SOUTHERN PLANTER AND FARMER
VOLUME 35-36
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THE SOUTHERN

PLANTER & FARMER,

DEVOTED TO

Agriculture, Horticulture, and the Mining, Mechanic and Household Arts.

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.
T. L. PAYNE, ... ASSOCIATE EDITOR AND BUSINESS AGENT.

New Series. RICHMOND, VA., JULY, 1874. No. 6.

It is always difficult, often dangerous, to effect a radical change in the political, social, or industrial interests of a country. Even when gradually accomplished, such changes are fraught with dangers which may well cause the most rabid reformer to pause ere he precipitates a revolution. But when all these interests combined are at once, instantaneously subverted, it is certainly not at all astonishing that pecuniary loss and comparative social and industrial paralysis should follow. Indeed, that social disorganization, ruin and anarchy did not follow the close of the war in the South, must be attributed to the natural conservatism of the ruling class. But while we commend and admire this conservatism, we fear very much that too large a portion of it is doing much to hinder the material advancement of Virginia and the South generally. This clinging to the past, this standing by old landmarks, this devotion to old systems, and pursuit of occupations that really belong to the past, and general indisposition to try new systems, to embark in new industries and effect other changes, rendered absolutely necessary by the altered condition of the labor system and other changes growing out of this, has brought bankruptcy to many Southern homes, and produced an incalculable amount of trouble and disappointment.

We hope, however, that our people have learned much by their bitter experience, and that the few new industries that have been developed during the last six or eight years will be rapidly followed by

others, which will bring increased prosperity to the country. One of the first changes which is likely to effect great good, is the abandonment of the old system of plantation management—employing large force and tending large crops of tobacco and wheat. Our laboring class is too indolent and unreliable to admit of this Such a system could only be profitable when the planters could command at all times the necessary amount of reliable labor to work it out successfully in all its details. This cannot now be done. A wedding, a funeral, or a fishing frolic will take all the labor off a half dozen large plantations for days even in the busiest season, and the crop, if tobacco, may be ruined by worms or frost, or it may fail to be planted at proper season, just that our nation's wards may be properly married, or buried, or enjoy the exhilarating sport of catching cat-fish or eels out of some muddy pond.

Having a knowledge of these facts from sore personal experience, we have from time to time, through the editorial columns of the *Planter*, urged upon our farmers the necessity of engaging in the production of such crops as required less continuous manual labor, and which are less liable to injury from temporary neglect.

SHEEP RAISING.

One of our hobbies, and one which we have urged repeatedly upon farmers as most likely to yield satisfactory results on our impoverished lands, is the raising of sheep. Many of our friends have experimented in this line, and are perfectly satisfied with their success. Col. Ruffin, in a communication published in the *Planter* some months since, gave a detailed statement of his success in raising lambs for the New York market, and what he has done any other farmer may do if he will only give the time and attention required. There need be no fear that the market will be overstocked. Practically, there is no limit to the demand, as our nearness to the seaboard gives ready and cheap access to all the large cities of the Atlantic coast, where good mutton and early lambs always meet with ready sale at profitable prices. Many men, however, are deterred from embarking in this profitable enterprise by the dread of dogs, and it must be confessed that their fears are not idle ones. We have almost daily accounts of splendid flocks decimated, and, in some instances, entirely destroyed by worthless curs, whose value would hardly be as one to a million compared with the loss they thus inflict upon the individual interest and that of the community. It does seem that this great nuisance ought and could be abated. It does

seem that such an impediment to the successful raising of one of the most profitable of our domestic animals could and ought to be removed by the united action of that large class of our citizens who are personally interested. We consider this matter of legislative interference for the protection of sheep against dogs of sufficient general importance to be made a test question in the choice of a representative to the Legislature. There is not the shadow of a doubt that the friends of sheep are very largely in the majority in the State, and that the noise of the dogs and their friends would soon be silenced if they would only speak out with determination.

The enclosure law, as it now stands, is based upon proper principles—the local option clause leaving it with the people of each community to decide for themselves whether it is desirable in their locality or not. With some very slight modifications this law would be acceptable to the larger part of those interested. But the dog law is one that is of general application, and its best results can only be reached by making it universal in its application.

There exists no natural or acquired right in one individual to keep an animal to devour the unoffending animals of his neighbor, and the fact that the owners of dogs preponderate in any immediate neighborhood does not give them the right to destroy the sheep of the minority, or prevent that minority from raising sheep from fear of their destruction.

Let the farmers of the State, then, determine that they will support no man for the Legislature who is not pledged to the passage of a law for the protection of sheep against dogs. This is the only way we can accomplish anything. The laws on this subject prevailing in most Northern States, making the owner of the dog responsible for the damage done, are very good there, but would be utterly nugatory here, from the fact that in many instances, indeed the majority of cases, the dog is about the only property he possesses. The only way we can reach the matter is to tax the dog heavily, and make payment of the tax a condition precedent to voting. We would gladly see a tax of two dollars or more imposed upon every dog, and believe that such a law would soon yield a revenue that would enable us to discharge some of our obligations.

RAISING GRASS.

The general introduction of sheep will necessitate the seeding of grass, and at the same time greatly facilitate securing a good set.

It is a notorious fact that sheep will set any place in grass. Their constant treading and close biting has a tendency to kill out the coarser grasses and improve the finer, sweeter and more nutritious. The keeping of sheep would in a few years cover many of the unsightly galls that disfigure the hillsides of the State with a luxuriant coat of green, and add very much to the fertility and money value of the farms.

A large part of the land of Virginia, however, will not raise much grass in its present condition. Such land should, as speedily as possible be improved by the plowing in of a crop of fallow peas, which will grow on the very poorest soils, and, with very little help, produce a luxuriant crop of vine. We cannot too earnestly recommend to the owners of impoverished farms to avail themselves of this cheap and rapid improver, which nature provides for them. Generally a crop of wheat sown upon pea fallow will give a good yield and leave the land in fine condition for grass. Grass seeded in February on wheat will rarely fail to catch, and as the wheat is removed early, it will make considerable growth during the summer and fall. Under our present system, fields not in cultivation are left bare, or grow up in weeds or briers. If we could substitute for these a good crop of clover, furnishing feed for large flocks of sheep, the profits arising from them would add greatly to the wealth of the whole country, and the improvement of the land would be rapid and sure.

COUNTRY ROADS.

We have never been in a country where the roads were as uniformily bad as they are in the State of Virginia. If they are to be taken as an index of the spirit of public improvement among the people, it is certainly at a very low ebb. Nothing adds more to the appearance of a country than good roads, and the value of the land of this State would be greatly enhanced if the roads were as good as they might be made with a very slight additional outlay. The weak point in the present system is the appointment or election of supervisors, who are totally incompetent and not in any way interested further than to secure their two dollars a day. Only men who know something about such matters should have the supervision of roads, and then, as far as possible, men who are interested in the appearance of the country and condition of the roads, should be chosen. One of the best methods of securing and keeping up good roads is to let them out by contract to private parties for a series, say of ten

years, to be put in order and kept so for a given yearly compensation, taking bond with security for the faithful performance of the contract. A per capita tax, not exceeding two dollars, for each person liable to work on the road, would keep the roads in excellent order. In conversation with a Pennsylvanian, who came here to buy land and went away without purchasing, he gave as a reason, that the roads were in such a condition that he could haul nothing over them if he raised it for sale—and he further remarked, that several of his acquaintances who had been here went back with the same opinion. Our farmers would do well to look to this matter as, unless it is speedily attended to, the sale of our lands and the improvement of the State will be indefinitely postponed.

COMMERCIAL FERTILIZERS AGAIN.

We give place in this number to a long article from the pen of Mr. Ott, on the subject of "Commercial Fertilizers." Our object in this matter, as in everything else, is to do justice. We believe that without the use of commercial fertilizers the course of improvement will of necessity be very slow, and that there is no subject of more vital importance to the agricultural interest of the State than this. We wish to see it thoroughly discussed in all its bearings, that our people may know what is the nature and cost of every ingredient used; then with the manufacture of these articles in reliable hands we may reasonably hope to get value received for the money paid out for them.

We know of no man more competent to give a fair exposition of this subject than the Secretary of the Southern Fertilizing Company, and we hope that he will give us more on the same subject. The columns of the PLANTER are open to him at all times. The article referred to was written at the request of the editor of the *N. C. State Journal* of Agriculture, and first appeared in that paper.

While we believe that a good article of fertilizer can be produced at much smaller price in proportion to its value than any now in the market, yet we think that this result can only be attained by a return to a cash system. So long as fertilizers are sold on indefinite credits, depending upon the ability and disposition of the farmer for payment, with the loss by bad debts necessarily attending such a method of doing business, so long will those who buy have to pay high prices.

THE GRANGES.

The rapid progress which the Society of Patrons of Husbandry is making in Virginia is indicative of a feeling among our farmers that a change of some kind is necessary. We do not belong to that class of our sanguine individuals who are always expecting impossibilities of every new thing. But we are confident that the Granges are going to work great and permanent good in this State. Our farmers being brought together in intimate personal relations, will be of great mutual benefit to each other, imparting and receiving imformation and inspiring among them a spirit of emulation which can be productive of good only.

We do not consider this movement a war upon other trades and professions. Whatever antagonism may exhibit itself must grow out of the legitimate protection it seeks to give to the interest of the producing classes. Farmers in Virginia are between two classes, both of whom are striving to make a living out of them, and in many instances without giving an adequate return. The laboring class, upon the one hand, as a general rule, demand higher wages than the products of their labor will justify, than the work performed is intrinsically worth, and failing to get what they demand by fair means they resort to cheating, lying and stealing as a means (to use their own language) of getting even.

We have in Virginia very few of what would in the North be considered skilled laborers. After an experience of three years with them, our former experience having been where good white laborers could be gotten, we are of the opinion that take farm work generally, including all the odd jobs, seeding, &c., that are to be done, one good hand, such as would command $15 per month in Ohio, Indiana and Kentucky is worth more than two hands, such as can be hired in Virginia for from $8 to $10. The other class with which the farmer has to contend with may be styled the money class, and is made up of commission merchants, bankers, manufacturers, &c., the profits of these classes are in many instances enormous. We do not wish to deprive any one of the legitimate profits of trade, but when we see nearly one fourth of a crop absorbed by commission storage, insurance, and such like charges, we are very apt to think there is something beyong legitimate profit somewhere.

We see frequent hints that this is a political movement which is usually persistently denied by those connected with the order. Now it appears to us that while the objects are not truly political

the results must be so. We need great reforms which can only be effected through legislation, and whatever a majority of the people desire can be so accomplished. We believe, therefore, that the Granges will shape legislation in the Southern and Western States for years to come, and that so far the effects of this movement will be political. Upon the contrary, however, this order does not proscribe any class but simply leaves the individual members to choose between candidates (and they will give preference to) those whose principles and views coincide with their own.

FOREIGN LABOR AGAIN.

We are just in the receipt of a letter from a prominent Virginia farmer, requesting our opinion of the practicability of introducing Chinese laborers into Virginia, and their value as compared with the negro, and also other farm laborers We know little about them ourselves and therefore make the following extract from a paper read before the Social Science Association and published in the *N. Y. Times*. It is from the pen of Mr. Mare of California:

"Probably the greatest difficulty which California will have to deal with will be the Chinese problem. There is nothing which the State requires so much as an abundance of cheap labor, if the fields are to be tilled, the mines worked, and the factories built. Ordinary domestic servants are now paid $25 or $30 per month in gold, in addition to their maintenance. European immigrants, willing to engage in manual or servile work, come but slowly into the State. The Chinamen are eager to come. They are versatile, hardy, industrious and obedient. Some of them excel in hard out-door labor; some are excellent cooks and laundresses; some are skillful operatives in factories. But they are of a different race, of heathen religion, of difficult speech, and altogether are an offense to multitudes of white persons, who regard them as trespassers in the labor market. The hostility of the multitude toward the Chinese surpasses any hostility manifested at the East toward the African, except in the extreme heat of passion evoked by the civil war. It has been quickened by the utterance of some of the newspapers and public speakers. It does not lesson as years roll on. Last year the cargoes of immigrants were so large that the city was on the verge of a riot, and the Chinese companies were forced to telegraph, "Send no more emigrants." This year, in consequence, the arrivals have been less numerous.

Those who employ large numbers of the Chinese are exposed to a great deal of popular censure; those who defend or advocate their rights are assailed very much as the anti-slavery men were assailed in years gone by. Yet the Chinese immigration is by no

means parallel with the system of African slavery, and should not be discussed on exactly the same principles. The evils objected to in Chinese labor are very different from those which were offensive in African servitude. A most extraordinary summary of their faults was once made in this arrangement that they were too frugal, too ingenious, and too industrious for Americans to compete with.

NOTES FOR THE MONTH.

After one of the coldest and most backward Springs we have ever known, June came in hot, and while we write, the thermometer is trembling among the nineties, having gone above one-hundred several times. The great heat following rain has injured the wheat, and the yield will hardly be as large as was anticipated earlier in the season. It is, however, satisfactory in most cases, and for the area seeded we think that we cannot complain. From many sections we have complaint of the chinch-bug, and we fear that without a very wet season the corn and oat crops will be very much injured by their depredations. On our own farm and those of our neighbors, we see great patches both of oats and corn indicating by their dry and shriveled appearances that these little pests have been at their work of destruction. Insect life of every kind seems to be more abundant this year than we have ever known it.

The majority of our farmers are now in the height of their busy season. Oats and grass require cutting, and corn and tobacco need the plow, hoe and cultivation, so that there is no time for idling.

STACKING GRAIN.

It is frequently a question whether it is better to stack grain before threshing, or haul it directly from the field to the thresher. We are decidedly in favor of stacking for several reasons. In the first place, farmers are too busy now to thresh. Their teams have all they they can do without imposing upon them the additional burden of turning the thresher. If left in the field until corn is laid by, the grain is apt to waste or be injured very much by weather, and the straw will not be near so good. It requires a very short time to haul the grain and stack it in some convenient place, and when the time comes to thresh, the team will only have to turn the thresher instead of some being engaged in hauling and some in threshing.

Another good reason for stacking is that the grain may then be left safely until the weather is cool, and the labor will not be so ex-

hausting to man or beast. The most favorable time for threshing is some dry time in September or October, when the ground is too hard to plow and the teams would otherwise be idle.

In our June number we gave full directions for taking care of hay. We only now suggest that it is not too late to sow Hungarian grass and that if any one has a rich spot unoccupied, it will pay very well to plow it up and sow this grass at the rate of one-half bushel per acre. With favorable season a yield of one and a half to two tons of good hay may be expected.

BUCKWHEAT.

We are of the opinion that Buckwheat can be made a profitable crop in Virginia. It will make a very fair yield on our light lands and always commands a good price. In our experience it has proven the best covering for grass, and if we wished to be perfectly certain of a stand of clover or grass we should seed with buckwheat the last of July or first of August. As food for poultry we have found it cheap and excellent, producing abundance of eggs. When sown for this purpose near the house it need not be cut at all, as it will lie on the ground all winter and keep sound. The chickens are very fond of scratching for it. A little patch that we sowed near our house last summer was the constant resort of the fowl during the winter, and they layed well so long as the buckwheat lasted. As a fallow crop it ranks next to peas, and may be sown much later and and yet make much sufficient growth to give a good grop to plow under. The greatest objection to buckwheat is the difficulty of harvesting and saving it. It will pay, however, to raise for bees, pigs and poultry, each of which will gather a share of its produce, without giving us the trouble of harvesting it.

TURNIPS.

Ruta bagas or Swedish turnips should have been sown last month, though it is still time, provided the ground is rich and in good mechanical condition. But no time should be lost in getting them in. The best manure for turnips of any kind is well rotted stable manure; failing in that, superphosphate, at the rate of not less than 500 pounds per acre, and 1,000 pounds is better, should be applied. We have succeeded in making very satisfactory crops on poor land by the use of superphosphate alone. It has one advantage over stable or farm-pen manure. It has no seeds of any kind to grow up and interfere with the crop.

The best method of preparing the ground is to select a piece as free as possible from weeds, and, if convenient, one that has been plowed early in the season. Break thoroughly and pulverize with the harrow; then cross-plow and harrow again, and continue this process until the ground is in perfect condition; then sow the fertilizer broadcast and rake again, and then throw into low ridges 20 to 24 inches apart, and drill in the seed on top of these ridges. In the absence of a regular seed drill, a goose quill stuck through the cork of a bottle will answer a very good purpose. Fill the bottle with seed, and try it first on the floor or a paper, to see how rapidly it discharges, and regulate your motion along the drill accordingly. After sowing, it is best to press down the top of the drill to make it solid and retain the moisture. A light roller will be best, and in absence of this we use a hoe or spade to pack it down.

When the young plants appear, they will be liable to the attacks of the fly. To prevent this, sow over them in the morning, when wet with dew, soot, ashes or lime. Either will usually prove a sufficient protection against the ravages of insect enemies. After the plant gets to some size, thin out to 10 or 12 inches apart, and keep free from weeds and grass. The same directions apply to the ordinary white turnip, except that it should be sown later—say from the 25th of July to the 10th of August—and we have made excellent turnips sown as late as the 1st of September. Turnips do not grow much until the cool rains of autumn moisten the earth, and the long, cool nights begin to prevent the scorching up of vegetation. Turnips do better sown broadcast than ruta bagas, as it is usually too late in the season for weeds to injure them very much.

LATE CABBAGE

Should be planted out this month as early as convenient. Heavy manuring is absolutely necessary when it is desired to make a good crop of this very necessary vegetable.

CUCUMBERS FOR PICKLE

Should be planted early in the month. They do very well to succeed early cabbage and potatoes, and where the ground was made rich for these crops, no more manure will be required.

IN THE ORCHARD.

Young trees will require special attention throughout the summer, and by a little care in rubbing off misplaced shoots and pinching back those which grow too rapidly, the symmetry of the tree may be

maintained, and the necessity of severe pruning in the fall and winter avoided. Grape vines especially should be watched, and everything that threatens to absorb the strength of the vine should be removed at once. Bearing shoots should be pinched off two joints above the last bunch, and the sap forced into the fruit as much as possible. An hour properly spent in the orchard or vineyard now is worth more than a half day in the fall or winter.

Agricultural Department.

VALUATION OF COMMERCIAL FERTILIZERS—THE OTHER SIDE OF THE QUESTION.

RICHMOND, VA., May 18, 1874.

To the Editors of the State Agricultural Journal:

I observe in the last number of your excellent paper, a list of several Fertilizers, in which is given the valuation in money of each constituent shown by the analysis. The presentation to the agricultural community of such valuations, is intended, of course, to subserve a good end, and nothing, therefore, could be more laudable. But whether such an end is really subserved is a matter of legitimate inquiry, and I propose to submit a few words in that direction.

The practice of Europe, where countries are generally contracted in area as compared with the populations they contain, and where, in consequence, the cultivation of land *must be* managed in a manner to produce the largest yield possible, shows the use of concentrated or chemical manures to be universal; indeed they are regarded as necessary in their system of agriculture as the plough or any other indispensable implement used. Whilst we, in this country, do not labor under the pressure of dense population as compared with our producing area, we have nevertheless found that we cannot afford to ignore any valuable aid tending to increase of production, and so have not only resorted to chemical manures, as in Europe, but each year exhibits a greater consumption than its predecessor. Such universal use of these manures, year after year, stamps the business of their preparation as entirely legitimate, and being legitimate, it is entitled to the same unreserved respect that is accorded to any other business involving the conversion of raw materials into manufactured products.

There are few callings hedged about by so many difficulties as this business of preparing chemical manures. There is the soil, so complex in its structure, and variable in its manifestations, that men are hardly beyond their horn books as to the laws which govern its operations. Out of this soil grow the plants which constitute our staple

crops, cotton, tobacco, wheat, corn, grass, pea-nuts, potatoes, and so on, and these plants are very diverse both in their character and requirements. Then comes in the climate to modify the action of both soil and plants. The labors of thoughtful and observant men in this direction, during the past seventy years, have tended to the establishment of certain general principles as a foundation on which the manufacturer of these manures may build his work, but their application is not so absolute as to justify the assertion beforehand that any particular combination will certainly produce in practice a particular result. This result is approached indeed only by degrees; that is, to use the words of an eminent European authority: "Before certain manures could be obtained that are now specially prepared to suit particular soils or particular crops, enterprising and intelligent manufacturers have frequently incurred heavy expense in trying all kinds of fertilizing mixtures, before they succeeded in ascertaining the states of combination, and the relative proportions in which they should be combined, *in order to produce the best practical results.*" This is the history of the experience of every intelligent manufacturer.

