOOD HOE."

BLADE ALL STEEL.

Eye malleable iron. Every Hoe warranted
 Best Hoe for general use in the market. The
 Hoe for merchants to sell, because it gives
 satisfaction.

Manufactured by

BALTIMORE STEEL HOE WORKS,
 and **O. H. HICKS & CO.**

 For Sale by the trade generally.
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BUCKEYE MOWER AND REAPER,
Sweepstakes Thresher and Cleaner.
ECLIPSE AGRICULTURAL ENGINE,

Best, Cheapest and most Economical Engine in the market.
 Circular Saw Mills; Mill Stones, Bolting Cloths, Eureka and other
 Smut Machines; Belting, Spindles, Mill Picks, Portable Farm and
 Grist Mills.

Cucumber Wood Pumps with Patent *Cast Iron* Cylinder. War-
 ranted best and most durable Pump in the market, &c., &c.

JOSHUA THOMAS,

53 Light Street, Baltimore, Md.

 Prices and Descriptive Circulars furnished on application.
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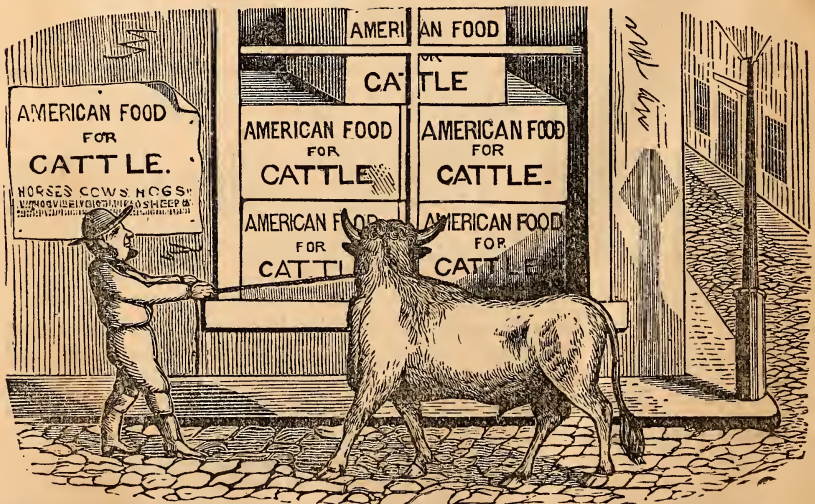
FARMERS AND DEALERS
PURE FINE GROUND BONE,
PURE BONE FLOUR,
 PURE DISSOLVED BONE ASH,
Pure Dissolved Raw Bone.

66° Oil Vitroil, German Potash Salts,
 Pure Chemicals for making Superphosphate at the lowest market price.

Call at **R. J. BAKER & CO'S.**

Aug—1y

BALTIMORE, MD.



THE AMERICAN FOOD FOR CATTLE

Invaluable for Horses, Cows, Sheep, Pigs, Poultry and Dogs.

To breeders training cattle for the show-yard or for sale, it is essential. It produces flesh, hair, milk and wool. It is conducive to health, cleanliness and good condition. For the diseases of Poultry it is a specific.

ROBT. HUME, Manufacturer,

Jan—3t

Office and Depot: No. 18 Fifteenth street, Richmond, Va.



“LINDEN GROVE.”

BERKSHIRES!

The SALLIE, SWEET SEVENTEEN, STUMPEY and SNIPED families, bred to perfection

At “LINDEN GROVE.”

Having lately received two importations of Berkshires, of first-class blood, among which were *Stewart's Gem*, *Stewart's Duchess* and *Stewart's Pride*, which won first prizes at Gloucestershire Agricultural Society, at Cirencester, Eng., and also prizes at other leading shows in England—there were also other prize-winners among the lot, such as the *1st Duke of St. Bridge*, winner of 1st prize at Croydon, England, and other noted shows, and pronounced by experienced judges to be the finest boar ever seen on exhibition—these, in addition to my last May's importation, give me one of the finest and most valuable herds of Berkshires in England or America—if not in the world—and I am prepared to furnish pigs of all ages, sired by *Plymouth* (the highest priced Berkshire boar ever sold in England or America), *Othello 1st* and *2nd Dukes of St. Bridge*, and by *Mark Antony*, out of my grand imported prize-winning sows, at reasonable prices.

Address,

T. S. COOPER,

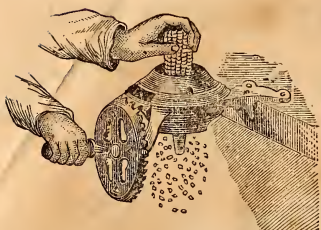
“Linden Grove,”

Coopersburg, Lehigh county, Pa.