The preparation of these manures, in a few words, involve knowledge of the soil, of the plant to be grown on it, and of the climate; they must be properly combined to meet the demands required of them, and presented in such mechanical condition as to permit of their being used both uniformly and with ease. *And the test of their value must be the results obtained in the field running through a number of years, that they may encounter all the vicissitudes of season.*

How, then, are these elements in the calculation to be managed so as to produce any absolute standard of measurement, in a money way, for the valuation of these articles? If possible at all to be made, *this standard must be absolutely invariable*; otherwise it places in jeopardy interests involving hundreds of thousands of dollars, the custodians of which are not willing to have imperiled for a single moment on an uncertainty.

Let us see how the case actually stands now. Take our tobacco fertilizer as an example. It has lately been analyzed by Dr. Genth, of Philadelphia. This analysis of Dr. Genth has been subjected to the valuation tables of four different chemists, all of whom claim to be authorities. The following shows the results:

By the valuation tables of Prof. Kerr, of N. C.,	59.41
By the valuation tables of Dr. Goessman, of Mass.,	64.58
By the valuation tables of Dr. Bruckner, of Pa.,	32.58
By the valuation tables of Prof. White, of Ga.,	69.16

[This article is sold at retail for $65.]

NOW WHO'S RIGHT? and what can possibly be the profit of such statements as far as the farmer is concerned? *Only utter confusion, while the manufacturer has to suffer from the discredit naturally following such unjust and arbitrary treatment of his interests —and this affects every article sold in this country.*

It is claimed, in a sort of wholesale way, that the consumer is not dealt by fairly in the sale of these articles; that, indeed, in the long run, he pays his money for that which brings him no return. As results speak louder than words, let us look, for example, at the cotton crop. With the South in the full tide of prosperity before the war, the largest crop ever produced was that of 1859–'60. It numbered 4,861,292 bales. The issue of the war, in the way of labor, affected these States in particular; in fact, the labor system was wholly broken up. To resume operations, the planter had to avail himself of every labor-saving contrivance possible, and the matter of his manures was by no means the least in importance; for composting and application involved more labor than he could with economy command. He resorted to concentrated manures, and despite the disjointed condition of things in a farming way there since the war, the year 1870–'71 showed a product of 4,347,006 bales! The low price of cotton prevailing that spring (1871) prevented the purchase of the usual supply of fertilizers, and the succeeding crop fell off to 2,974,351 bales, or a diminution of 1,372,655 bales, which at $65 per bale, is $89,222,575.

If the use of such aids to agriculture is necessary—and this, no one, I believe, will now gainsay—why should their preparation be conducted on a basis involving less integrity than that obtaining in connection with other callings? Again, if self-interest is the lever which moves every enterprise, why should its manifestations, in this direction, differ from those of all other callings? Every man in the business *knows* that he cannot hold his trade, once made, without his work will pay the consumer to use it; and this is very soon found out. It is, therefore, simply incredible that he should invest hundreds of thousands of dollars in buildings and machinery to conduct the business, and then deliberately go to work to make his investment valueless Furthermore, there is no combination among manufacturers. Combination means uniformity of price, and in no line of business, perhaps, is there such a diversity. Nor is there danger of excessive profit to the manufacturer. Monopoly means extortion, and in no other business, perhaps, is competition more rife.

If our planters were so circumstanced as to pay the cash for what they need in this way, the manufacturer could work on the same margin of profit, as any other business producing cash articles; but we all know that time is demanded, and long time at that. He must, in carrying these sales, encounter all the fluctuations of the market, and take the risk which always attaches to sales made in great numbers, and to all classes of persons. To save himself then, he must charge an adequate advance upon the cash price. The fact that in no manfacturing business is money made more gradually than in this, proves that the profits are not only not excessive, but reasonable in the extreme.

In this business, as in all others, one man will produce better work than another. Superior skill and intelligence will always command a greater return than inferior. And here presents itself the

duty the farmer owes to his own interests. *He must exercise judgment in his purchases.* He has no right to accept, without inquiry, the statement of any man or company not known to him, either in person or by reputation. In the purchase of his fertilizers, he has the means of finding out what article used in his region, has been attended, from year to year, *with the fewest failures.* As his purchases involve a good deal of money, and their result greatly affects the success of his year's operations, he cannot afford to ignore this inquiry, and do, as is too often the case, take anything that is offered him, *provided it is cheap.*

No manufacturer worthy to follow the business, should ever object for one moment, to the people being thoroughly educated in this behalf. The more the farmer knows about his business, the better crops he will raise, and the greater will be the demand for these manures. England may be taken as an example. There it is no uncommon thing for a single factory to produce as much as 100,000 tons per annum, and that too, where land rents at from £1 to £3 sterling per acre, and where farm stock is abundant.

Your paper was established to be the exponent of the farmers' interests in North Carolina. You then are especially qualified to find out what, in this direction, is most worthy the encouragement of your people. As far as we are concerned [and I presume no less would be proffered by any Company laying the least claim to respectability] nothing would give us greater pleasure than to receive a visit from you, when we would acquaint you fully with our methods of operation, the reasons upon which they are founded, the safeguards we have adopted to insure the most trustworthy results, and what has been actually accomplished in the field.

While we do not charge that any of the chemists who have applied their valuation tables to these articles are actuated by any motive to destroy the business, still that this is the manifest tendency of such arbitrary action on their part, the examples given in the foregoing most amply attest. Failures in expected results are not seldom directly attributable to the season, and sometimes, it is believed, to indifferent management on the part of the farmer himself. Hence, it is unjust in the extreme to lay everything that goes wrong upon the fertilizer used, and certainly not less so, to denounce indiscriminately everybody in the trade as swindlers because it should be found that a single individual in it has been guilty of unfair dealing. Looked at aright, there can be no conflict of interest between the producer and consumer. The consumer must prosper or the producer will languish. Interest, then, aside from any other consideration, will prompt him to do all in his power to promote that prosperity.

JOHN OTT, Secretary
Southern Fertilizing Company.

DRILLING WHEAT vs. BROADCAST SOWING.

In a late number of your paper I saw a report of experiments in wheat growing, reported by the Agricultural College of Pennsylvania. All such reports I regard as very valuable to the observing farmer. If of any value, I would wish to offer my experience in wheat growing for ten years past—five years broadcast and five with the drill. The wheat sown was the Swamp, or bearded Mediterranean. Location, Ohio river bottom. Soil, sandy loam. Number of acres experimented on, 100.

Yield from 1¾ bushels seed per acre, sown broadcast and harrowed twice:

1864, 33 acres, 14¼ bushels per acre.
1865, 35 acres, 15 bushels per acre.
1866, 50 acres, 16¼ bushels per acre.
1867, 38 acres, 17½ bushels per acre.
1868, 40 acres, 18 bushels per acre.

Yield from 1¾ bushels seed per acre, sown with drill:

1869, 32 acres, 21½ bushels per acre.
1870, 30 acres, 20 bushels per acre.
1871, 33 acres, 26½ bushels per acre.
1872, 42 acres, 24½ bushels per acre.
1873, 25 acres, 22 bushels per acre.

Sown with drill eight inches apart and two inches deep. Land in 1871–72 broke twice—all harrowed before drilling, and all for ten years sown in September, and all but twice before Sept. 25.

The above shows an average of something over six bushels per acre in favor of the drill, or about $8 per acre. I am firmly persuaded that, were two bushels sown per acre, the average would still be better, and would pay. I am going to try two bushels this year on fifteen acres, along with one and a third bushels on thirty-two acres, and mark the result. If farmers could break their land twice, I am sure it would pay; indeed, I think the better order land can be placed in, the better it will pay. American farmers desire to farm more land than they can till well, because it is fashionable and looks grand. It is to be hoped that as we grow older we will grow wiser. I would like to have some of your intelligent readers give their experience in wheat growing.—Frank Lee, *in Rural World. Trimble county, Ky.*

(For the Southern Planter and Farmer.)

DOMESTIC INDUSTRY.

This article is addressed to the great middle class of white people—poor in pocket and rich in honesty of purpose—and not afflicted with too much pride and laziness. The truth is necessary at all times, but especially so at the present. We are in a transitive con-

dition, and it becomes every head of a family to think soberly which way he is going, upwards to prosperity or downward to adversity, and to bring every member of his family up to his own standard of thinking. When all work together there is progress, when only a portion labor to advantage, and the balance produce nothing, or it may be, spend more than is made, the family is progressing backwards, as thousands are doing. In cities and towns the irrepressible customs of society must keep up appearances regardless of the ability to sustain the outlay of money. Finery in dress, costly furniture, showy equipages, well furnished tables and numerous servants must be kept up, for "what will people say" is deemed of more importance than the real question "what can I afford."

To this rule in some respects the Jews constitute a noble exception; they bring up every member of their families from childhood in their business—girls and boys—earning their own support while learning practically to carry on their affairs when arriving at maturity. As the result of this household industry, Jews are not inmates of Alms Houses and State Prisons, (and seldom fail in business).

The change of times and circumstances should produce a corresponding change in the habits of the family. Instead of having servants at the beck and call of each member of the family, the work should be done by themselves, which is the best form of independence. In Europe, and in the Northern States, and in the Valley of Virginia, a family with a moderate income can live comfortably, whilst in this section a different state of things continue, somewhat after the old order of affairs. Before the war superfluous expenses and high living ate up negro families and farms by the wholesale, and consequently there were continual changes from affluence to poverty, the same property seldom remaining in the family two generations.

At the present time necessity calls for far more economy and industry than in *ante-bellum* times.

The land now produces shorter crops, prices are ranging lower, labor becomes scarce and being more worthless costs more to the employer. Competition from the West is becoming greater from year to year, and without a change matters will go on from bad to worse, till bankruptcy is certain. The farmers' great reliance must be in his own family. Every member large enough to work should go at it. By the use of the best stoves, washing machines, sewing machines, fruit dryers and every other labor saving machine, much hiring can be dispensed with. A well managed dairy and apiary would pay as much or more than the cultivation of the soil. By this plan the *res augusta domi*, can be removed. Suppose the same plan adopted in other countries were pursued here. Twenty per cent. in hires of household servants could be saved to add to instead of to take from the small income of the farm. In the West each emigrant is calculated to add $400 per annum for his own labor, and half as much for his wife. By the saving and accumulations, each year

would add to the comforts, conveniences and happiness of the family.

It may be said in reply, that families have not been raised to do their own work and cannot do it. It is well known that persons acquire habits in youth that become natural, and therefore, having been reared under different circumstances, they cannot work. This is true to a certain extent. A wagon wheel without grease runs hard, but hard or easy go it must, and so must families after some sort or other. If they will not work when they have the means, they must learn through the hardships of poverty. "Whom the Devil drives must go along," and so it is necessity knows no law but its own. People must move on one way or the other, and before the habits are fixed and old age and poverty come in, a little property will not be considered uncomfortable to possess.

In another view, the importance of physical labor is very manifest. Good health is certainly secured by industrious habits, and the mind and body being employed in out-door labor much of the time, a large amount of money can be annually saved from doctors and druggists. Idle people have more nervous diseases or suppose they have, which is equivalent, so far as medical advice is concerned, and besides the expense attendant, the old adage says "an idle hand is the Devil's workshop."

Suppose the old state of affairs continue. How many people can afford to bring up their families in idleness, extravagance and luxury. By unusual energy and good luck, or by borrowing money, a family may appear to be getting along very well, but sooner or later the facts, hard and stern, come out. A sheriff's sale before or after the death of the head of the family, reveals the fictitious prosperity ended, and the beginning of misery commences. Apparent riches have fled away, and poverty follows an unwelcomed and too often a permanent life long resident of many a household. This is just what might have been expected without any gift of prophecy or of unusual sagacity. One word to the wise is sufficient, but pretentious vanity must be laid aside, and persevering industry followed without regard to the opinions of people, who think the gaudy butterfly of more value than the working *bee*. C. R. C.

[For the Southern Planter and Farmer.]

TUCKAHOE FARMERS CLUB.

HENRICO CO., VA.

At our June meeting the Club was most hospitably and elegantly entertained by Judge J. F. Lay of our county.

After the transaction of much business, the essay on the use of the black or fallow pea as a fertilizer and cleanser, was called up; but owing to the absence (caused by sickness) of Dr. Beattie, who was in the possession of that paper, its reading and consideration had to be continued until our next meeting. Judge Lay then by

resolution called for the views verbally of the members of that committee present, whereupon Dr. Perkins and your reporter of that committee, and Mr. Warren of the Club, united in the opinion of the great practical benefit to the land to be derived from the use of this pea, affording as it does to some extent the like great fertilizing qualities of our clover. Its use we urgently advocated as an economical, safe and durable improver The time of seeding being as early in June as practicable. If upon the wheat field, remove the shocks, or place them in line, quickly after harvest. Sow the pea upon the stubble at about one bushel to the acre, then with the single plows turn them under, say three inches. Allow the vine to grow until as late in September as you can conveniently. Then with your large double plow turn the whole under from 8 to 10 inches and follow with an application of 30 or 40 bushels of shell lime to the acre, harrowing the same in. The result will be a good wheat or winter oat crop, and fine stand of clover if the same be seeded, as we think should be.

But the subject not being concluded was continued until our next meeting.

The "Corn Crop" being under consideration, Dr. Pollard read to the Club a lengthy and very valuable article on this subject written by himself in 1872, in which this whole subject was carefully treated, and can be found in your Journal of that year.

Yours, &c.,

J. A. LYNHAM, Reporter.

[For the Southern Planter and Farmer.]

COTTON.

Thinking my little experiments might do some one good, and believing it to be the duty of every farmer when he realizes a benefit from his experiment to give it to the agricultural world, or for the benefit of those who are engaged in the culture of some crop, I send the following for publication.

In January I broke up my cotton land broad cast; in February I laid off my cotton rows four feet wide with a small scooter; 1st March I run a large twelve inch shovel in the same furrow, after two or three heavy rains, which settled the ground and washed the small particles of soil in the deep furrow. My reasons for using the deep furrow was to let the action of the sun warm up the deep furrows and the atmosphere to have free access deep in the soil. 15th March I run a small subsoil plow ten inches deep in the same furrow, and then I put ten two horse wagon loads of good stable manure, which was all made under shelter, to the acre, and run two furrows on each side, one with a good turn plow, followed in the same with a subsoil plow, ten inches deep, making three deep subsoil furrows to the row. In a few days I finished bedding up with turn plow. 10th April, I commenced planting with cotton planter, very common seed; got a very poor stand; had to replant 25th April when cotton was up large enough to work. I run around with a large turn

plow running the bar very close. Four days after, followed with the hoe, thinning it to stand one stalk every twelve inches in the drill. Six days after I run in the same furrow with a fourteen inch scooter, four inches wide, fourteen inches long, close to the cotton, plowed out with seven inch shovel, very long. Cotton grew off finely. Eight days after I swept the cotton with twenty-four inch sweep, very shallow; hoed three times; plowed six times in all; made 1,610 lbs. cotton in the seed per acre. This would seem to be a small yield, but taking the land into consideration the yield was large. This was the third crop on the land after being cleared. First year made with 200 lbs. guano per acre, 340 lbs. seed cotton per acre. Second year, same guano made 540 per acre. The land is low, flat pine land, and very poor; top soil very fine and close, with a good clay subsoil eight to ten inches. My yield of cotton would have been much better if I had planted a good improved seed, such as Dickson's Prolific. I am satisfied the yield would have been 2,000 lbs. per acre. The worms eat up the cotton 27th August. So you see that it was a good crop any way. My reason for so deep a preparation and deep plowing at first was to see if I could not prevent the rust, which is about as bad in our country as the army worm. I did not have a rusted stalk on my farm, while my neighbors had plenty of rust in their cotton in same character of soil. My cotton seemed to stand the changes of the summer better than I ever saw any before; neither wet nor dry weather seemed to affect the growth. So you see what can be done on poor land by manuring and deep plowing. W.

Columbia, Ala., June 1, 1874.

[For the Southern Planter and Farmer.]

MONTE ROSA, June 13th, 1874,
Adjoining Warrenton, Va.

I have read with much interest the *prize* essay of your associate editor, published in your number for the present month. Many of its suggestions are both valuable and judicious; but "the amount of labor necessary on a farm of this kind," (200 acres) is most vaguely and unsatisfactorily stated.

If I understand the essay, the farmer "on a farm of this kind" is to have 100 acres, (one half), in grain, annually, besides 10 acres in lot, garden, orchard and appurtenant yards and out-houses, &c., forty acres in clover, and 50 acres in timber and permanent pasture, besides a considerable stock; and the land is to be thoroughly tilled, 12 inches deep, and frequently harrowed, (and why not rolled also) and the stock is to be kept "in a thriving condition," as there is no "surer index of bad farming than lean and hungry stock."

Now, this is a partial only, and yet a serious exhibit of the necessary operation "on a farm of this kind;" and the requisite labor to compass it, is a matter of no little solicitude. Upon looking into the essay for information on this subject, I am gratified to find that my

anxiety was groundless, as I am informed that "for the *mere cultivation and saving* of crops, the other work, including harvesting, being done either by the job or day labor, one man and a boy large enough to plow, (the owner himself lending a helping hand) will be found sufficient." Now, this information is very much of a character with the reply of the wag, who, when asked the size of some article of which he was speaking, replied, "that it was very much the size of a piece of chalk." True, the 10 acre lot including garden, orchard, &c.—the taking care of sheep, hogs, cattle, colts—the keeping up of fencing, &c., can be cared for "*by the job or day labor.*" And no doubt, it is the best way to keep everything in "thriving condition," it being well known throughout the country that those who work by the "job or day" are altogether our most reliable labor! I have omitted to state "that this one man and a boy large enough to plow" are allowed the help of "three first class animals," two of them "good, large brood mares" whose foals would be worth, if mules, at least $50 each, at five months old," and that we are told "this will not at all interfere with their general usefulness on the farm!" But they are not even allowed the co-operative force of a yoke of oxen! Now, how such an amount of work as the essay requires, can be done by a force which, it seems to me, is so inadequate, I cannot understand.

My farm, on which I reside, and manage myself, consists of 225 acres, assessed for taxation at $90 an acre, and has about one half of it, annually, in cultivation. I require five good horses, besides my saddle horse and a yoke of good oxen to do the work of the farm. Nothing less will do. Indeed, my saddle horse has sometimes to give us a lift, and it very frequently happens that an additional horse would be a material advantage. I require five permanent men hands, besides work "by the job or day." I have 10 acres appurtenant to my residence, in a small lawn, a garden of nearly two acres, a part of which is in peas, &c., grapes and the smaller fruits, a small peach and two apple orchards. Now it requires a man with occasional help from the house gang, and a man at times by the day to care for this interest properly. The four farm hands have the care of the stock divided out among them, so as to have them attended to by or before 6 o'clock, when they go to breakfast; after which they go to the work severally assigned them. At present I have three white men and one black man by the year, and another by the month, on the farm, and they are employed, to-day, the 15th, as follows: Two plowing in my corn field of 35 acres; two about finishing planting the black North Carolina pea, with Smith & Co.'s remarkable planter, in my truck patch of five acres done, cleaning my oat field, and its fencing and ditching of scattering ox-eye and bushes, who, in an hour, will be joined by the two hands engaged in planting peas, and all three of whom will, to-morrow, be in the corn field, dropping compost around the corn and thinning it with the hoe. Now this job, to be finished with all dispatch, I move into a clover field of 35 acres with two mowers and all my hands, and all I can

hire "by the day." But I am tired and must stop—fatigued even at the mere contemplation of the quantity of work before me.

Yours truly,

WM. SMITH.

We are a little disappointed that Gov. Smith broke down so soon, though we could hardly expect anything else. We fear very much that at least two of the men he employs belong to that class to whom the mere *contemplation of labor is fatiguing.* We have always considered it a very great misfortune that the farmers of Virginia—many of them thoroughly practical men—should have grown up under circumstances so little calculated to give them accurate ideas of what amount of labor a man ought to perform in a day. Under the system that prevailed *ante bellum*, the question was not "How shall I be able to do the amount of work on the farm with the force at my command? But, How shall I possibly employ all my force on this farm? Consequently, there was no effort at economizing labor, and everything was done in the most roundabout way possible in order to keep the hands employed at all. It is true there are honorable exceptions to this rule. The late Richard Sampson, though unknown to us personally, was, from what we can gather. one of the most economical men in this respect, and much of his success in life is to be attributed to the fact that, by early experience, he knew what a man could do, and he required all his hands to do their duty.

But to return to the subject. Some allowance must be made for the fact that Gov. Smith lives in a section where stiff clay soil prevails, while the ideal farm under consideration has a light grey soil, easily worked. We believe that we do not over-estimate when we say the amount of team and hands necessary to the successful management of the one would be nearly double that of the other. The question as to the ability of the team to perform the labor can only be settled by experiment, but in Kentucky, where the land is by no means light, we knew a man with four mares, three of which had colts, to prepare the land and seed over forty acres in wheat, and the same amount in corn, and some thirty acres of oats. Nor was the work done in a slovenly manner. The corn received four good plowings, and was thinned and hoed out and cut up and shucked in good time. The only force upon the place was the owner and two sons, the oldest 16 years, and no labor hired except in harvest. We, however, did not profess to give the amount of labor accurately, but only approximately. If extra crops are cultivated, if a large garden

and a great deal of fine fruit, &c., is to be cultivated and cared for, extra labor would, of course, be required, but for the mere cultivation of the crops and general care of the farm, we think that the estimate is not very far from correct.—Asso. Ed.

[For the Southern Planter and Farmer.]

Lyon's Falls, Lewis County, N. Y., June 8, 1874.

Messrs Editors,—Who is to blame for overdoing the business of cultivating the soil? when not only all of the Dr. Franklins, with the power of all the presses, with the printers, publishers and politicians' art, flattering us and urging us on. There is still another higher and holier influence. It is the love of design in nature, no part of which is more beautiful than that of agricultural science. *The Great First Cause* has not only created the beauties of the outer world in such perfection so far beyond human powers of description, that we may say they are far beyond human comprehension; but He has created corresponding beauties in the human mind, and left us free to cultivate and harmonize them, until we arrive at the perfection due from our feeble natures.

The object of a love of design, so kindly given us, is that we may have a desire to trace the productions of the soil from the seed to their maturity; that we may know how to prepare the soil, protect the plant and prepare for an increase in its reproduction beyond what nature has provided.

One of the beautiful designs in nature is, every product of the soil requires roots, stems, leaves, &c., that are designed, after the maturity of the seed, to be utilized only in reproduction, which, if properly applied to the soil by art, will, with the help of chemical action, not only prepare it for reproducing its own species four fold, but prepare it for other products through another design in nature. She has created all the fertilizing gases heavier than the other parts of the atmosphere, which causes them to move nearer the surface, that they may be more readily absorbed by the soil, when it is prepared to attract them, and the leaves, after the soil has sent them into the atmosphere to assist in getting a living for themselves and to lay up something for the comfort of the parent soil through the winter, after the lord of the soil has been supplied with his part, the seed.

Here we may raise a question against the popular theory that we "must apply to the soil directly every ingredient that on accurate analysis of the crop we wish to raise produces." This leaves nothing for the atmosphere or chemistry to do, or the falling of the rain through the atmosphere in minute drops, which is another beauty in the designs of nature.

It takes the exhalations of animals and of the soil, which might otherwise become poisonous malaria back to the earth, for which pure rain water has a strong affinity, and gives it to the roots and

leaves of plants, which manifest their thankfulness by reaching higher for more.

If we should procure all the elements of a wheat crop, and apply them in the exact quantity and proportion required, there is no doubt with a favorable season, we should have a good crop, but where would be the profit? If we go thus far in agricultural science, we must go a little further and summons to our aid agricultural chemistry or taste, not the Pierian spring. One of the beauties of design is the craving of the soil for nothing but the waste of its own production. It asks only for that which cannot be otherwise utilized. Give it plenty of that, and in due time, by the aid of chemical action, it will be prepared to absorb from the lower strata of the atmosphere in contact, sufficient to prepare it for the production of plants that will reach above the surface and arrest the passing fertilizers required to mature the crop.

Here we see more design. The better we prepare the soil, and the more vigorous the growth upon it, the more will be taken from the passing atmosphere. This is in accordance with a universal law of accumulation. Where the greatest accumulation is, there is the strongest tendency to accumulate. There is no exception to this law It is as true in all departments of nature as in astronomy, where, were it not for the laws of compensation, designed expressly to prevent, the larger plants would soon swallow up the smaller. Our Saviour's parable of the talents was well calculated to illustrate this law. Our indolent farmers, who do nothing to give strength to their soil, that it may help itself from the atmosphere, lose the benefit of the passing breezes, which come, perhaps, loaded with fertilizing gases, finding nothing with power enough to take them, collect the exhalations of the debilitated soil and waft them away to a more powerful attraction. Thus, "to him that hath shall be given, but to him that hath not shall be taken away, even that which he hath."

The fact that the cultivation of the soil is overdone, discovers the shadow of another design to stimulate us in the search after a more perfect knowledge in the science of agriculture, that we may recompense a partial evil with a universal good.

D. S. Howard.

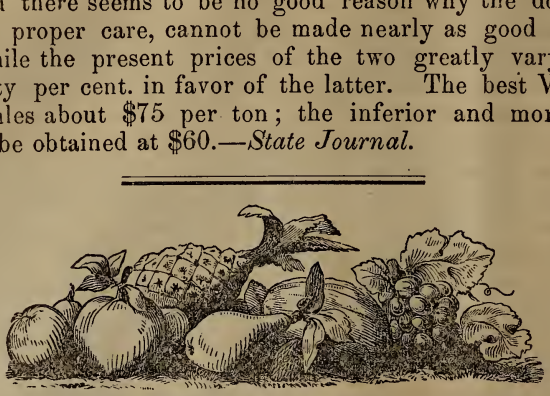
VIRGINIA SUMAC.

Southern sumac has for many years past come into competition with the foreign article, but it is mostly gathered in its primitive state, and very little if any attention is paid to its cultivation.

In Virginia, sumac grows wild, and no attempt has ever been made to cultivate it, as in Sicily. Doubtless it would be found equally as good, and possibly surpass in valuable qualities the imported article, were the same pains taken to develop its excellencies. In time, the Virginia people may learn to cultivate this natural product to their own advantage; now they look upon it as something only to be attended to when they have nothing else to do.

Two thousand pounds of ground sumac to an acre is an average

crop. The climate of Virginia, in many portions, resembles that of Sicily, and there seems to be no good reason why the domestic article, with proper care, cannot be made nearly as good as the imported, while the present prices of the two greatly vary, and are about thirty per cent. in favor of the latter. The best Virginia at present rules about $75 per ton; the inferior and more common kinds can be obtained at $60.—*State Journal.*



Horticultural Department.

[For the Southern Planter and Farmer.]

CLOSING GULLIES.

Messrs. Editors,—How few of our most observant and intelligent farmers are there who can successfully contend with these blotches on their farms.

In their attempts to close them, even where they expend much pains, they entirely lose sight of the main difficulty to be contended with, viz: the *back action* of the water, as it falls over the obstructions put in its way, resulting very soon in its being undermined and washed away, and the injury thereby very greatly increased. Some months ago, in writing for one of our local papers, I expressed my views, in the paragraph enclosed, but it elicited no attention, but had it been a proposition to give a $50 saddle to the youth who would most frequently *job* a ring off a pole, at our county fair, in a tournament, so-called, would have been hailed as something worth striving for.

"Speaking of *gullies*, in my last, permit me to say, that the face of our country is everywhere disfigured by these scars, blemishes and running *sores*. Some of them are so deep and formidable as to endanger travel on our public roads, and to impair most seriously the value of many farms, being of such character as to prevent cultivation. Would not our County and State Fairs act wisely in offering liberal premiums to the person who will successfully and most economically institute a plan to heal them? It would be much more sensible than wasting money on hurdle races and much other nonesense they give premiums for. The eye is offended with galled places on some of our best farms. Let the farmer use the three-horse plow on such places, with a good subsoil in same furrow behind it, plowing under straw, leaves, corn-stalks, shavings, pine tags or

any rubbish, and a sprinkle of guano, with grass seed, and my word for it, the gall will bloom as any other part of the field. I differ, in toto, with the Club in discountenancing the subsoil plow. Had such a plow been used freely in the past, no such gullies as mar many of our farms would be seen. The writer, in no boasting or vaunting spirit, will superintend the closing of any gully, of any depth, at any point within the limits of the county, where the party desiring it will supply the material and labor necessary, and any three of the best farmers of our county, may, at the end of six or twelve months, pass judgment upon it, and I am satisfied will not say the cost will overrun the profit." A VALLEY FARMER.

[For the Southern Planter and Farmer.]

COMPOSTS AND VIRGINIA LAWYERS.

Virginia has never wanted some enthusiast on the manure question. General C., well known as a zealous agriculturist, improver and warm advocate of all economical fertilizers, required his servants to pour the water they used in washing their ash cakes on a dung pile he had attached to every cabin; and on one occasion, still further to impress them with the importance of minute saving after paring his finger nails over a newspaper, directed his servant to take them to add to the manure pen. * * * * * * * * *

A young huntsman remarked, what an old deer, he has no upper teeth. Yes, said Dick, that reminds me of a Virginia lawyer who bought a farm, and going to a sale, was advised by a friend to buy some oxen, saying they were very good, to which the lawyer replied, yes, but do you not see they have split feet. J. R. R.

HOW LARGE PEARS ARE RAISED.

Mr. G. F. B. Leighton, of Norfolk, Va., has produced some of the largest pears ever grown in this country. In a late interview with this gentleman he told us that he has now in bearing six thousand trees, the most of them being Bartletts, Louise Bonne, de Jersey and Seckel. The soil upon which they are grown are a stiff, blue clay, overlaying sand to the depth of three or four feet. In planting out pear trees, Mr. Leighton digs a hole in the clay some two or three feet deep, and sufficiently wide for the roots to ramify, and then bores a hole with a post auger through to the sand. This auger-hole and a small portion of the large excavation is filled with sticks (cut brush); this forms a complete underdrain.

A soil to set the roots of the trees in, is composed of tide-washed muck, which is brackish, shell lime and the surface or alluvial earth. The trees grow with wondrous rapidity, and produce such fruit as astonished fruit-growers everywhere. First premiums have been taken far and near at the largest horticultural shows. Duchess d'Angouleme were shipped to New York last season from Mr. Leighton's orchard weighing over thirty ounces, or about two pounds,

forty-eight pears on the average making a bushel. This fruit brought twelve dollars per bushel, just twenty-five cents a piece for the pears. They retailed at fifty cents each upon Broadway.

Mr. Leighton much prefers the standard to dwarfs, and plants his trees twenty-five feet apart each way. In a portion of his orchard he has dwarfs between the rows, but does not allow them to remain long enough to interfere with the full development of the standards.

Decomposed bone is used to revive the standards when they appear to be falling into a decline, and works to perfection. The bones are broken up into small pieces, and put into boxes or barrels, with alternate layers of wood ashes, and kept moist until they are thoroughly decomposed.—*Horticulturist.*

[For the Southern Planter and Farmer.]

PRUNING FRUIT TREES.

Messrs. Editors,—While I do not profess to know much about fruit growing, I do think I know something about the philosophy of nature in general; and I have observed some practices quite prevalent with reference to pruning fruit trees, which I think contrary to the laws of nature, and highly detrimental to the trees. We all like to see a pretty tree, and there is nothing about the farm much prettier than a well-formed, thrifty-looking apple tree. But to have such a tree we must fulfill certain conditions. It must have a suitable amount of space, in a good soil, and then it must be trained while young, and *brought up*, as it were, to the requisite shape. In planting an orchard, care should be observed to give sufficient space. Our fathers and grand fathers committed errors in this particular. The trees in nearly all the old orchards were planted too near together, and when they grew they became crowded, and the owners began to cut away branches to give them room. This cutting embraced limbs two to four inches thick, so that when the pruning was completed, the trees had space enough and looked better. But wherever a limb of any tolerable size had been cut off, there was a seed of death planted which invariably produced its fruit. As far as a limb goes into the body of a tree it dies when cut off; so that, if it happens to be one of those branches that shot forth when the tree itself was a mere switch, then we have a plug of dead wood extending from the surface to the centre of the tree, and we may suppose it embraces nearly half the substance of the tree at that point. True, living wood is laid on in the course of a few years, and may form a sheet entirely over the stump, and would lead an unreflecting mind to the conclusion that all is right now, and the tree will receive no further injury from it. But not so; that plug of dead wood lies there to the injury of the tree as long as the tree itself lives; and if several such limbs are cut away, the effect is distinctly marked in the appearance of the tree. The whole appearance is that of an unhealthy cast. Vigorous watersprouts may shoot forth; but the original tree looks sickly; it does not grow,

and its fruit is dwarfed and irregular in size. And thus it continues to degenerate from year to year, until finally it dies. It dies generally a limb at a time; and, in some instances, a single limb will be found living and bearing fruit. By this time, however, the body of the tree is dead—at least, two-thirds of it—and while this single limb grows and looks healthy, at an unexpected time a heavy crop of fruit or a strong wind takes it off, and leaves nothing but the stump of this once pretty tree. I have twenty just such trees as I have described, and many that were here seven years ago have entirely passed away, and these will inevitably follow, until not one will be left. The error was in planting so close one to another that they had to be cut after the branches had grown too large to admit of it. That they could not prosper in so crowded a state was manifest; but a better remedy would have been to cut away every other tree entire, so as to leave uninjured the remainder. To avoid injury from pruning, it must be done when the branches are small. Commence in the nursery, and trim so as to cause the tree to take the form you wish it to have when it becomes a fruit bearer in the orchard, and carefully watch it and cut off all branches that would tend to change such form. In this way the cutting is all done when the branches are small, the tree grows up to the form you wish and has a healthy trunk, and, by consequence, healthy branches, because it is not encumbered with dead wood—the result of cutting off large limbs. Most men acknowledge the correctness of this theory, but not one orchard in fifty gives evidence of its practice. The advantage is at least three-fold; the orchard looks better; the fruit is better, and the trees live twice as long. Then if it don't pay to attend to it, I should scarcely think it pays to have an orchard at all.

S. M. SHEPHERD.

Greenwood Depot, 7th June, 1874.

GATHERING OF RIPE FRUIT.

Josiah Hoopes, who is good authority on every subject connected with fruit gathering, says:

"In regard to the gathering of ripe fruits of different kinds, no fruit should be taken from the tree or plant during a damp time, and especially when the dew is plentiful in early morning. Never be so hurried as to find cause for the excuse, I had no time to hand-pick my fruit, and, consequently, was forced to shake them off; for such is very poor policy. Fruit so gathered will almost inevitably decay from the effects of bruises. Each specimen should be taken from the tree one by one, handled as if they were so many eggs. The slightest bruise or even abrasion of the skin is the sure forerunner of a dark spot, which will eventually change into some form of rot. The spores of seed of *fungi* are always ready to assist in the work of dissolution, and the slightest scratch gives them a foothold for their destructive work. Scarcely any variety of the largest

fruits color or ripen so well if left perfect themselves on the tree, and especially is this true in respect to pears. Summer varieties, as they approach maturity, loosen their hold somewhat on the limb, and by gently raising the fruit they will easily detach themselves at the proper period. This is an excellent test, and may always be relied on. To color up fruit nicely, all that is necessary will be to spread a blanket on the floor of a cool room, and then thinly and evenly place the fruit on the floor. A second blanket must be spread over them, and in a short time the effect of the treatment will be apparent in the most golden-colored Bartlets, and rich, ruddy-looking Seckels imaginable. Pears perfected in this manner rarely have the mealiness of their naturally ripened companions; nor do they prematurely decay at the core as when left on the tree. Peaches are too frequently gathered before attaining full size, and when this is the case we need not expect full flavor. They must obtain this requisite before gathering, although it is not necessary to delay picking until very mellow. As a general rule, all fruits are gathered too early; and, as high color is not a sign of maturity, many experienced fruit growers are frequently misled. Never pick strawberries because they are red, nor blackberries solely on account of their dark appearance. Each should remain on the plant for some time thereafter. The Albany seedling strawberry changes to a deep crimson hue, and gains continually in size after its first coloring process. It is then soft and excellent eating. And so with blackberries in like manner, many complaining of their extreme tartness when the fault was in gathering imperfect fruit. The Lawton or New Rochelle variety, in particular, is delicious eating, if allowed to remain on the plant until soft, when the slightest touch will sever its hold. Strawberries picked with the calyx (or hull) adhering, will always carry better, and be less liable to decay than if carelessly pulled off without this appendage. The foregoing remarks in relation to the proper time for gathering fruits are equally applicable to the grape. These generally color long before they mature; and thus many a novice in fruit culture frequently forms an unjust opinion of his varieties simply from testing unripe specimens. Grapes should always be severed from the vine with strong scissors or trimming shears, and never twisted or broken off.

"The nice appearance of fruits of all kinds, in their boxes or baskets, in the markets, will always command a better price, than when slovenly 'done up.'"

GRAPES IN CALIFORNIA.

From the reports to local papers of persons qualified to judge, the grape crop of 1874 promises to be both heavy and of good quality. In Napa county, the yield is estimated to reach probably 4,025 tons, or 537,000 gallons of wine. Sonoma county is estimated to yield from 10 to 25 per cent. more than last year.

Stock Department.

[For the Southern Planter and Farmer.]

SHEEP NETS.

Messrs. Editors.—I intended long before now to have sent you a few lines regarding these valuable adjuncts to sheep and mixed farming, but have been prevented by other business. To begin with, I would remark that it seems to me that sheep raising should form a much larger proportion in the farming operations of Virginia than it at present does. Much of the land would require years of labor as well as manure to make it fit to bring profitable crops, but which are, in their present condition, fit for raising sheep on, which sheep would be continually improving these lands, and gradually bringing them into that state to fit them for profitable farming without the outlay of cash for wages, &c.

Sheep, as a rule, realize a handsome profit on the capital invested in them, but sheep raising can, I think, be made even more profitable by the use of sheep nets. Many of your readers are, I have no doubt, aware that these nets are used in Great Britain for folding sheep on turnips in the winter, and although I find that such is not practicable in many of the Northern States of the Union on account of the severity of their winters, I do not see why the same practice might not be introduced at least in the Southern counties of Virginia. The great value of such practice is evident when you consider the labor of harvesting the roots is saved, the sheep being folded on a portion which are eaten off, and the ground thoroughly manured, thereby gaining a second advantage—saving the hauling of manure. The nets are then shifted to the next lot, and so on till the whole crop is eaten, and the whole field well manured. It is true root growing, as yet, is not carried on in Virginia to any great extent, but it may be considerably increased with advantage; but the use of nets need not necessarily be confined to roots. Sow corn for fodder, rye or any other suitable crops to come in at different seasons, and net the sheep on these. It will answer the same purpose Again, where is the farm which has not its bare spots, which seem to defy the farmer to get a catch of anything on them by any ordinary means. Well, only net a few sheep on these eye-sores, and carry feed to them for a short time, and they will completely trample and manure it, and put in a condition to bring grass; and again, so long as the laws do not protect the owners of sheep from the losses caused by the ravages of the useless curs which infest the country, I am firmly persuaded that by driving the sheep into a net fold at night, the dogs would not attempt to go inside the nets, and they would be safe for the night.

Every practical farmer who has used these nets cannot fail to ap-

preciate their value, as they at once, without any loss of time, enable him to turn to account any spot which may not be fenced in, and, therefore, comparatively useless. Any other fence, however slight and temporary, would probably be too costly, and often too slow an operation getting the materials together, whereas, these nets are always handy, and (having stakes provided) a man, after some practice, will set as many nets in a day as would enclose several acres, and they are so easily removed and put away till wanted again. They are made of strong twine, with meshes seven inches square, and have a small rope run along the top and bottom to fasten them to the stakes with. Each net, when set, spreads forty yards in length and four feet in height, and can be had either tarred or not. The stakes can be made of old fence rails, young oaks, or any other suitable material, set in the ground about a foot with a crowbar, three yards apart. Care should be taken, especially with old nets, not to stretch them too tight to allow for shrinking in wet weather, as the ropes they are set on, if too tight, would be apt to burst, the line of stakes is best to be straight—that is, each portion netted should be a parelellogram and not circled. When taken down the nets should be carefully put away, and should be hung up open, not in bundles, as the mice are apt to make nests in them and cut them. I am also using them in my garden to train peas and tomatoes, &c.

WM. ADAMSON.

Nokesville, Va.

[We are glad to know that Mr. Adamson is negotiating for a large importation of the above nets, which he proposes to sell cheaper than can be bought elsewhere—he having superior advantages for purchasing at wholesale prices in Scotland. In our next number he will state what they can be had at.]

[For the Southern Planter and Farmer.]

THE BEST BREED OF CATTLE FOR VIRGINIA.