P. S.—My Prize sow Sallie XI. (Royal Beauty), winner of 1st prizes at the Royal Show, England, '74, 1st prize in her class at Ohio State Fair and Cleveland, and winning sweepstakes in a large and hotly contested ring at both Fairs in '74, has at present a litter of 8 pigs (7 boars and 1 sow) which are now 8 weeks old, and sired by imp. 2nd Duke of St. Bridge, which I will sell when three months old, boxed and delivered at our express office, with feed for journey, for \$50 per head. In her last litter she had 8 pigs; two of which—*Sambo XI.* and *Sallie XIV.*—were got up for the shows, and won first prizes at the leading shows in the West. The boar won 1st prize in his class at the following fairs: Ohio State Fair, Indiana State Fair, Cleveland and St. Louis; also sweepstakes at Cleveland and at the world's show at St. Louis, as best boar of any age or breed. The sow won sweepstakes at Cleveland, in a large class, as best sow of any age or breed; also 1st prize at other local shows.

My imported prize-winning sows, *Stewart's Gem* and *Duchess* have littered seven pigs each since their arrival, the largest, finest and best formed pigs I ever mind seeing. They were sired in England by Capt. Arthur Stewart's prize boar.

The young pigs will be for sale when three months old.—T. S. C.



**Home
Corn
Sheller**
The
best
hand
sheller
for fam

ily use in the market.

Every Machine Warranted. Price, \$2.50, shipped by express, safely boxed, on receipt of price. Every farmer needs it. Live agents wanted. Send for descriptive circular to **LIVINGSTON & Co., Iron Founders, Pittsburgh, Pa.**

jan

10 CENTS sent to **BRIGGS & BRO.,** Seedsmen, Rochester, N.Y., or Chicago, Ill., secures postage paid, the January Floral Work. Free to customers. See it! Save Money and Failure on Seeds!

jan—1t

ROSES FOR THE MILLION!

Twelve choice Roses, assorted colors, by mail, for One Dollar. Descriptive lists sent free. **TYRA MONTGOMERY, Mattoon, Ill.**

jan—3t

THE 100 DAYS TOMATO.

Actually ripens in one hundred days. Earliest Good Tomato Ever Offered. Free from rot; ships well; remarkably prolific. \$419.50 sold from one-fourth acre. Positive proof of these claims in free circular. 25 cents per packet; 5 for \$1.00; post-paid. Address, **J. A. FOOTE, Seedsmen, 512 Main St., Terre Haute, Ind.**

jan—2t

FLOWER

Spooner's Prize Flower Seeds.

SEEDS.

Spooner's Boston Market Vegetable Seeds.

Vegetable

The cheapest and best seeds in the market. Send two 3 cent stamps for our illustrated catalogue and the prices. **W. H. SPOONER, Boston, Mass.**

SEEDS.

jan—2t

FARM FOR SALE.

A fine Grass Farm of 720 acres, in Pittsylvania county, Va.; admirably adapted to sheep raising; which will be sold cheap. Address Editor of *Planter and Farmer.*

jan

FOR SALE.

I offer for sale, a thoroughbred pair of Essex Hogs, aged ten and twelve months. The sow has taken the boar. These hogs are very beautiful, and come from the best imported stock.

C. M. ROBINSON,

P. O. Box, 157, Richmond, Va.

jan—2t

WILLOW BANK STOCK FARM.

I am breeding Devon cattle, Merino sheep and Berkshire pigs, of pure blood and choice quality. My cattle are bred from the importations of C. S. Wainwright, and Hon. Ambrose Stevens. They are choice breeders and prize-winners. Have taken in the three seasons past, eight herd prizes and over sixty individual prizes in Iowa, Illinois and New York. My sheep and pigs also are of strictly first quality.

Also White Leghorn Chicks. Prices reasonable and satisfaction given. **B. F. PECK, East Bethany, Genesee County, N. Y.**

jan—1y

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The result of five years experimenting.—The Improved Evergreen Broom-corn grows to a medium height, brush good length, fine and straight yields much better and will bring one-third more money in the market than any other variety, making from 7 to 10 hundred pounds of brush and 40 bushels seed to the acre. Seed is worth more than oats for feeding.

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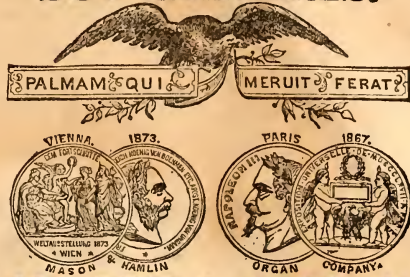
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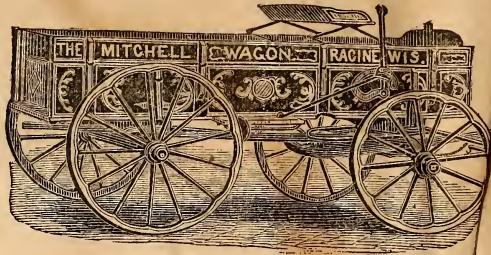
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