Messrs. Editors,—Under the heading "The Best Breed of Cattle for Virginia," in your June number, page 291, "C." gives his judgment in favor of the "Devons." If the farmer lives in a grazing section, and his object is the raising of work-oxen, I fully concur with "C," that he cannot do better than improving his herd with the "Devon" blood. They are a beautiful race, and excel all others in quickness and docility; also, in sections where food is not abundant and rich, it would perhaps be judicious to select this breed for the raising of beef, in preference to the Shorthorns. But as for many years back the Devons have been bred for beef and work and not for the dairy, I hardly think that any farmer whose object is milk (or butter or cheese), would make a judicious selection in choosing this breed. For the butter-dairy, the infusion of Jersey (Alderney) blood into the native herds makes the gilt-edged, high-priced butter.

For the butter and cheese-dairy, or the sale of milk, none excel the beautiful "Ayrshires," which race has always been bred for their milking qualities only. The best authorities in the United States concur with me in this opinion. Allow me to mention a few. Youatt says: "For the dairy the North Devons must be acknowledged to be inferior to several other breeds. The milk is good, and yields more than the average proportion of cream and butter, but it is deficient in quantity." On page 367 of the "New American Farm Book," by Allen, it reads: "Their (the Ayrshires) history is of less consequence than the *fact* of their decided excellence for the pail. They must now be considered as an established *dairy* breed, capable of perpetuating, in their own blood alone, their excellent qualities. As such they are now bred, cherished and valued.

Charles L. Flint, the most *practical* and *experienced* authority in the United States (who never asserts anything but what he himself has practically tried), says, in his work on "Milch-Cows and Dairy-Farming," page 25: "We must conclude, then, that for dairy purposes, the Ayrshire cows deserve the first place. * * * She converts a large proportion of her food into milk. So remarkable is this fact, that all dairy farmers who have any experience on the point, agree in stating that *an Ayrshire cow generally gives a larger return of milk for the food consumed than a cow of any other breed.*"

I have dwelt thus at length upon this race for the reason that it is pre-eminently a dairy breed, surpassing all other pure breeds in the production of rich milk and butter on soils of medium fertility, and admirably adapted, in my opinion, to raise the character of our stock to a higher standard of excellence. The best milkers I have ever known in the course of my own observations were grade Ayrshires, larger in size than the pure bloods, but still sufficiently high grades to give certain signs of their origin.

Otherwise "C." gives some excellent advice to his brethren.

I fear that I have encroached already too much on the valuable space of the *Southern Planter and Farmer*, but I could not help putting in a word in favor of my favorites, the "*Ayrshires.*"

P.

Mechanicsville Farm, Va., June 11th, 1874.

John Hamilton, Colfax, Indiana, has recently purchased a small herd of Short-horns of William McClure, of Bath county, Ky., and of Samuel M. Pryor, of Bourbon county, a pair of $150 Berkshires. He also reports sales of twenty odd Berkshires to parties in various portions of the country.

E. Purdy, Olesville, Iowa, reports sales of Berkshires to various parties whose addresses are not given, at prices ranging from $10 to $20 each.

Poultry Department.

ESSAY ON POULTRY RAISING.

The following essay, written by our associate editor, received a premium and medal at the last State Fair:

The great and constantly increasing demand for fresh poultry and eggs in our cities and towns, together with the fact that they are articles of production or consumption in every household in the whole country, makes this a subject of great interest. Ever since the reports of the mythical establishment of De Sora near Paris created a lively sensation fifteen or twenty years ago, and the almost cotemporaneous introduction of the Asiatic breeds of fowls gave rise to what was popularly known as the "hen fever," the interest in poultry has been constantly and rapidly increasing. Numerous attempts have been made to raise and keep poultry on a large scale, which have almost uniformly resulted in failure and consequent loss. It is believed by the writer that the cause of these failures was attempting to keep too many fowls on a small space, disregarding the natural instincts of all gallinaceous birds to collect in small separate coteries, each having a separate leader, range and roosting place. An experience of fifteen years has taught the writer many facts that are worthy of the attention of those intending to engage in this interesting department of rural economy. The climate and soil of Virginia are peculiarly adapted to the rearing and keeping of poultry, and there is scarcely a farm east of the Blue Ridge where from three to four hundred laying hens may not be profitably kept, and 1,000 young fowls raised each year. About 50 adult hens, with three or four cocks, is the maximum number that should be kept together or permitted to roost in the same house. A plain building 10 by 16 feet, six feet high to the eaves, with a shingle roof and tight plank floor, will be sufficiently large to accommodate this number of fowls. It should be boarded vertically, and have a door (secured by a good lock) on the south side, and a smaller door or two in the eastern end for the use of the fowls. These last should be closed by a sliding door on the inside. The roosts should be of pine poles laid across the western end of the building, resting upon cletes nailed to the side twelve inches above the floor. They should be laid in notches and require no nailing. The nests should be on either side from the roosts to the eastern end, except where the door opens, and should consist of simple boxes six inches deep, sixteen inches square, and having no bottoms, being set upon the floor and upon a wide plank firmly nailed fourteen inches above the floor. A dozen nests will be enough for fifty hens, as it is not intended that they shall set in this house. The house should set upon posts twelve inches high. Such a house

as the above should have a lot containing not less than one-fourth of an acre of land attached, enclosed by a five-foot fence, and the house itself forming part of the southern fence. In this lot the fowls should have a constant supply of pure cool water and broken bone or oyster shells, and be regularly fed upon grain of some kind night and morning. A rough shed facing the south, made of slabs, should shelter the fowls from sudden storms, and under it should be provided a dust bath for the fowls, consisting of sand, lime and ashes, with an occasional addition of a few pounds of flour of sulphur. Fruit trees, such as plums and cherries, may be advantageously planted in this yard, but not so thickly as to make a dense shade. We have now accommodations for fifty fowls, and to increase the number we have just to multiply these fixtures.

Supposing four hundred hens are to be kept, this would require eight houses and two acres of land. Immediately adjoining and in the rear of these lots should be an enclosure from five to ten acres, the larger the better, to which the fowls from each pen should have daily access. This land should be partly in grass and partly in crops for the benefit of the fowls. If ten acres, then about two or three acres running the entire length immediately adjoining the fowl lots should be sown in grass. The remainder should be divided into strips running through the entire length, and sown in wheat, oats, buckwheat and rape. As these grains ripen they will be eaten down by the fowls, and they may then be plowed in. The buckwheat may be sown upon the same land occupied by the wheat and oats. The rape should be sown in September, and will furnish green food throughout the winter for all the fowls and yield a crop of seed in the spring.

If desired, this land may be planted in apple trees forty feet apart. A small granary should be provided for the grain used in feeding. We have now the necessary accommodations for our laying stock. For setters we require still another building, with a yard similar, though it need not be so large as those before described. The building for setters should be made as follows: Post eight feet long should be put into the ground eighteen inches. The building should be twenty-five feet long by ten feet wide. A broad plank should run around the bottom both inside and outside the post. The outside should then be boarded up vertically, and the roof put on as with any other building. The floor should be filled in with sand to the top of the board running round the bottom, and sand should also be filled between the outer and inside board. If it is intended to raise early chickens for market, the house should be made double all the way up on the north, east and west sides, and filled up with dry sawdust. For nests we use simple boxes without bottoms, closed on both side and back and half way up in front. They should be sixteen inches in the clear and twelve inches high. Over the top we tack laths, and the front we close with a movable board. These boxes we set upon the ground around the sides of the room, only having so many at any time as there are hens sitting. The nests

are made of soft grass and a liberal supply of tobacco dust or stems to keep off vermin. Whenever a hen shows a disposition to sit, we permit her to remain upon her own nest (removing all the sound eggs and giving a few spoiled ones) a day or two, and then, having previously prepared a box for her in the sitting house, we remove her, together with her eggs, after dark, and place her where it is intended she should hatch, closing the entrance to the nest so as to confine her. The next evening we open the nest and let her come off and feed her, not permitting her to leave the house, however; and if she returns voluntarily to the nest, we remove the rotten eggs and place those desired to be hatched under her. If she should not be easily reconciled to her new quarters, confine her to a coop until the sitting fever leaves her, and when slaughter-day comes let her be one of the victims. It is always better to set at least three hens at a time, so that if they fail to hatch a full clutch, one or two may take the chickens, and the other hatch out another clutch, or be returned at once to the laying yard. About twelve eggs in cold weather and fifteen when warm is the proper number to be placed under an ordinary hen, and they should never be over a week old when set. During incubation the hens should be released every other day and well fed and watered, but they should never be permitted to leave the house and yard set aside for this purpose; and care should be exercised that they return to their nest before the eggs are chilled. We prefer to commence sitting hens about the middle, or even earlier, in February. These early hatched chicks require more care, but they will amply repay it. The young males will go to market early in May, and bring from five to eight dollars per dozen, and the pullets, if well fed, will be laying before the summer is gone; and all through the fall, when older fowls are moulting and eggs are high, they will continue to make glad the heart of the owner. For early hatched chicks, we provide a run similar to the cold frames used by gardeners, except that we only have one sash instead of three in a nine foot bed. The remainder we cover with plain boards, battoned so as to keep out the rain. In each one of these runs we can raise fifty chicks. The hens are confined to coops just outside and communicating with the frame by a small hole large enough to admit the chickens, but too small for the hen. In the frame the chickens are regularly fed five or six times a day; and here they will bask in the warm sun when the cold wind outside would chill them to death. When the weather is warm, the hen is allowed some liberty, being tied to her coop with a soft string four feet long. When the chickens have attained considerable size, the hen is released entirely, whenever the weather is settled and warm enough. Chickens hatched later we usually carry to the garden, confining the mother by a string to a simple box coop, and allowing them to range among the plants, foraging for bugs, worms, seeds, &c. When chicks are first taken from the nest, they should be lightly touched on the head and under the wings with a mixture of the following ingredients: Mercurial ointment, 1 oz.; hog's lard,

1 oz.; flour sulphur, ½ oz.; crude petroleum, ½ oz. This is recommended by Mr. Halsted, of Rye, New York, one of the most experienced fanciers in the whole country, as a sure preventive of gapes, killing the tick which lays the eggs when the gape worms are hatched. Our own experience has tended to strengthen this opinion. It will at least destroy the vermin they are apt to bring with them from the nest, and will contribute to their growth. The food of young chickens during the first few days should be given often and in only small quantities, and should consist of stale crumbs of bread, hard boiled eggs, grits, &c. After they are a week old, coarsely ground corn, the grain being barely broken as for hominy, and screenings should form the staple article of diet. They should have access at all times to clean water in shallow vessels. Our preference is old iron vessels, the oxidation of which furnishes a good tonic.

When the chicks are large enough to take from their mother, they should be removed and the hen returned to the laying house. The young chicks should be divided into two parcels. The young males should be confined to a moderately small yard and fed highly, to prepare them for the table, and as soon as ready taken directly to market. The pullets should have more range, and if the houses are not too much crowded may be placed at once where they are intended to remain, when they commence laying. In the care of poultry, the greatest neatness should be observed. The houses, nests, coops, fences, and everything about the premises should be whitewashed twice a year, fall and spring, at least, and if every month during the summer so much the better. The floor of the roosting houses should be dusted over with sand, and at least once a week the roosts, nests, &c., should be removed and the whole thoroughly swept, and the litter conveyed to the manure house and a fresh supply of sand placed upon the floor. The nests should be saturated with coal oil occasionally and the nest boxes plunged into a kettle of hot whitewash. The best standard food for adult fowls is Indian corn fed whole, scattered widely over the ground that all may have access to it. In winter potatoes boiled, and while hot mashed up with wheat bran, the whole made into a stiff dough, hot water being added if necessary, and fed in long troughs while warm, makes an excellent morning meal. Meat should also be given in small quantities twice a week in winter. It should always be cooked. Chandler's greaves, sheep plucks, beef livers, &c., will suggest themselves as cheap articles to be used for this purpose. We like to use red pepper in considerable quantities, both for adult and young birds, and find it an excellent condiment; we give it finely ground and mixed with dough.

We now come to the question what kind of poultry to keep. Many persons yet contend that the common fowl of the country is equal if not superior to any of the improved breeds, an opinion which we cannot by any means endorse. There are several prominent characteristics which might very well serve for general classification of the varieties now before the public.

We have first, then, what are known among fanciers as the sitting and non-sitting breeds. The first includes the Asiatics, the Dorkings and the Games. The latter includes the Spanish, Leghorn, Hamburg and Crested fowls, and also the newer French fowls.

It is unnecessary here to enter into a description of the various breeds. For the general purposes of the farmer, where hens are kept for eggs, flesh and the rearing of young chickens, the varieties of which the Bramah is the type, are undoubtedly superior to any other. They are large, hardy, easily raised, good layers, good sitters, good mothers, and are excellent table fowls. But where the production of eggs for market is the prime object, there are other breeds much more economical to be kept than the Brahma. Either a Leghorn or Hamburg hen will lay more eggs by at least one-fourth than a Brahma; and when they can forage and are allowed sufficient range, two Hamburgs can be kept where one Brahma would hardly make a living. The Brahmas are a thrifty fowl when well fed, but they depend almost exclusively upon the owner for a living. The other varieties mentioned are active, restless, and will seek their living in the highways and woods. The Games, Dorkings, &c., possess no characteristics to recommend them over the three breeds mentioned, and will not compare with them in their own peculiarities. A Hamburg or Leghorn for eggs, and a Brahma or Cochin for general utility, cannot be excelled, if indeed they can be equalled, by any breed. It would be best, all things considered, to keep at least two varieties of chickens wherever as many as four hundred hens are kept. For this purpose a yard with a small house, say 8x10 feet, should be prepared for each breed so kept, and a cock and ten or a dozen hens confined here, and the eggs from these houses saved separate and used exclusively for sitting. By constantly renewing the stock, a fine lot of fowls may be raised each year without any material trouble. It is well known by those who have the care of fowls that the yield of eggs diminishes very rapidly as the hen advances in age.

Every year, about the first of March, when plucked poultry usually commands a high price, the size of the flock should be diminished by killing off the older hens, which will usually be very fat at this time, if they have been well fed during the winter. This event will bring out prominently the good qualities of the Brahmas and Cochins. The hens will dress seven to eight pounds, and sell readily for fifteen cents, when other breeds that only weigh four or five pounds will not bring more than twelve and a half cents per pound. The question of profit and loss in keeping fowls is, after all, the most interesting one, and here we will give our experience in as condensed a form as possible.

A Leghorn or Hamburg hen will eat in one year, being allowed her liberty, about a bushel of corn, besides what she will gather from the woods and pastures, and will lay from 150 to 175 eggs per year. A Brahma will eat a bushel and a half or more, and will lay from 120 to 150 eggs and hatch one or two broods of chicks. We

estimate from our experience that the one is about as profitable as the other, and the account may be made out with the Hamburgs thus:

175 eggs, at two cents apiece, - - - - - -	$3 50
One bushel corn, - - - - - - - - - - -	75
Leaving a net profit of - - - - - - - -	$2 75

for a year's investment. If, then, we suppose the sale of the carcass to realize enough to pay for raising to the time they commence laying, we see we have a very handsome return from our feathered friends. With anything like good attention, we may very safely calculate on a net return of at least two dollars per head for every fowl kept. We have at our side private accounts strictly kept, which show a much larger return, but will not transcribe them.

A New Englander, in a report to the Department of Agriculture, puts the net profits of his 200 fowls at $500, which is the result of accounts strictly kept. If in the cold climate of Massachusetts, where snow lies upon the ground from five to six months in the year, such returns can be realized, what may we not confidently expect when we hardly have as many weeks of bad weather?

The other varieties of poultry usually kept upon the farm are duck, geese and turkeys. The former two can only be raised profitably contiguous to marshes or ponds, where they can gather the larger part of their food themselves, and are not suited to the general purposes of the poultry raiser. Some experiments have been reported lately where, in a trial between ducks and hens for the production of eggs, the ducks produced the larger quantity in proportion to the food consumed. It would be well enough to try the experiment here, but our own experience induces us to doubt the reliability of the report. The rearing of turkeys is attended with a great many difficulties. But when successful, the return is quite large.

They should have a house separate from other fowls. About six hens should be allowed for each cock. As early in the spring as they begin to show signs of laying, they should be closely watched to prevent their stealing a nest out. Some advise their being confined to the house in the morning until they have laid. We prefer, however, to have a small yard, with a high picket fence around it. If three or four small wires are stretched around a few inches apart, the lower one being six inches from the top of the fence, they will not fly over. The post should project two feet above the top of the pickets, and the wire should be fastened to them. The turkeys will make one or two attempts to get over, but being caught upon the wire and forced to fall back, they will give it up. A few empty barrels, with the open ends lying next the fence, with barely room for the turkeys to pass in, and nest made in them of grass or leaves, will soon be made the depository of the precious egg. The eggs should be removed as rapidly as they are laid, and a large hen egg kept as a nest egg. After some fifteen or eighteen eggs have been laid, the turkey will probably manifest a disposition to set. This

may be known by her remaining on the nest over night, and by other unmistakable signs well known to every one familiar with the bird. It is best to permit her to remain without any eggs a day or two; then she should be gently removed, a new nest made of hay or long grass, and about fifteen eggs placed under her.

Unless there is danger of vermin of some kind, it will be unnecessary to confine her in any way, but if there is danger of that kind, the end of the barrel should be closed by a board at night. She will then require no further attention than to have feed and water placed conveniently near. When it is discovered that the young are breaking the shell it is best to close up the barrel at once, and leave it so until they are all hatched and dry. She may then be released and permitted to walk about the yard when it is dry. The first night she will probably return to her old nest, and should then be confined until the dew is off next morning. Then, having previously prepared a pen in some protected spot, she should be gently driven to it and confined, so that she cannot wander about too much with the young brood. The pen may be of laths or common fence rails, covered with plank. A box or barrel in one corner should be provided to protect the mother and young from storms and vermin. The best food for young turkeys is hard boiled eggs cut up and black pepper sprinkled over it thickly; stale light-bread, soaked in milk, is also excellent. Whatever is given, however, should be in pieces as large as they can conveniently swallow, as they do not like to mince at their meals. When the young are two weeks old, the old one may be turned loose, still keeping them confined until the grass is dry in the morning. They should be liberally fed from the very start, receiving full rations of grain night and morning until they are ready for market. They will require constant care to prevent their wandering too far from home, and falling victims to foxes and unscrupulous hunters. Of the profit of raising turkeys, we are not prepared to speak very favorably. They are subject to so many casualties that the business is too uncertain. When, however, they can be raised successfully, they undoubtedly yield a good return for the outlay.

Of the diseases to which poultry are subject, it will be unnecessary to say a great deal. We aim to prevent rather than to cure diseases. If, with all our care, cleanliness, ventilation, &c., some of our fowls get sick, we usually make short work of it by cutting off the head. It sometimes happens, however, that epidemic diseases prevail among poultry. These, generally known under the name of chicken cholera, may generally be cured, unless they have progressed too far, by feeding on food highly seasoned with cayenne pepper, and giving, at intervals of an hour or so, three or four, or even ten drops of paregoric, to check the discharge from the bowels.

The roop, one of the greatest scourges of the poultry yards of the North, is scarcely known here. We occasionally have a case of severe catarrh, which, if not checked, will eventually run into roop, but it is easily managed by confining the fowl to a warm yard, and

feeding on warm, stimulating food. If there is any discharge from the nostril, it will be well to syringe the nostril with chloride of soda, using the smallest size glass syringe.

In conclusion, we would earnestly recommend to the poor farmers of Virginia to give more attention to the rearing and keeping of poultry. The capital required is very small, and the return immediate. The lumber necessary to construct one of the houses and lots described in the former part of this essay, would not exceed in cost, nails included, $50. The fowls can now be readily purchased at not more than $25 per hundred. By buying common hens and crossing fine cocks upon them, the value of the progeny would be greatly enhanced. The annual value of the poultry and eggs of the States east of the Mississippi does not fall short of $25,000,000. Of this, Virginia does not produce one-fourth her full share. The employment is light, and the return sure and quick. The manure saved from one hundred fowls, properly saved and applied to the hill with corn, will add one hundred bushels to the produce. Thus we have every reasonable inducement to undertake it. Let us try.

There is no danger of overstocking the market. The cities of Washington, Baltimore, Philadelphia and New York, with which we are in easy daily communication by cheap lines of water transportation, will take all our surplus were it ten times what it is now. A pound of poultry can be raised as cheaply as a pound of pork, and will generally sell for twice as much. With these considerations I leave the subject.

CORRESPONDENCE.

SOME REASONS WHY OUR YOUNG MEN ARE AVERSE TO ENGAGING IN AGRICULTURE AS AN OCCUPATION.

Messrs. Edditors,—In your editorial in the June number of the *Planter and Farmer* on "Progress of the Agricultural Interests of the South," you state truly "that one of the difficulties in the way of progress is the disinclination among the better class of our people to engage in any pursuit that requires manual labor for its successful prosecution." False pride may keep some from manual labor, but downright laziness influences a larger number to seek some employment requiring less physical exertion. But many a good farmer is lost to the community because he sees clearly that labor on the farm is not paid for as in other pursuits; that the income is not adequate to the labor expended. His disinclination, therefore, arises from neither pride nor laziness, but from a knowledge of the fact that it don't pay. To a sensible young man, able and willing to work, what are his prospects as a farmer compared with other pursuits? Leaving out of consideration the professions or positions that require a certain amount of educational and practical training as a qualification for business, he sees and knows that he can go

behind the bar and sell the death-dealing and peace-destroying fluid, or behind a cigar case, or vend newspapers, and in each occupation make more money than he can possibly make from his individual labor on the farm. He knows, too, that if he goes upon a farm that he must do more work, and harder work, and for less pay than in any other business or occupation.

Assure him of ample compensation for his labor and he will, if not too lazy, stick to the farm. When satisfied that his pay will be in proportion to the amount of labor he performs, and relatively as profitable on the farm as anywhere else, he will, if raised on the farm, prefer to remain upon it in preference to seeking a precarious livelihood in some other pursuit. But there is no disguising the fact that if he relies alone upon the labor of his own hands for a living, present and prospective, he may expect to live hard and die poor, and leave the profits of his labor in the hands of his more fortunate brother who sits in the shade. We grant that there are honorable exceptions, but the young man who starts in the world flat-footed and unaided upon a farm has an up hill business, and can hope for little more than a bare support. There is something dreadfully wrong somewhere. Bread is too low when the itinerant pedlar or peripatetic speculator can buy a pound of flour for five and a pound of bacon for ten cents. The price of food is disproportionate to the labor spent in its production, and those engaged in raising it, have for years been the dupes of speculators and consumers. Labor is entitled to its reward, and the fault lies with producers as a class that they are inadequately paid.

Who desires to see his son bearing the heat and burden of a hot June day in the harvest field to raise flour at four and five cents a pound to be sold to the baker, who, after adding water to and baking it, sells the same for ten cents for a short pound loaf, thus realizing more than one-hundred per cent. on the hard earnings of his boy? But this is done every day, and the bread goes to feed an army of non-producers, who, if compelled, rather than raise their own bread would give one dollar for every pound of bread they eat, and for every thing else in like proportion. His boy as he delves and toils knows all this, and is dissatisfied; for he well knows that he is not receiving full compensation for his labor.

Let the fathers do *their* duty and I'll venture to answer for the boys. Some brave, noble fellows, in spite of all difficulties, are working their way up into the world. Let us clear the way for more of them, and give them what they most desire—a fair chance for success. This can only be done by association and joint action. Here's work, appropriate work for the grangers.

Dignity and importance will soon come to the avocation of the husbandman when he is prosperous, reaping the just rewards, of his labor. Our appreciative, good young women will not have to be taught to love the independent, prosperous farmer. He'll not lack for sweet-hearts. For he who is brave enough to win fortune, will find some queen ready to crown and smile upon him as victor.

R. L. Ragland.

CELEBRATION OF QUEEN VICTORIA'S BIRTHDAY.

FORMATION OF THE BRITISH ASSOCIATION OF VIRGINIA.

The British Settlers in Virginia held a grand celebration of Queen Victoria's Birthday, this year for the first time. The idea was a happy one and was carried out with great spirit and success.

On Saturday, the 23rd of May, the streets of our capital showed unmistakable signs of a British invasion, and on Sunday evening at 5 o'clock the invading forces mustered strongly at the Monumental Church, where the proceedings of the celebration commenced with a special service, followed by an admirable sermon by the Rev. Dr. Wall, from the appropriate text: "Love the brotherhood. Fear God. Honor the King."

On Monday, the 25th, the Settlers held a meeting in the Hall of Delegates to hear an address from Mr. St. Andrew, of Chase city, and to organize "The British Association of Virginia." About 150 Englishmen attended the meeting, which was presided over by Capt. T. T. Jackson, of Richmond, and the proceedings were marked throughout by great good feeling and unanimity, and by a strong determination not to let the occasion of so large a gathering of English colonist go by without establishing a permanent bond of union for the benefit of all present and future English dwellers on Virginia soil.

The meeting commenced with prayer by Dr. Wall, which was followed by a very sensible address from the Chairman, Captain Jackson.

The meeting then appointed a Committee on Permanent Organization, who retired to consider their report, and on their return Mr. St. Andrew delivered his address. Our space will not allow us even to glance at the various topics touched upon by the speaker, who handled his subject in a very masterly style. It was decided, however, that the address should be printed and circulated, and we strongly recommend its careful perusal both by our Virginia and our English readers.

In the course of his speech, Mr. St. Andrew described very forcibly the chief difficulties which an English colonist has to contend with in this country, foremost among which he placed—

Bad roads; sheep-killing dogs; unscrupulous land agents; want of fences and a fence law; and the absence of small farms.

His address was full of excellent practical advice both to Englishmen and Virginians, and towards its close he summed it up in the following terse sentences. His advice to the intending settler was:

1. Come in colonies, or go to colonies.
2. Bring money in your purse.
3. Leave your prejudices behind.
4. Don't expect too much.
5. For land or business, pay cash.
6. Keep two-thirds at least of your money for working capital.

7. Avoid land-sharks. You can easily find out the reliable land-agents.

8. In buying land, don't get too much of a good thing.

9. Adhere to the old fashioned principle of British honor. Don't attempt "smartness." Better class Americans don't admire it; but they can beat you at the game if you challenge them to it.

10. Remember that success is more in the man than the country.

His advice to the Virginia citizens was:

1. Reform your roads.
2. Hang your dogs, and save your mutton.
3. Put up your fences.
4. Cut up your large farms into small ones.
5. Insist on fair dealing with settlers.
6. If you find a settler in a tight place, don't squeeze him too hard.
7. Make the new settler feel like an old citizen.
8. Live and let live.
9. Preserve your State credit.
10. Let there be free trade in money.

Mr. St. Andrew concluded his address by demonstrating the advantages to be attained by the formation of the proposed Society. He pointed out the assistance which it would render to the intending settler by furnishing him with disinterested and reliable information; the stimulus it would apply to English immigration, and the advantages in the way of social intercourse which it would afford to its members.

In his closing remarks, after gracefully acknowledging the warm sympathy which the celebration had evoked in Virginia, he said:

"It is something unique for such an assemblage of British people to commemorate the Queen's birthday in America. The event marks an epoch in the history of Virginia, the only State which ever had the honor of being directly associated with the British Crown. Among a noble and chivalrous people we find ourselves increasing in numbers and influence. It may be the high destiny of British settlers to help in restoring the prosperity of a great country and the happiness of a great people. It is for us to realize our position, and remember that for Britain and Virginia we must do our duty. Let us form a brotherhood that shall be the basis of a powerful movement. Let that bond of union inspire us all to be worthy, both of our State and of our dear Fatherland. Let the nobility of character of that illustrious lady whose birthday we celebrate to day be honored in the lives of her former subjects in Virginia. Let us determine to-day that when we become citizens of Virginia, we will forget none of the lessons of truth, virtue and patriotism which we learned at home, and then, though our Society will be British in name, it will be Virginian in usefulness, and every citizen and settler may join in wishing it 'God speed.'"

After a cordial vote of thanks to Mr. St. Andrew, the report of the Committee on Permanent Organization was read, and the pro-

posed constitution and by-laws were discussed at length, and finally adopted. It was determined that the Society should be called the British Association of Virginia; that it should be free to all settlers in Virginia and West Virginia, born in any of Her Majesty's dominions and their children, and that its objects should be: 1. To promote social intercourse among British settlers. 2. To obtain and disseminate disinterested and reliable information on subjects of importance to settlers. 3. To afford assistance to British settlers in distress.

The meeting then elected the officers of the association for the ensuing year, and adjourned after deciding to celebrate the next aniversary of Her Majesty's birthday in Richmond.

At 5 o'clock the British settlers, and a large number of distinguished Virginia guests sat down to an excellent dinner at the Ballard House, from which we were glad to see the English ladies did not absent themselves.

Mr. F. R. Scott, of Richmond, was in the Chair.

The toast of the evening was, of course, "the Queen," and it was received with the greatest enthusiasm, the whole audience joining in the National Anthem, and then making the roof ring with cheer after cheer in genuine English fashion. The toast was ably responded to by Maj. Gen. Barton, of Norfolk.

The other toasts were:

"The President of the United States," responded to by Mr. Senator Johnson.

"The Prince and Princes of Wales, and the Royal Family," responded to by Mr. J. W. Hebditch.

"Virginia," responded to in an admirable speech by Gov. Kemper.

"Our Guests." "Richmond." "The Press." "The Ladies."

The proceedings of the day terminated with a grand reception in the ball room of the Exchange Hotel, where Virginia and British beauty fairly distracted the critic in his attempt to award the palm between them. The ball-room was tastefully decorated with banners and heraldic devices; the flags of Great Britain, America and Virginia being emblematically intertwined; while on the walls were a number of portraits of the Queen, and other works of English art, which had been lent for the occasion, and some of them being of great value and interest. The entertainment was kept up with great spirit till far into the morning, when the band again played "God save the Queen," and so terminated the celebration, an event marked throughout with the greatest good feeling and enthusiasm both on the part of the British and their Virginia guests.

We heartily congratulate our English friends on the success of their undertaking, from which we predict very useful results, not only to themselves, but to the community at large.

Go to the ant thou sluggard; consider her ways and be wise.

SCHEDULE OF PREMIUMS
OF THE
VIRGINIA STATE AGRICULTURAL SOCIETY
AT ITS
FAIR TO BE HELD IN RICHMOND,
On the 27th, 28th, 29th and 30th of October, 1874.

DEPARTMENT I.
Raw Material and Produce,
Dr S. P. Moore, Chief.

CLASS I.—*Minerals, Geological, Chemical, Zoological and Ornithological Specimens.*

Gen'l J. D. IMBODEN, Supt.

SECTION I.

☞ All the specimens must have the name and locality attached in a plain manner.

1. Best collection of specimens illustrating the mineralogy of Virginia, including coal, lime, stone, soapstone, sandstone, marbles, clays, peats, marls, soils and minerals, Diploma and $50
2. Best exhibit of minerals from any single mine, $10
3. Best suit of fossils from Virginia, Medal.
4. Best collection illustrating the zoology of Virginia, Silver medal and $10
5. Best collection of insects, illustrating the Entomology of Virginia, $10
6. Best collection of Botanical specimens, $10
7. Best collection of native woods, specimens to be six inches long, dressed on two sides, and properly labelled, $15
8. Best collection of foreign woods, same requirements, Diploma.
9. Best collection of birds, illustrating the ornithology of Virginia, Medal and $10
10. Best collection of Indian relics, $15
11. Best specimen of Bituminous coal, 1009 lbs. or more, $10
12. Best specimen of Anthracite, $10
13. Best specimen of coal suitable for smelting iron ores, $5
14. Best specimens of building stone or marble, (dressed.) $10
15. Best specimen of Virginia lime, one barrel, Medal.
16. Best specimen of loam sand for foundry purposes, $10
17. Best specimen soapstone from Virginia quarries, $5
18. Best specimen grindstone from Virginia quarries, $5
19. Best specimen Whetstone from Virginia quarries, for oil and water, $5
20. Best specimen millstones from Virginia quarries, $5
21. Best specimen slate from Virginia quarries, $5

CLASS II.—*Chemical and Pharmaceutical Products and Processes, and Vegetable and Mineral Substances employed in Manufactures.*

Dr. W. H. TAYLOR, Supt.

SECTION 1.

1. Best collection of chemicals manufactured in Virginia, $5
2. Best collection of pharmaceutical preparations manufactured in Virginia, $5
3. Best collection of mineral waters (artificial), Diploma
4. Best assortment of chemial glassware, Diploma
5. Best assortment of druggists' sundries, Diploma
6. Best strictly pure white lead, dry, and in oil, Diploma
7. Best substitute for white lead, dry and in oil, Diploma
8. Best mineral paint, 100 pounds or more, Diploma
9. Best collection of varnishes, Diploma
10. Best lard oil, Certificate
11. Best linseed oil, Certificate
12. Best castor oil, Certificate
13. Best sulphuric acid, Certificate
14. Best nitric acid, Certificate
15. Best hydrochloric acid, Certificate
16. Best nitre. Certificate
17. Best barrel of salt, $5
18. Best assortment of essential oils, 5
19. Best assortment of flavoring oils, 5
20. Best assortment of perfumery, 5

21. Best glue, Certificate
22. Best hydraulic cement, $5
23. Best hypochlorite lime, Certificate
24. Best disinfectant, $5
25. Best pure alcohol, Certificate
26. Best collection of dyes or dye-stuffs, Diploma,
27. Best pure ground mustard for medicinal or table use, Certificate
28. Best display of pure ground spices, Certificate
29. Best gallon of lubricating oil, $5
30. Best specimen of cotton seed oil, 5
31. Best printers' ink, Diploma
31. Best shoe and leather blacking, $2
33. Best writing and copying ink, 2
34. Best stove polish, Certificate
35. Best wash blue, Certificate
36. Best baking powder, Certificate

Judges.

Prof. Mallett, University of Virginia.
Dr. J. B. McCaw, Richmond.
Prof. Pratt, Washington and Lee University.
W. W. Fontaine, Hewletts.
W. C. Dimmock, Richmond.

CLASS III—*Produce.*

RUSH BURGESS, Superintendent.

SECTION I.

FARM PRODUCTS.

1. For the largest product per acre corn, wheat, oats, and hay: provided that not less than ten contiguous acres be cultivated in either crop, and provided also that the yield of corn shall not be less than 80 bushels (shelled), wheat 40 bushels, oats 60 bushels, and hay 2½ tons per acre; and for the best crop of tobacco of not less than 2½ acres, with a yield of not less than 1,500 pounds (well cured) to the acre—For each crop, Society's diploma and $100
2. Best crop of cotton, not less than five acres, and 400 lbs. of lint, 50
3. For best crop of ground peas, not less than five acres, and not less than 60 bushels per acre, 25

Article 18 of Rules and Regulations provides as follows, and must be adhered to by all competitors; and the yield must be verified by the certificate of two disinterested parties: "Applicants for premiums on farm crops will remember that the land from which the crop for premiums is claimed must be in one piece and measured by a competent surveyor, whose affidavit must accompany the statement. The location of the land must be stated in writing, and the kind and condition of the soil; what the previous crop, and how manured; the quantity and kind of seed; the time and manner of sowing, harvesting and preparing the crop for market, and the actual yield; and a fair average sample of the crop must be exhibited at the Fair."

4. Best shipping leaf tobacco, growth 1874, $20
5. Best manufacturing leaf, growth 1874, 20
6. Best fancy wrapper leaf, growth 1874. 20
7. Best specimen manufactured tobacco for general consumption, 20
8. Best specimen of smoking tobacco, 10
9. Best specimen cigars, 5

☞ To be represented by samples of the crop, not less than ten lbs, boxed or cased, and to be accompanied by statement of mode of cultivation, fertilizers used, yield per acre, and number of acres cultivated.

10. Best bushel white wheat, 5
11. " red wheat, 5
12. " white corn, in ear or on stalk, 3
13. " yellow corn, in ear or on stalk, 2
14. " rye, 1
15. " oats, 1
16. " barley, 1
17. " clover seed, 5
18. " timothy seed, 3
19. " herds grass seed, 2
20. " Kent'y blue grass seed, 2
21. " Highl'd grass seed, 1
22. Best baled cured hay, 1
23. " bushel ground peas, 2
24. " bale of cotton in Virginia, 10
25. " corn shucks, 1
26. " broom corn, 1
27. " fodder, 1
28. " hay, 1
29. " timothy, 1
30. " clover hay, 1
31. " mixed clover and timothy,
32. " herds grass, 1
33. " orchard grass, 1
34. Best specimen of flax, 2
35. " hemp, 2
36. Best three fleeces of wool, 5
37. " fleece of fine wool, 5
38. " specimen (1 lb.) raw silk, 5

All these products from Virginia.

Judges.

Wm. A. Ruff, Lexington.
Col. C. R. Barksdale, Richmond.
T. Homer, Farmville.
Dr. Richhard Wood, Amelia.
Maj. Robert Douthat, Charles City.

CLASS IV.—*Garden, Nursery and Orchard Prodacts.*

JOHN M. ALLAN, Superintendent.
HENRY BOWLER, Assistant.

SECTION 1.

1. For best acre Irish potatoes, not less than 300 bushels, $25
2. For best acre turnips, not less than 600 bushels, 25
3. For best acre potato onions, not less than 250 bushels, 25
4. For best acre sweet potatoes, not less than 200 bushels, 25
5. For best acre ground peas, not less than 100 bushels, 30
6. For best acre winter cabbage, not less than 3500 good heads, 25
7. For best acre largest and best collection vegetables, not less than 15 varieties, 25
8. For 2d best ditto 5
9. For best collection of reliable garden seeds, not less than 20 varieties of Virginia growth, 25
10. For best dozen beets, 2
11. " " cabbages, 3
12. " ½ " cauliflower, 5
13. " " cucumbers, 1
14. " " celery, 5
15. " " carrots, 2
16. " ½ " egg plants, 2
17. " " lettuce, 1
18. " " parsnip, 2
19. " 4 " pumpkins, 2
20. " " salsify, 2
21. " " endive, 2
22. " peck onions, 1
23. " bushel sweet potatoes, 3
24. " " irish " 3
25. " peck peppers, 1
26. " " white turnips, 1
27. " " red turnips, 1
28. " " ruta bagas, 1
29. " " tomatoes, 1
30. " dozen brocoli, 3
31. " peck lima beans, 2
32. " bushel field peas, 2
33. " ½ dozen winter squash, 1

SECTION 2.

ORCHARD AND NURSERY PRODUCTS.

Competitors for orchard, grapery and nursery premiums, are requested to furnish a detailed statement of the time and manner of planting or setting out, mode of cultivation, position of ground, level or inclined, and if inclined, to which point of the compass—size, age and number of trees.

1. Best display of nursery grown fruit trees, Diploma and $5
2. Best display of ornamental trees and shrubs, Diploma and 5
3. Best display of nursery grown evergreens, Diploma and 5
4. Best display of deciduous trees, Diploma and 5

FRUIT.

5. For the greatest and best display of fruit. by any county, township, society or individual, 25

APPLES.

(Samples to be distinct from the foregoing.

6. Best display of apples, not less than 15 varieties, and three specimens of each variety, 10
7. Best display of fall apples, 8
8. Best display of winter apples, 8
9. Best collection of ten varieties for family use, for cultivation in Virginia, 8
10. Best one-fourth bushel winter apples, 3
11. Best one-fourth bushel fall apples, 3
12. Best collection crab apples, 3
13. Best plate of 5 American Golden Russett, or little Pearmain 2
14. Best plate, of Baldwin, 2
15. " Belleflower, 2
16. " Belmont, 2
17. " Ben Davis, 2
18. " Esopus Spitzenburg, 2
19. " Fallawater, 2
20. " Rawle's Janet, 2
21. " Jonathan, 2
22. " King of Tompkins Co., 2
23. " Maiden's Blush, 2
24. " Mason's St'nger 2
25. " Nonsuch, 2
26. " Albe'rle Pip'in, 2
27. " Fall Pippin, 2
28. " Northern Spy, 2
29. " Smith's Cider, 2
30. " Roxbury Russet, 2
31. " Red Canada, 2
32. " Rome Beauty, 2
33. " Rambo, 2
34. " Wine Sap, 2
35. " Pilot, 2

PEARS.

36. Best display of pears, not less than 5 varieties, 8

37. Most valuable collection of pears for planting in Virginia, 8
38. Best collection of winter pears, 5
39. Best collection of fall pears, 5
40. Best single specimen of winter pear, 1
41. Best single specimen of fall pear, 1
42. Best half peck Seckels, 3
43. Best half peck Bartletts, 3
44. Best plate of 5 Beurre 'dAngou, 2
45. " " Beurre Clairgeau, 2
46. " " Beurre Dril, 2
47. " " Bartletts, 2
48. " " Belle Lucrative, 2
49. " " Duchesse d'Angouleme, 2
50. " " Flemish Beauty, 2
51. " " White Doyenne, 2
52. " " Columbia, 2
53. " " Howell, 2
54. " " Lawrence, 2
55. " " Louise Bonne d'Jersey, 2
56. " " Onondaga, 2
57. " " Seckels, 2
58. " " Sheldon, 2
59. " " Vicar of Winkfield, 2

Not less than 3 specimens of each variety of apples and pears will be received for competition.

GRAPES.

60. Best collection of native grapes, not less than 4 bunches of each variety, $5
61. Best collection, not less than 10 varieties, three bunches of each variety, 10
62. Best display of any one variety, 3
63. Best display on one cane, 3
64. Best single bunch, 1
65. Best and largest collection of grapes of less than 10 varieties, 8
66. Best collection of table grapes, 5
67. Best collection of wine grapes, 5
68. Best 3 bunches Concord, 1
69. " " Delaware, 1
70. " " Norton's Virginia, 1
71. " " Iona, 1
72. " " Ives' Seedling, 1
73. " " Catawba, 1
74. " " Martha, 1
75. " " Croton, 1
76. " " Eumelan, 1
77. " " Hartford Prolific, 1
78. " " Isabella, 1
79. " " Rebecca, 1
80. " " Salem, 1
81. " " Senasqua, 1
82. " " Walter, 1
83. " " Winder, 1

WINES.

84. Best collection of native wines, 10

Judges.

John B. Davis, Henrico.
V. Vaiden, Williamsburg.
G. B. Leighton, Norfolk.
Col. Edward Daniels, Fairfax.
T. N. Merrell, Charlotte.

SECTION 3.

MALT LIQUORS.

1. Best lager beer, $5
2. Best pale ale, 5
3. Best porter, 5

SECTION 4.

1. Best specimens of native brandies, 5
2. Best and purest distillation of whiskey, 5
1. Best still cider made in Virginia, 3
2. Best sparkling cider made in Virginia, 3
3. Best vinegar made in Virginia, 3

☞ All liquors must be exhibited by or for the manufacturer, and *entered by numbers*, and the name of the maker withheld from the judges.

Judges.

T. J. Wright, Richmond.
W. B. Warwick, Richmond.
G. W. Royster, Richmond.
Col. J. L. Carrington, Richmond.

SECTION .5

FLORAL PRODUCTS.

1. Best floral display, to include plants in bloom, foliage plants, cut flowers, and floral designs, baskets, stands, etc.—flowers to be grown by the exhibitor, $15
2. Second best (amateur premium) plants in bloom, 8
3. Best collection of distinct varieties of green-house plants, 10
4. Best collection of Asters, 3
5. " Begonias, 3
6. " Carnations, 3
7. " Dahlias, 3
8. " Everlastings, 3
9. " Fuschias, 3
10. " Gladioli, 3
11. " Geranium, 3
12. " Heliotropes, 3
13. " Lilies, 5
14. " Pansies, 3
15. " Petunias, 3
16. " Phlox, 3
17. " Pinks, 3
18. " Roses, 3
19. " Salvias, 3
20. " Tuberoses, 3
21. " Verbenas, 3

Judges.

Mrs. A. H. Drewry, Westover.
Mrs. Bradley T. Johnson, Richmond.
Mrs. L. H. Frayser, Richmond.
Mrs. Ella Seddon, Goochland.
Mrs. Robert Carter, Shirley.

SECTION 6.

FOLIAGE PLANTS.

1. Best Colens, not less than three varieties, 2
2. Best Colludium, not less than three varieties, 2
3. Best gold and silver Balms, 2
4. Best variegated Maple, 3
5. Best collection of foliage plants, 5
6. " Cacti, 3

ORNAMENTAL ARRANGEMENT FOR PLANTS.

7. Best Wardian case, 10
8. Best rustic flower stand, made by exhibitor, 3
9. Best rustic flower stand, with living plants, 5
10. Best rustic hanging basket, made by exhibitor, 2
11. Best fernery, 5

Judges.

Mrs. James R. Branch, Richmond.
Mrs. Dr. Currie, Richmond.
Mrs. John B. Davis, Henrico.
Mrs. Col. Gantt, Albemarle.
Miss Kate Finney, Richmond.

SECTION 7.

CUT FLOWERS—FLORAL DESIGNS.

1. Best floral temple, 3
2. " floral arch, 3
3. " floral wreath, 3
4. " floral cross, 3
5. " basket of flowers, 3
6. " original design, 3

BOUQUETS.

7. Largest and most tasteful bouquet of choice flowers, 5
8. Best and most tastefully arranged pair flat bouquets, 3
9. Best and most tastefully arranged pair round bouquets, 2
10. Best single bouquets, 1

DRIED FLOWERS AND LEAVES.

11. Best bouquet of Everlastings, 2
12. Best design in Everlastings and mosses, 2
13. Best herbarium, correctly named, 5
14. Best arranged and correctly named collection of forest leaves, 2

Judges.

Mrs. Thomas Branch, Richmond.
Mrs. William T. Scott, Charlotte.
Mrs. John F. Davis, Chesterfield.
Mrs. James G. Brooks, Richmond.
Mrs. Joseph Walker, Chesterfield.

SECTION 8.

DOMESTIC PRODUCTS.

1. Best lot (5 lbs.) butter, in rolls or shape, $5
2. Best tub or firkin butter, not less than six months old (40 lbs. or more), 10
3. Best cheese, 1 year old or over, 3
   The exhibitor must state, in writing, the mode of making and preserving butter and cheese, or no premium will be allowed.
4. Best loaf domestic white bread, 3
5. " loaf brown bread, 2
6. " pilot bread, 2
7. " soda biscuit, 2
8. " crackers (butter), 2
9. " crackers (sweet), 2
10. " Sally Lunn, 2
11. " rye bread, 2

In preparing bread, no salaratus or other alkalies, or acids of any kind, to be used.

12. Best 3 hams, mode of preserving to be stated in writing—one of the hams to be cooked, 10
13. Best sponge cake, 2
14. " pound cake, 2
15. " jelly cake, 2
16. " fruit cake, 2
17. " gold cake, 2
18. " silver cake, 2
19. " marble cake, 2
20. " nut cake, 2

HONEY, PRESERVES, PICKLES.

21. Best 10 pounds of honey, $5
    The honey to be taken without destroying the bees, and kind of hives to be specified, as well as the general management of the bees during the year.
22. Best display of Virginia manufactured candy, 5
23. Best preserved quinces, 2
24. " peaches, 2
25. " pears, 2
26. " plums, 2
27. " apples, 2
28. " Siberian crabs, 2
29. " grapes, 2
30. " cherries, 2
31. " raspberries, 2

32. Best preserved strawberries, 2
33. " blackberries, 2
34. " citron, 2
35. Best apricot jelly, 2
36. " apple jelly, 2
37. " cherry jelly, 2
38. " currant jelly, 2
39. " grape jelly, 2
40. " quince jelly, 2
41. " Siberian crab jelly, 2
42. " lemon jelly, 2
43. " orange jelly, 2
44. " wine jelly, 2
45. " marmalade of any fruit, 2
46. " canned blackberries, 2
47. " canned cherries, 2
48. " canned grapes, 2
49. " canned peaches, 2
50. " canned pears, 2
51. " canned raspberries, 2
52. " apple butter, 2
53. " peach butter, 2
54. " brandied peaches, 2
55. " sour pickled cucumbers, 2
56. " sweet pickled cucumbers, 2
57. " " grapes, 2
58. " " cherries, 2
59. " " peaches, 2
60. " pickled cauliflower, 2
61. " " tomatoes, 2
62. " " walnuts, 2
63. " " onions, 2
64. " " gherkins, 2
65. " tomato catsup, 2
66. " mushroom catsup, 2
67. " walnut catsup, 2
68. " cucumber soy, 2
69. " picalili, 2
70. " mangoes and melons, 2
71. " display of the above by one person.

All the above to have been prepared by the exhibitor.

Judges.

Mrs. Gen. W. H. F. Lee, New Kent.
Mrs. Geo. A. Barksdale, Richmond.
Mrs. J. B. McCaw, Richmond.
Mrs. A. H. Drewry, Westover.
Mrs. Dr. C. Archer, Henrico.

DEPARTMENT II.

J. D. ROGERS, Chief.

GEO. WATT, Jr., Aid.

Machinery for Agricultural, Manufacturing, Engineering, and other purposes. Mechanical inventions illustrative of the agents brought to bear by human ingenuity on natural products.

Note.—A machinery building is on the grounds—fitted up with pulleys and shaftings for the use of exhibitors desiring to put their machines in motion; but that all may be accommodated, it is desirable that exhibitors should give the Society at least two weeks' notice of the character of their machines, and the power and motion required.

Machines, implements, &c., not enumerated in either of the Classes or Sections of this department, will be received and placed on exhibition in their appropriate Class and Section.

☞No awards will be made in this department without trial.

CLASS I.—*Machines for direct use, including Steam, Hydraulic, and Pneumatic Engines, railway and other Carriages.*

JOHN ANDREWS, Supt.

Section 1.

1. Best engine applicable to agricultural purposes generally, Diploma and $50
2. Best steam plow adapted to farm fallow or tillage, Diploma and $250
3. Best saw mill for farm purposes $25
4. Best model of locomotive and tender made in Virginia, Diploma
5. Best railway street car made in Virginia, Diploma
6. Best model of passenger car made in Virginia, Diploma
7. Best working model of steam engine Diploma
8. Best railway freight car, Diploma
9. do. steam gauge, Medal
10. do. water gauge, Medal
11. do. steam pump, Diploma
12. do. safety valve for engine, Medal
13. do. saw gummer, Medal
14. do. self setting saw mill head blocks, Medal

Section 2.

1. Best pump for deep wells, $ 5
2. do. do. shallow wells, 5
3. do. fixtures for drawing water from wells other than pump, 10
4. Best water ram in operation, 5
5. Best hydraulic governor for over-shot and other mill wheels, 10
6. Best tide gate, 10
7. Best levelling instrument for draining operations, 10
8. Best device or plan for fitting up a natural spring, having regard to beauty, permanency, and collection and preservation of the purity of the water, 10
9. Best water-wheel, turbine or other, 10

Judges.

Richard Irby, Ashland.
James Worth, Chesterfield.
F. T. Glascon, Richmond.
Maj. Wm. Allen, Henrico.
James Talbott, Richmond.

SECTION 3.

WOOD-WORKING MACHINES.

1.	Best planing machine,	$20
2.	do. mortising and tenoning machine,	15
3.	Best turning machine,	10
4.	do. boring machine,	5
5.	do. moulding machine,	10
6.	do. slat tenoning,	5
7.	do. irregular frame tenoning machine,	10
8.	Best scroll saw,	5
9.	do. shoe last machine,	5
10.	do. shoe peg machine,	5
11.	do. sash machine,	5
12.	do. hoop machine,	5

SECTION 4.

1.	Best brick machine,	$25
2.	do. drain tile machine,	25
3.	do. lead pipe machine,	25
4.	do. machine for moulding pottery, &c.,	10

SECTION 5.

MISCELLANEOUS.

1.	Best barrel machine,	$10
2.	do. machine for buckets,	10
3.	do. shingle machine,	10
4.	do. lathe machine,	10
5.	do. stave machine,	10
6.	do. hoisting machine for store or warehouse,	10
7.	Best wool packing machine,	10
8.	do. cotton packing machine,	10
9.	do. tire upsetter,	Medal
10.	do. domestic gas apparatus,	do.
11.	do. set of willow ware, Virginia growth and manufacture,	Medal
12.	Best set woolen ware, Va. make,	Medal
13.	Best dozen brooms, Va. make,	do.
14.	do. coffee pots,	$2
15.	do. coffee roaster,	2
16.	do. For any invention useful in agriculture or the mechanic arts, by a resident of Va.	Diploma

SECTION 6.

1.	Best printing press,	$25
2.	do. press for card printing,	5
3.	do. press for ornamental or fancy work,	10
4.	Best type work,	10
5.	do lithograph work,	10

Judges.

Wm. Gibson, Richmond.
Gen. H. H. Hurt, Halifax.
Capt. W. Taylor Smith, King George.
C. T. Sutherlin, Halifax.
W. R. Polk, Henrico.

CLASS II—*Agricultural, Horticultural and Dairy Machines, Implements, &c.*

WILLIAM H. ALLISON, Supt.

SECTION 1.

1.	Best combined reaper and mower,	$30
2.	Best mower,	20
3.	" hay tedder,	10
4.	" hay rake,	5
5.	" wheat gleaner,	5
6.	" wheat cradle,	2
7.	" grass blade and snath,	1
8.	" hay fork,	1
9.	" hay press in operation,	15
10.	" harvest hand rake,	Certificate
11.	" reaper and mower grinder,	"
12.	" hay hoisting apparatus,	5

SECTION 2.

1.	Best horse-power,	$25
2.	" railway power,	15
3.	" combined machine for threshing, separating and cleaning,	25
4.	Best fan mill,	5
5.	" cockle machine,	5
6.	" machine for threshing and cleaning clover seed,	25
7.	Best machine for cleaning wheat of smut,	10
8.	Best machine for picking and separating peanuts,	5

Judges.

Hill Carter, Shirley, Henrico county.
T. L. P. Cocke, Cumberland.
Robert Byrd, Albemarle.
R. L. Ragland, Halifax.
T. H. Leitch, Buckingham.

SECTION 3.

1.	Best corn shucking or husking machine,	Diploma
2.	Best corn sheller for power,	$10
3.	" corn sheller for hand power	5
4.	" hominy mill,	2
5.	" stalk and fodder cutter	10
6.	" hay and straw cutter for hand	2
7.	Best hay and straw cutter for power,	5
8.	Best root cutter,	2
9.	" stalk knife,	1
10.	" mill or machine for crushing corn or other grain for stock,	10

SECTION 4.

1. Best four-horse plow, right or left, $10
2. Best three-horse plow right or left, 10
3. Best two-horse plow right or left 5
4. " one-horse " " " 5
5. " subsoil plow, 5
6. " hillside plow, 5
7. " scraper for tobacco, cotton and vegetables, 2
8. Best cultivator, 5
9. " harrow, 5
10. " drain plow, 5
11. " machine for digging potatoes 2
12. " " " ground peas 2
13. " rotary digger, 2
14. " new ground plow, 5
15. " gang plow, 10
16. " sulkey plow, 10
17. " chain harrow, 5

Judges.

A. R. Venable, Farmville.
Samuel McGutchin, Charlotte.
C. S. Harrison, Brandon.
W. H. Gaines, King George.
J. D. Hankins, Halifax.

SECTION 5.

1. Best grain drill, with guano and grass seed attachment, $25
2. Best drill, without attachments, 20
3. " broadcasting machine 5
4. " lime or fertilizer spreader or broadcaster, 20
5. field roller, 10
6. machine for sowing and covering peas in corn, at last tillage with or without guano, 10
7. Best clod crusher, 10

SECTION 6.

1. Largest and best collection of vehicles for pleasure or use, Diploma
2. Best two-horse family carriage Medal
3. " one-horse " " " "
4. " top buggy, "
5. " open buggy, "
6. " carryall, "
7. " sulkey, "
8. Largest and best collection of children's carriages, "
9. Best harvest or hay cart, for one or more horses, $10
10. Best wagon farm use, 10
11. " dumping " 10
12. " tumbril cart, 10
13. " ox cart, 10
14. " wagon body for hauling grain in sheaf, hay or straw, 10
15. Best ox-yoke, 5
16. " hand cart, 5
17. " wheelbarrow for garden, 2
18. " wheelbarrow for dirt, 2

SECTION 7.

1. Best sorghum mill, Medal
2. " sorghum boiler, "
3. " cooling vat for sorghum, Certificate
4. Best set of skimmers, dippers, and strainers used in making sorghum molasses, Certificate
5. Best agricultural boiler for stock food, 10

SECTION 8.

HORTICULTURAL IMPLEMENTS.

1. Best cider and wine mill, $10
2. garden seed drill, 2
3. garden cultivator, for horse-power, 2
4. Best garden culti'tor, hand-power, 2
5. " hand plow, 2
6. " garden pump or syringe, 5
7. " collection of garden rakes, hoes, and transplanting tools, 5
8. Best lawn mower, 5
9. " lawn roller, 5

Judges.

E. R. Cocke, Cumberland.
Dr. R. H. Stewart, King George.
R. V. Gaines, Charlotte.
R. E. Lee, King William.
J. Woods Garth, Albemarle,

CLASS III—*Domestic Machines and Implements.*

CLAIBORNE WATKINS, Supt.

SECTION 1.

1. Best sewing machine, Medal
2. " knitting machine, "
3. " washing machine, $5
4. " clothes wringer, 1
5. " clothes boiler, 1
6. " sausage cutter, 1
7. " sausage stuffer, 1
8. Best churn, $5
9. " butter press, 1
10. " cheese press, 5
11. " fruit peeler, 1
12. " fruit dryer, 1
13. " dough kneeder, 1
14. " rat and mouse trap, 1.

Judges.

Mrs. Wilson Thomas, Richmond.
Mrs. Col. Danforth, Richmond.
Mrs. Peter Minor, Richmond.
Mrs. George Watt, Richmond.
Mrs. J. H. Knight, Farmville.

SECTION 2.

1. Best cooking range, Diploma
2. " cooking stove, Diploma
3. " heating stove for coal, $5
4. " heating stove for wood, 5
5. " fire-place stove for heating two or more rooms, 5
6. Best dining room stove, 5
7. " laundry stove, 5
8. " fire-place arranged for heating two rooms, 5
9. " furnace for heating a church or public building, Diploma
10. Best assortment of fronts and grates and fenders, $10
11. Best assortment of stove furniture, 5
12. Best specimens of general hollow ware, 5

Judges.

Mrs. Wilson Thomas. Richmond.
Mrs. Col. Danforth, Richmond.
Mrs. Peter Minor, Richmond.
Mrs. George Watt, Richmond.
Mrs. J. H. Knight, Farmville.

DEPARTMENT III.

DR. S. P. MOORE, CHIEF.

Manufactures, the result of Human Industry on Natural Products.

CLASS I.—*Cotton, Wool, Silk, Flax, Hemp, Mixed Fabrics, Shawls, Vestings, Quilts, &c., &c.*

JOHN CHAMBLIN, ESQ., Supt.

HOUSEHOLD MANUFACTURES AND LADIES' FANCY AND ORNAMENTAL WORK.

SECTION 1.

1. Best hearth rug, $3
2. " pair woolen knit stockings, 3
3. " pair cotton knit stockings 2
4. " pair woolen knit socks, 2
5. " pair cotton knit socks, 2
6. " pair woolen stockings by Misses under 12 years of age, 2
7. Best pair cotton stockings by Misses under 12 years of age, 2
8. Best netting, 2
9. " worsted knit socks for inf's, 2
10. Best Stocking yarn, 2
11. " worsted knit shirst for infants, 2
12. Best display of machine knit goods, 3
13. Best straw hat, 2
15. Best crocheted bed spread, either cotton or wool 5
15. Best 10 lbs. dressed flax, 3
16. " pound linen sewing thread, 2

No articles manufactured in factories or out of the family, will be received in this class. Exhibitors must accompany their articles with a certificate of manufacture in the family.

NEEDLE WORK, EMBROIDERY, ETC.

In every case, but more especially in this one, the words "best display," refer in the first place to QUALITY, and in the second place to *quantity.*

17. Best table cover, 2
18. " piano cover, 3
19. " silk emb'ed infant mantle 3
20. " " " sacque, 2
21. " " " skirt, 3
22. " " child's dress, 3
23. " " pin cushion, 1
24. " " slippers, 2
25. " " cloak, 3
26. " display of silk embroidery, 5
27. " display of worsted emb'y, 2
28. " display of cotton emb'y, 2
29. " display of linen embroidery, 2
30. " specimen chenille emb'y, 3
31. " display of chenille emb'y, 3
32. " lamp stand mat, 2
33. " specimen of ornamental needle work, 3
34. Best embroidered chair, ottoman or stool cover, 2
35. Best worsted embroidered sofa cushion, 2
36, Best specimen braid work on machine, 2
37. Best ladies' braided cloak, 3
38, " child's braided cloak, 2
39, " child's braided dress, 2
40. " yoke and cuffs, 2
41. " gentlemen's dressing gown, 2
42. " ladies' robe, 2
43. " ladies' skirt, 2
44. " gentleman's shirt made by hand, 3
45. Best gentleman's shirt made by machine, 2
46. Best chemise made by hand 2
47. " " " machine, 2
48. " handkerchief made by hand, 2
49. " ladies' night dress hand made 3
50. Best ladies' night dress made by machine, 2
51. Best display of machine work, 2
52. " display of hand work, 3
53. " display of band and sleeves, 2
54. " specimens of darning, 2
55. " specimen of applique, 2
56. " specimen of tetting, 2
57. patch work quilt of silk, calico or woolen, 4
58. Best large affghan, 4
59. " child's affghan, 3
60. " specimen of hair work, 3
61. " " bead work, 3
62. " " gold thread work, 2

63. Best specimen silver thread work, 3
64. Best specimens of cone work, 2
65. " " leaf work, 2
66. " " imitation coral work, 3
67. Best specimens of shell work, 3
68. " " moss or lichen work, 3
69. Best specimen feather flowers, 2
70. " specimen of wax work, 3
71. " display of millincry work, 5
72. " crochet shawl, 2
73. " " hood or head dress, 2
74. " " infant sacque, 2
75. " " mittens, 1
76. " " collar, 1
77. " " chair tidy, 2
78. " display crochet work, worsted or cotton, 2
79. Best display of stamping, 2
80. " specimen of worsted work, 2
81. " fly brush, 2

Judges.

Mrs. Joseph Hall, Richmond.
Mrs. Mary Page, Richmond.
Mrs. Henry Hudnall, Richmond.
Mrs. S. H. Bailey, Richmond.
Miss Bettie Fox, Richmond.

SECTION 2.

GENERAL MANUFACTURES OF COTTON, WOOL, SILK, &c., OF VIRGINIA MANUFACTURE.

1. The largest and best collection of goods made exclusively of wool, Diploma or $20
2. The largest and best collection of goods made of wool and cotton combined, Diploma or $15
3. The best piece of cassimere made of wool exclusively, Medal or 5
4. The best piece of goods made of cotton and wool combined, Medal or 5
5. The largest and best collection of goods made exclusively of cotton, Medal or 10
6. The best piece of ¾ brown shirting, Medal or 10
7. The best piece of 4-4 sheeting, Medal or 5
8. The best piece of bleached shirting, Medal or 5
9. The best piece of brown cotton drills, Medal or 5
10. The best piece of bleached cotton drills, Medal or 5
11. The best piece of jeans made of cotton and wool combined, Medal or 5
12. The best collection of cotton plaids or ginghams, Medal or 10
13. The best piece of checked or plaid ginghams, Medal or 10
14. The largest and best collection of woolen blankets, Diploma or 15
15. The best pair of woolen blankets, Medal or 10
16. The best collection of knitting cotton, Medal or 5

Judges.

Samuel M. Price, Richmond.
Jas. G. Brooks, Richmond.
Christopher James, Petersburg.
Geo. M. Rucker, Lynchburg.
Wm. T. Clarke, Danville.
Wm. P. Yancy, Norfolk.

SECTION 3.

FURNITURE MADE IN VIRGINIA.

1. Largest and best collection of furniture, Diploma
2. Best set parlor furniture, $25
3. " set chamber " 20
4. " set dining room furniture, 20
5. " set school room " 10
6. " bureau, 5
7. " wardrobe, 5
8. " sofa-bedstead, 5
9. " extension table, 5
10. " chairs for office, 5
11. " " for library, 5
12. " centre table, 5
13. " workstand, 5
14. " writing desk, 5
15. " book case, 5
16. " sideboard, 5
17. " specimen of ornamental carving, 10

SECTION 4.

1. For best wooden mantel, $5
2. " slat blinds, 3
3. " panel door, 3
4. " window sash, 3
5. " set of mouldings, 2
6. " carpenter's finished w'k, 10

SECTION 5.

1. Best specimen leather tanned in Virginia, calf sole, hog, goat or buckskin, medal or $5
2. Best set of wagon harness for two horses made in Va., medal or 2
3. Best set of carriage harness for two horses, medal or 5
6. Best set of buggy harness for one horse, certificate and 5
5. Best riding saddle and bridle, certificate and 5
6. Best pair of boots from leather made in Virginia, certificate and 2

7. Best pair of shoes from leather made in Virginia, certificate and $1
8. Best pair of gloves from leather made in Virginia, certificate and 2
9. Best trunk of leather made in Virginia, medal or 2
10. Best set of furs made of skins secured in Virginia, medal or 10
11. Best mattress made of hair, medal or 3
12. Best specimen of hair work, 1
13. Best specimen of ladies' shoes of leather made in Virginia, medal or 2
14. Best specimen of leather collars for horses, medal or $5
15. Best specimen of Straw hats made in Virginia, medal or 2
16. Best specimen of baskets and mats, medal or 2

Judges.

J. A. Belvin, Richmond.
F. Emmenhauser, Richmond.
Lewis Miller, Norfolk,
J. A. White, Petersburg.
Chas. E. Wingo, Richmond,
J. P. Pearson, Henrico.

CLASS II.—*Paper, Stationery, Types, Printing, Bookbinding.*

GEO. L. BIDGOOD, Superintendent

SECTION 1.

1. Best specimens of writing paper made in Virginia, $5
2. Best specimens of printing paper made in Virginia, 5
3. Best specimens of wrapping paper made in Virginia, 5
4. Best specimens of envelopes made in Virginia, 5
5. Best specimens of paper bags made in Virginia. medal
6. Best specimens of paper twine made in Virginia, medal
7. Best specimen of colored papers for bookbinding made in Virginia, medal or 5

SECTION 2.

8. Best specimen of plain and ornamental types and borders made in Virginia, medal or 5
9. Best specimen of plain and ornamental printing, medal or 5
10. Best specimen of bookbinding done in Virginia, medal or 5

Judges.

E. S. Gregory, Petersburg,
W. Ellis Jones, Richmond.
P. Bouldin, Danville,
W. D. Chesterman, Richmond.
B. W. Gillis, Richmond.

CLASS III.—*Cutlery and Edge Toolsl Iron, Brass, Pewter and Genera, Hardware, Surgical Instruments, &c.*

W. S. WHITE, Superintendent.

SECTION 1.

1. Largest and best collcction cutlery made in Virginia, medal or 5
2. Best specimen of saws made in Virginia, Medal or 3
3. Best specimen of axes and hatchets made in Va., Certifi'te and 3
4. Best rifle or shot gun made in Virginia, Medal or 3
5. Best collection of steam-cocks, water coupling, Medal or 3
6. Best assortment of general hardware, Certificate and 3
7. Best and largest assortment of surgical instruments, Diploma
8. Best artificial limbs, Diploma
9. " optical instrum'ts, Medal or 3
10. " dentist's instrument, Medal
11. " specimens of den'stry, Diploma
12. Best specimens of silver ware with agricultural designs suitable for premiums, Diploma
13. Best specimens of argentine and britania ware, Medal
14. Best truss, 2

Judges.

Col. W. H. Taylor, Norfolk.
Dr. H. L. Thomas, Richmond.
Dr. I. H. White, Richmond.
Dr. J. Herbert Claiborne, Petersburg.
Dr. Wm. B. Pleasants, Richmond.

CLASS IV.—*Glass-Ware, Stone-Ware.*

SECTION 1.

1. Best display of useful and ornamented pottery wares, stone or earthern ware, 10
2. Best paving tiles, 5
3. Best Furnace, fire and stove tiles, 5
4. Best pressed brick, not less than 25, 5
5. Best common or mould brick not less than 25, 5
6. Best stock brick, not less than 25 5
7. Best paving brick, not less than 25, 5
8. Best fire clay from Quarries in Virginia, 10
9. Best specimen of pipes, for drainage made in Virginia, of clay cement or other material, Medal or 10

10. Best specimen of tobacco pipes of Virginia clay, Medal or 5
11. Best specimen of glassware made in Virginia, Medal or 20

Judges.

Gen'l Bartlett, Westham.
James Werth, Chesterfield.
Charles Grattan, Staunton.
Dan'l Hatcher, Powhatan.
W. H. Hite, Orange.

DEPARTMENT IV.

FINE ARTS.

DR. W. T. WALKER, Chief.

W. W. VALENTINE, Superinten'nt.

STATUARY, DRAWINGS, PAINTINGS, &c.

It is understood that all products of art or industry competing for premiums, are to be exhibited by or for the maker, improver or contriver.

CLASS 1.—*Statuary.*

SECTION 1.

1. Best sculpture by a Virginia artist, 10
2. Best group of sculpture connected with the history of Va., 30
3. Best portrait bust, 16
4. Best marble mantel of Virginia material, 10
5. Best marbelized state of Virginia material, 5
6. Best genre picture in oil, 30
7. " historical picture in oil, 30
8. " portrait from life in oil, 25
9. Best portrait in oil, of horse, bull or cow, 20
10. Best specimen of painting in oil by a Virginia artist, 20
11. Best specimen of fruit or flower painting in oil, 10
12. Best old portrait of any one connected with the history of Va. 10
13. Best landscape from nature, in oil, 20
14. Best fancy sign painting, Medal
15. " old historical picture illustrating any incident connected with Virginia, 10

SECTION 2.

WATER COLORS, DRAWING, ENGRAVING, ETC.

1. Best life size photograph colored in oil by Virginia artist, 10
2. Best life size photograph colored in water by Va., artist, 5
3. Best specimen of porcelain photograph, Medal
4. Best photograph of infant colored in oil, Medal
5. Best photograph of infant colored in water colors, Medal
6. Best photograph of infant uncolored, Medal
7. Best specimen of water colors, 10
8. Best landscape from nature in water colors, 10
9. Best specimen of uncolored photograph, Medal
10. Best specimen of fruit or flower painting in water colors, 5
11. Best engraving, 5
12. " wood engraving, 5
13. " lithography, 5
14. Best porcelain painting and gilding, Medal
15. Best specimen Penmanship, Medal
16. Best specimen of ornamental penmanship, Medal
17. Best crayon drawing, 5
18. " pencil drawing, 5
19. " pencil graining, Medal
20. " design for farm-house, 10
21. " design for farm-barn. 10
22. " design for dalry-barn, 10
23. " design for poultry-house, 5
24. " design for farm-gate, 2
25. " design for granary, 3
26. " bridge, (model of,) Medal
27. " architectural drawing, 10
28. " picture frames made in Va. Medal
29. Second best picture frames made in Va., Certificate
30. Best collection of artist materials made in Virginia, Medal
31. Second best collection of artists materials made in Virginia. Certificate
32. Best collection of coins, 5
33. Best collection of autographs of distinguished Virginians. Medal
34. Best collection of Confederate relics, Medal

Designs must be accompanied with estimates of cost and specification. Those to which premiums may be awarded, will be engraved and published in the report of the Society.

Judges.

Wm. H. Haxall, Richmond.
Dr. Wm. P. Palmer, Richmond.
Samuel H. Pulliam, Richmond.
Mrs. Charles S. Carrington, Richmond.
Mrs. E. H. Hobson, Richmond.
Mrs. G. C. Walker, Richmond.
Mrs Mary B. Dobbin, Richmond,

DEPARTMENT V.
ANIMALS.

S. W. FICKLIN, Chief.

Committee to Examine Pedigrees:

Thos. W. Doswell, Richmond,
R. B. Haxall, Orange,
R. V. Gaines, Charlotte.

☞ The attention of the Judges is *particularly called* to the regulation *which forbids* premiums to be awarded to constitutionally unsound animals. All animals must be of superior quality; the brood mare must have dropped a colt. The produce, if present, will be considered in forming the award of the judges.

CLASS I.—*Horses and Mules.*

Superintendent.

SECTION 1.

THOROUGHBREDS.

1. Best stallion 4 years old or upwards,	$50
2. Second best	30
3. Best entire colt 3 years old and under 4,	35
4. Second best	20
5. Best entire colt 2 years old and under 3,	25
6. Second best	15
7. Best entire colt 1 year old and under 2,	20
8. Second best	10
9. Best brood mare 4 years old and upwards,	40
10. Second best	20
11. Best filly 3 years old and under 4	30
12. Second best	15
13. Best filly 2 years old and under 3	20
14. Second best	10
15. Best filly 1 year old and under 2,	15
16. Second best	8
17. Best colt or filly,	5

Judges.

Dr. R. H. Stewart, King George.
Gen. Wickham, Richmond.
W. E. Broadnax, Brunswick.
Philip Haxall, Richmond.
R. H. Dulaney, Loudoun.

SECTION 2.

Roadsters—adapted to quick draft.

1. Best stallion 4 years old or upwards,	$40
2. Second best do.,	25
3. Best entire colt, 3 years old and under 4,	30
4. Second best do.,	15
5. Best entire colt, 2 years old and under 3,	25
6. Second best do.,	12
7. Best entire colt 1 year old and under 2,	15
8. Second best do.,	8
9. Best brood mare, 4 years old or over,	30
10. Second best do.,	20
11. Best filly, 3 years old and under 4,	25
12. Second best do.,	12
13. Best filly, 2 years old and under 3,	20
14. Second best do.,	10
15. Best filly, 1 year old and under 2,	15
16. Second best do.,	8
17. Best pair of mares, or geldings in harness,	25
18. Best colt or filly,	5

SECTION 3.

HORSES FOR GENERAL PURPOSES.

1. Best stallion, 4 years old and upwards,	$40
2. Second best do.,	25
3. Best entire colt, 3 years old and under 4,	30
4. Second best do.,	15
5. Best entire colt, 2 years old and under 3,	25
6. Second best do.,	12
7. Best entire colt, 1 year old and under 2,	15
8. Second best do.,	8
9. Best brood mare, 4 years old or over.	30
10. Second best do.,	20
11. Best filly 3 years old and under 4,	25
12. Second best do.,	12
13. Best filly, 2 years old and under 3,	20
14. Second best do.,	10
15. Best filly, 1 year old and under 2,	15
16. Second best do.,	8
17. Best colt or filly,	5

Judges.

J. B. Newman, Orange.
M. M. Blacker, Amelia.
Judge Thomas Smith, Warrenton.
R. J. Hancock, Albemarle.
Gen. Terry, Wytheville.

SECTION 4.

Saddle—adapted to the breeding of improved riding horses.

1. Best stallion, 4 years old or over,	$40
2. Second best, do.,	25

3. Best entire colt, 3 years old and under 4, 30
4. Second best do., 20
5. Best entire colt, 2 years old and under 3, 45
6. Second best do., 12
7. Best entire colt, 1 year old and under 2, 15
8. Second best do., 8
9. Best brood mare, 4 years old and over, 30
10. Second best do., 20
11. Best filly, 3 years old and under 4, 25
12. Second best do., 12
13. Best filly, 2 years old and under 3, 20
14. Second best do., 10
15. Best filly, 1 year old and under 2, 15
16. Second best do., 8
17. Best colt or filly, 5

SECTION 5.

Heavy draf s.

1. Best stallion, 4 years old or over, $40
2. Second best do., 25
3. Best entire colt, 3 years old and under 4, 30
4. Second best do., 15
5. Best entire colt, 2 years old and under 3, 25
6. Second best do., 12
7. Best entire colt, 1 year old and under 2, 15
8. Second best do., 8
9. Best brood mare, 4 years old or over, 30
10. Second best do., 20
11. Best filly 3 years old and under 4, 25
12. Second best do., 12
13. Best filly, 2 years old and under 3, 20
14. Second best do., 10
15. Best filly, 1 year old and under 2, 15
16. Second best do., 8
17. Best colt or filly, 5

Judges.

Wm. Beverly, Leesburg.
John Chaplin, Greensville.
Maj. Hoxe, Culpeper.
Gen'l Walter Taylor, Norfolk.
W. W. Micheau, Powhatan.

SECTION 6.

Saddle Horses under the Saddle.

1. For best saddle horse or mare as pacer, $20
2. For best saddle horse or mare as dog trotter, 20
3. For best saddle horse or mare, 30

Style, action, quality, and variety of gaits—walking especially to be considered.

SECTION 7.

Mules and Jacks.

1. Best jack, $35
2. Second best do., 20
3. Best jennet, 20
4. Second best do., 10

The premiums to be awarded to none but the finest quality of jacks and jennets as above classified.

5. Best mule colt, 3 years old, foaled in Virginia, 20
6. Second best do., 10
7. Best mule colt, 2 years old foaled in Virginia, 15
8. Second best do., 8
9. Best mule colt, 1 year old, foaled in Virginia, 10
10. Second best do., 5
11. Best mule colt, a suckling, foaled in Virginia, 5
12. Best pair mules, 25
13. Second best do., 15

Judges.

Geo. S. Ayres, Upperville.
Thomas Hunter, Amelia.
E. J. Winston, Hanover.
Robert Morris, Louisa.
Randolph Crocket, Wytheville.

SECTION 8.

Trials of Speed.

TUESDAY—Premium $125, for stallions to wagons, owned in and have stood a season in Virginia, mile heats, three or more to enter, and three to start. First horse $75, second $50.

Riding Club—A single dash one mile forthree-year olds only. Prize, silver goblet of the value of $50.

WEDNESDAY—Trotting in harness for four year olds and under, mile heat and repeat, three or more to enter, three to start. Premium, $150. First horse, $100; second, $50.

Riding Club—Mile heat, best two in three, open to all ages. Prize, silver cup of the value of $75.

THURSDAY—Trotting in harness for three year olds, three or more to enter, three to start, mile heat. Premium $100. First horse, $60; second, $40.

Tandem teams to harness, single dash five miles. Premium, $100.

Ridtng Club—Trotting race under the saddle, heats three miles each, best two in three, open to all ages, and not less than three to start. First horse, silver plate the value of $100; second horse, silver cup the value of $50.

FRIDAY—Trotting in harness, open to all, mile heats, best three in five, four or more to enter, and three to start. Premium, $300. First horse, $200; second horse $100. Time 2:40.

Riding Club—Heats two miles each, best two in three, open to all ages, not less than three to start. First horse, silver plate the value of $150; second horse, silver cup of the value of $75.

☞All the above trials will be governed by the regular rules of trotting and running.

All entries must be made to the Secretary of the Society on or before twelve o'clock M. the day of the race; and each entry must be accompanied by ten per cent. of the premium entered for.

The Society reserves the privilege to change the above programme so far as to substitute one day's trials of speed for another, so far as to meet casualties of the weather, &c.

Judges.

Thomas W. Doswell, Richmond.
Gen'l Fitz. Lee, Stafford.
Dr. D. S. Watson, Goochland.
Gen'l Wm. Mahone, Petersburg.
Gen'l Bartlett, Richmond.
J. H. Chamberlayne, Norfolk.

CLASS II.—*Cattle.*

W. C. SAUNDERS, of Wythe, Sup't.

Committee on Pedigrees for Cattle.

Geo. W. Palmer, Saltville.
C. E. Coffin, Muirkirk, Md.
I. T. Sayers, Sr., Wythe Co., Va.

SECTION 1.

Short Horns.

1. Best bull three years old and upwards, $50
2. Second best do., 30
3. Best bull two years old and under three, 40
4. Second best do., 25
5. Best bull one year old and under 2, 25
6. Second best do., 15
7. Best bull calf, 10
8. " cow three years old and over, 40
9. Second best do., 30
10. Best cow two yenrs old and under 3, 35
11. Second best do., 20
12. Best heifer one year old and under two, 25
13. Second best do., 15
14. Best heifer calf, 10

Short-Horned Grades.

15. Best cow 3 years and upwards, not less than ¾ pure blood, 25
16. Second best do., 15
17. Best cow 2 and under 3 years, 20
18. Second best do., 10
19. Best heifer 1 year old and under 2, 10
20. Second best do., 5
21. Aest heifer calf, 5

Holstein and Herefords, each.

22. Best bull 3 years old or upwasds 30
23. Second best do., 20
24. Best bull 2 years old and under 3, 25
25. Second best do., 15
26. Best bull 1 year old and undr 2, 15
27. Second best do., 10
28. Best bull caft, 5
29. Best cow 3 years old and upwards, 25
30. Second best do., 15
31. Best cow or heifer 2 years old and under 3, 20
32. Second best do., 10
33. Best heifer 1 year old and under 2, 15
34. Second best do., 8
35. Best heifer calf, 4

Judges.

W. A. Stewart, Saltville.
J. T. Sayers, Wythe Co.
T. Lovelock, Gordonsville.
S. H. Bell, Augusta.
W. W. Bently Pulaski.

SECTION 2.

Devons.

36. Best bull 3 years old and upwards, $30
37. Second best do., 20
38 Best bull 2 yrs. old and under 3, 25
39. Second best do., 15
40. Best bull 1 yr. old and under 2, 15
41. Second best do., 10
42. Best bull calf, 5
43. Best cow 3 yrs. old or upwards, 25
44. Second best do., 15
45. Best cow or heifer 2 years old and under 3, 20
46. Second best do., 12
47. Best heifer 1 yr. old and under 2, 15
48. Second best do., 8
49. Best heifer calf, 4

Devon Grades.

50. Best cow 3 years old and upwards, 10
51. Second best do., 12
52. Best cow 2 yrs. old and under 3, 15
53. Second best do., 8
54. Best heifer 1 year old, 10
55. Second best do., 5
56. Best heifer calf, 3

SECTION 3.

Work Oxen.

1. Best yoke team of 4, 30
2. Best yoke of oxen, 20

☞ Must be exhibited in working order and not as fat cattle.

Judges.

S. T. Stewart, Loudoun.
Dr. Dillard, Spotsylvania.
R. E. Lee, King William.
Capt. Browning, Orange.
S. F. Maghee, Richmond.

SECTION 4.

Ayrshires.

1. Best bull 3 years old or upwards, 30
2. Second best do., 20
3. Best bull 2 yrs. old and under 3, 25
4. Second best do., 12
5. Best bull 1 year old and under 2, 15
6. Second best do., 10
7. Best bull calf, 5
8. Best cow 3 yrs. old or upwards, 20
9. Second best do., 15
10. Best cow or heifer 2 years old and under 3, 20
11. Second best do., 12
12. Best heifer 1 and under 2 yrs. old, 15
13. Second best do., 8
14. Best heifer calf, 4

Ayrshire Grades.

Same amounts and classification as Devon grades.

Alderneys.

1. Best bull 3 yrs. old or upwards, $30
2. Second best do., 20
3. Best bull 2 years old and under 3, 25
4. Second best do., 15
5. Best bull 1 year old and under 2, 15
6. Second best do., 10
7. Best cow 3 yrs. old or upwards, 25
8. Second best do.. 15
9. Best cow or heifer 2 years old and under 3, 20
10. Second best do., 12
11. Best heifer under 2 years, 15
12. Second best do.....8
13. Best heifer calf, 4

Alderney Grades.

Same amount and classification as Devon grades.

Judges.

F. T. Lee, Lynchburg.
A. Rowe, Fredericksburg.
W. Topham, Wytheville.
A. R. Bowman, Waynesboro.
Hon. J. Lyons, Richmond.

SECTION 5.

Dairy and Natives—Cross Breeds and Grades less than three-quarters pure.

1. Best cow 3 yrs. old and upwards, $20
2. Second best do., 12
3. Best cow 2 yrs. old and under 3, 15
4. Second best do., 8
5. Best cow or heifer 2 years old and under 3, 15
6. Second best do., 8
7. Best heifer 1 year old and under 2, 10
8. Second best do., 5
9. Best heifer calf, 3

Judges.

Gov. Wm. Smith, Warrenton.
J. B. Crenshaw, Richmond.
Dr. J. R. Woods, Albemarle.
Geo. Chapman, Amelia.
Samuel Frank, Burkeville.

SECTION 6.

Fat Stock—Hogs. Sheep, Cattle, Dressed Mutton.

1. Best fat bullock, $30
2. Second best do., 20
3. Best fat cow or heifer, 25
4. Second best do., 15
5. Best lot of fat cattle, not less than 4, 80

☞ Statement of manner of feeding to be handed to the Secretary at the time of entry.

SECTION 7.

FAT HOGS, &c.

1. Best lot fat hogs, not less than 6, $30
2. " sheep, not less than 6, 30
3. " slaughtered mutton, 10
4. Second best do., 5

Judges.

J. G. Moffitt, Richmond.
A. G. Robertson, Richmond.
London Bruce, Greenwood, Albemarle.
Fred. Brauer, Richmond.
R. J. Farrer, Richmond.

SECTION 8.

Herd Premiums.

1. Best bull and four cows or heif-

ers, not less than 3 years old, all of one breed, and owned by one exhibitor, $100

2. Best bull and 4 cows or heifers, not less than 2 years old (exclusive of Short Horns), all of one breed, and owned by one exhibitor, 50

SECTION 9.

Sweepstakes for Cattle.

1. Best thoroughbred bull, $50
2. Best thoroughbred cow or heifer, 50

Judges.

J. T. Sayers, Sr., Wythe.
C. E. Coffin, Muirkirk, Md.
F. T. Lee, Lynchburg.
Dr. Dillard, Spotsylvania.
James H. Renick, Greenbrier.

CLASS III.—*Swine.*

R. H. FIFE, Superintendent.

SECTION 1.

Large Breeds, including Chester, Russia, Bedford, Woburn, Berkshire, Poland, China, and other large Breeds.

1. Best boar 2 years old and over, $20
   Second best do., 10
2. Best boar 2 years old, 15
   Second best, 8
3. Best breeding sow over 2 yrs. old, 20
   Second best, 10
4. Best breeding sow under 2 ys. old, 15
   Second best, 8
5. Best sow and 8 pigs or more, 25

SECTION 2.

Small Breeds, including Neapolitan, Suffolk, Sussex, Essex, Chinese, improved Hampshire and other small Breeds.

6. Best boar 2 yrs. old and over, $20
   Second best, 10
7. Best boar under 2 yrs. old, 15
   Second best, 8
8. Best breeding sow over 2 yrs. old, 20
   Second best, 10
9. Best breeding sow under 2 ys. old, 15
10. Best sow and 8 or more pigs, 25

Judges.

J. B. Caddell, Pulaski.
R. F. Graves, Woolfolk's Store.
J. D. Craig, Mt. Meridian.
T. C. S. Ferguson. Lynchburg.
D. E. Gardner, Henrico.

CLASS IV.—*Sheep.*

R. H. FIFE, Superintendent.

SECTION 1.

Fine Wools, including pure bred Spanish, Saxon, French, and Silesian Merino.

1. Best ram 2 years old, $30
   Second best, 20
2. Best ram under 2, 20
   Second best, 10
3. Best pen ewes, 8 in number, 30
4. Second best do., 20
5. Best pen ram lambs, 3 in number, 30
6. " pen ewe lambs, do., 25
7. " fleece fine wool, 10

Fine Wool Grades, including crosses of the above

8. Best pen ewes, 3 in number, $20
9. Second best, 10
10. Best pen ewe lambs, 10

Middle Wooled, including South Downs, Oxford Downs, and other pure breeds of middle wool.

11. Best ram 2 years old, $30
12. Second best, 20
13. Best ram under 2 years old, 20
14. Second best, 10
15. Best pen ewes, 3 in number, 30
16. Second best, 20
17. Best pen ram lambs, 3 in num'r, 30
18. Best pen ewe lambs, 3 in num'r, 25

SECTION 2.

Middle Wool Grades, including crosses of above.

19. Best pen ewes, 3 in number, 20
20. Second best, 10
21. Best pen ewe lambs, 10

Judges.

J. G. Moffitt, Richmond.
P. B. Jones, Orange.
Dr. J. R. Baylor, Albemarle.
James L. Stringfellow, Culpeper.
E. Berger, Glendower.

SECTION 3.

Long Wools, including Bakewell or Leicester Cotswold or New Oxfordshire and Lincoln.

22. Best ram, 2 years old, $30
23. Second best, 20
24. Best ram under 2 years old, 20
    Second best, 10
25. Best pen ewes, 3 in number, 30
26. Second best, 20
27. Best pen ram lambs, 3 in num'r, 30
28. Best pen ewe lambs, 3 in num'r, 25

Long Wool Grades, including crosses of above.

29. Best pen ewes, 3 in number, $20
30. Second best, 10
31. Best pen ewe lambs, 10

SECTION 4.

Goats.

1. Best Angora, or Cashmere goat, not less than 3 in number, $20
2. Second best, 10
3. Best Angora, or Cashmere goat, female, not less than 3 in num'r, 20
4. Second best do., 10

Judges.

Thos. Hudson, Broad Run.
Chas. S. French, Amelia.
J. A. Byars, Washington Co.
L. S. Macon, Albemarle.
J. Fuller, Lexington.
J. W. Hebditch, Gary's P. O., Buckingham.

CLASS V.—*Poultry.*

J. C. SCHERMERHORN, Sup't.

SECTION 1.

Chickens.

All specimens in this class must be judged according to the rules laid down in the American Standard of Excellence, adopted by the National Poultry Association.

No premium to be awarded unless the fouls exhibited are of intrinsical merit.

1. Best trio of dark Brahmas, $3
2. " light " 3
3. " white Dorkings, 3
4. " gray " 3
5. " black Russians, 3
6. " Dominiques, 8
7. " White face black Spanish, 3
8. " silver spangle Hamburgs, 3
9. " golden " 3
10. " white crested black Polands, 3
11. " golden Polands, 3
12. " silver, " 3
13. " Houdans, 3
14. " Creve Cœur, 3
15. " LeFleche, 3
16. " brown Leghorns, 3
17. " white " 3
18. Best games (of any strain), 3
19. " buff Cochins, 3
20. " Partridge " 3
21. " white " 3
22. " black " 3
23. " Silkies, 3
24. Best common barn yards, 3
25. " golden seabright Bantams, 3
26. " silver " 3
27. " white Bantams, 3
28. " black " 3
29. " spangled " 3
30. " game " 3
31. " golden Pheasants, 3
32. " silver " 3
33. " pair of Capons, 4
34. " pair of Peafowls, 3
35. " pair of white Peafowls, 3
36. For greatest variety of breeds exhibited and owned by one person, 10

Ducks, Geese, &c.

37. Best pair Aylesbury ducks, 3
38. " Cayuga " 3
39. " Rouen " 3
40. " Muscovy " 3
41. " bronze turkies, 5
42. " turkies (of any improved breed), 5
43. " African geese, 3
44. " Bremen " 3
45. " white China geese, 3
46. " brown " 3
47. " Toulon geese, 3
48. " Sebastopol geese, 3
49. " Swans (white or black) 4
50. For largest exhibition of pigeons, not less than six varieties, 5
51. For heaviest dozen of hen's eggs, 2
52. Best pair Canary birds, 2
53. Best parrot, 2
54. Best Mocking bird, 2
55. Best pair English rabbits. 2
56. Best Guinea pigs, 1

Judges.

P. C. Laras, Richmond.
Mr. Rogers, Rural Messenger, Petersburg.
Jessie Hutchison, Richmond.
Dr. Peter Johnson, Orange C. H.
C. G. Thompson, Richmond.

DEPARTMENT VI. will be published in our next number, and will contain programme for essays, plowing matches, &c.

TO OUR PATRONS.

We wish to address a few words to our patrons. We are striving to make the PLANTER AND FARMER a general medium of communication among our farmers.

We ask our patrons to aid us in these efforts by contributing to the PLANTER all the information within their reach. Don't say you are not in the habit of writing for the press, and don't know how to dress it up. Give us the facts, we will do the dressing.

We earnestly request your assistance in this, and as we commence making up our number on the 13th of the month, we would like, if possible, to have your communications in hand by that time.

AGENTS WANTED.

We take pleasure in calling attention to the advertisement of Mr. Bissell for agents to sell Trees. Mr. Bissell represents a very reliable firm of Rochester, New York, Messrs. Chase Bros., and is himself a nice gentleman to do business with. Young men out of employment will do well to open a correspondence with him, or call at his office.

We call the attention of our readers to the advertisements of Two Farms offered by our Associate Editor. From what we can learn these farms can be bought much under their real value, as the owner has no use for them, being otherwise employed.

The Powhatan is one of the best and most productive in that county, and the Chesterfield farm has upon it enough wood to more than pay for it, including the expense of cutting and marketing it.

EDITOR PLANTER AND FARMER.

DRY GOODS MUST BE SOLD

CHEAP TO EFFECT SALES.

LEVY BROTHERS

have, therefore, marked the whole of their stock at the lowest possible prices. They only enumerate a small portion of their stock, but will state that they have everything in the way of Foreign and Domestic Dry Goods, Trimmings, Notions, Carpets, Matting, &c.

Striped and Plain Mixed Wash-Poplins, twenty-seven inches wide, 16⅔c. per yard worth 25c.; Striped Wash-Poplins, twenty-four inches wide, at 14c. worth 20c.; Mixed Wash-Poplins at 32½ per yard worth 16⅔.;

East-colored Lawns at 12½c. per yard worth 18c.; Seersucker, twenty-seven inches wide at 12½c. per yard worth 20c.; Black Grenadines with colored stripes at 12½c. per yard worth 25c.;

Black Grenadines with colored silk stripes at 16⅔c. would be cheap at 30c.; Japanese Poplins at 16⅔c. per yard worth 25c.; Japanese Poplins at 20 and 25c. would be cheap at 30 and 35c.;

Japanese Poplins, silk warp, at 40 and 50c. per yard worth 60 and 75c.; Striped Silks at 75c., 85c., $1 and $1.25 per yard—all 25c. a yard below regular prices; Black Silks from 60c. to $3.50 per yard—all much below regular prices; Colored Silks in great variety at lower prices than at any time since 1862;

Striped Muslins at 25c. per yard, would be cheap at 35c.; Checked Muslin, large patterns, at 30c. per yard worth 50.; Victoria Lawn from 20 to 50c. per yard—all very cheap; Linen Lawns at 25c. worth 35c. per yard;

Grass-Cloth Suitings with side bands for trimmings - all yard-wide at 20c. worth 25c.; A large variety of Linen Suitings at very low prices; Bombazines and other dress material for mourning;

Alpacas, Mohairs, and Brilliantines, in all qualities, at lower prices than ever; Excellent Calicoes at 8⅓ 10, and 12½c. per yard; Swiss Muslin from 12½ to 50c.—great bargains in this line;

Nottingham Lace, for curtains, at 20, 25, 30 and 35c. and up to $1.25 per yard; Tucked Cambrics in all widths and qualities; Shirred Muslin at 50c. per yard, worth $1; Full-Width Linen Sheeting at 75c. per yard worth $1;

Pillow-Case Linen, 1¼ yards wide at 60c. worth 75c.; Table Cloths, warranted all linen, two yards long, at $1 worth $1.50; White Matting, one yard wide, at 25, 30, 35, 40, 45 and 50c. per yard—all excellent quality for the price;

Red Check Matting at 30c. and up to 60c. per yard; 6-4 White Matting at 40c. per yard, worth 50c.; 6-4 Red Check Matting at 45c. per yard worth 60c.;

Victoria Lawn Dress Patterns in white and buff skirts, ready-made with sufficient material for a sacque or basque at $2—cost double the money to import; Black Lace Scarfs, now so fashinable, from $1 up to $6;

Black Lace Points and Sacques in all qualities at remarkably low prices; Printed Cambrick Frilled Collars and Cuffs at 15c. a set, worth 50c.; Ruffling and Ruffs in great bargains—some extraordinary bargains in this line;

A large stock of Striped Cotton Hose for women and Children; Crepe Veils in all sizes—some extra large and heavy;

Great bargains in Cotton Trimmings, Laces, Embroideries, Jewelry, Fans, Parasols, Fan Chains, Satchels, Trunks, Baskets, Shawl-Straps, &c., &c.

Particular attention paid to orders. Goods sent by express C. O. D,, or upon receipt of post-office order or registered letter.

LEVY BROTHERS,

1017 and 1019 Main Street,

july RICHMOND, VA.

HERMITAGE NURSERIES,

RICHMOND, VIRGINIA.

JOHN W. RISON,

PROPRIETOR OF

HERMITAGE NURSERIES,

RICHMOND, VIRGINIA.

1,500,000

Apple and Peach Trees,

FOR SALE THIS SPRING AT REDUCED PRICES. FIRST-CLASS APPLE TREES, $16 per hundred. FIRST-CLASS PEACH TREFS, $14 per hundred.

These trees are warranted true to name, and are strictly first-class stock.

SEED STORE AND OFFICE:

909 Main Street, Richmond, Virginia.

feb

FOR SALE,

Italian Bees,

BEE HIVES, &c.

I am prepared to furnish, at short notice, Swarms of Black Bees at $5 per swarm—Hives extra.

Swarms of Italian Bees at $10 per swarm—Hives extra.

Italian Queens (with a few workers), by mail or express, $5. Safe arrival guaranteed.

A cheap Movable Comb Hive without surplus boxes	$3 00
A better Movable Comb Hive with two surplus boxes	3 75
Triumph Bee Hive, Movable Comb, and upper or surplus chamber, or six surplus boxes (trade mark included to use one Hive), painted, and with feet	5 00
Deeds for individual rights to make and use the Triumph Hive	5 00
Deeds for individual rights to make and use the American Side-opening Hive	5 00
Bee Vail for protecting face and head	1 00
Cheap Honey Extractor, Virginia made	9 00
Large Honey Extractor with cog wheels	13 00
Peabody Honey Extractor at factory prices, freight to be added	15 00

W. R. POLK,
Real Estate Agent and Auctioneer,
No. 7 Shaffer's Building, Tenth St.,
ap Bet. Main and Bank Sts., Richmond, Va.

FOR SALE.—Thoroughbred Stock, &c. I have for sale a lot of thoroughbred Devon Cattle. Essex Pigs from improved stock. Also a lot of Light Brahma Fowls. Persons ordering from me can rely upon getting as good stock as any in the State. My herd of Devon are of the most improved breed. I took 5 1st premiums on a portion of them at our last Virginia fair. For further particulars address

F. W. CHILES,
feb-6mos Mansfield, Louisa co., Va

EDW. J. EVANS & CO.,

Nurserymen and Seedsmen,

York, Penn.

A complete stock of Fruit and Ornamental Trees, Garden and Flower Seeds, Seed Wheat, Seed Oats, Seed Corn, Seed Potatoes, Grass Seeds, &c. Send for Catalogue and price lists. feb-10t

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J. M. Thorburn & Co.,

15 JOHN ST. NEW YORK.

Will mail, upon application, their New Catalogue of Vegetable and Agricultural Seeds for 1874. mar—6t

POWHATAN RAW BONE

SUPER-PHOSPHATE,

MANUFACTURED BY

JAMES G. DOWNWARD & CO.

To the Planters of Virginia and North Carolina:

We again respectfully call the attention of those intending to use fertilizers on their spring crops to the Powhatan Raw Bone Super-Phosphate, and particularly those who want a reliable fertilizer for tobacco and cotton, as we intend in the future, as in the past five years, to furnish an article which has no rival, regardless of price. Wherever it has been used by the side of any other fertilizer whatever, not excepting the deservedly popular and higher priced tobacco fertilizers of the day, it has in every case proved itself superior.

A few out of many of our certificates from our patrons:

BLACKS AND WHITES, Nottoway Co., Va., Jan. 1, 1872.

Dear Sirs,—This is to certify that I have used the Powhatan Phosphate along side of three other kinds of fertilizers, each of which cost more than the Powhatan, and the difference in my crop of tobacco was greatly in favor of the Powhatan Phosphate. From my experience last year I think it a No. 1 manure, and recommend its general use.

Very truly yours, SAMUEL F. EPES.

LUNENBURG, Co., Va., Jan. 29, 1873.

Gentlemen,—I used your "Powhatan Raw Bone Super-Phosphate" last year on tobacco with perfect success and entire satisfaction.

Very respectfully, R. H. ALLEN.

DINWIDDIE Co., Va., January 13, 1872.

Dear Sirs,—In reply to your request, I have no hesitation in saying that I prefer the Powhatan Raw Bone Super-Phosphate, bought of you last spring, to any preparation that I have ever used on tobacco. I wish you to furnish me again this spring. Yours truly, WM. B. COLEMAN.

POWHATAN Co., VA., Jan. 30, 1873.

Gentlemen,—Yours of 24th, asking my opinion of the Powhatan Phosphate, to hand. In reply, I have to say it acted well on my tobacco—better than a more costly fertilizer that was applied by the side of it.

Yours truly, Z. G. MOORMAN.

AMELIA Co., VA., Jan. 16, 1872.

Dear Sirs,—In regard to the Powhatan Phosphate bought of you last spring, I take pleasure in saying that I am much pleased with its action on my crop. I used it on very thin land, 200 pounds to the acre, and my tobacco weighed better than any crop I have ever raised. I wish you to furnish me again this spring.

GEO. H. WILLS.

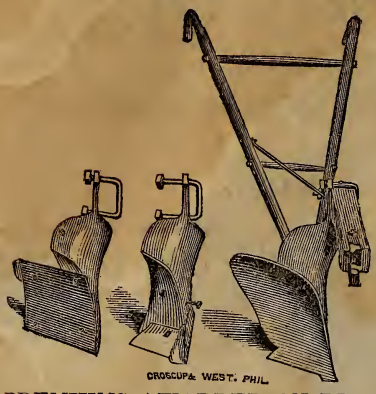
HARMONY, Halifax Co., Va., Jan. 20, 1872.

Gentlemen,—You request me to give you the result of my experience in the use of Powhatan Raw Bone Super-Phosphate. I have used it successfully for two years, 1870 and 1871, and I think it the cheapest fertilizer I have ever used, and expect to use it again the coming season.

Yours truly, EDWARD MOORE.

THE WATT PLOW

CONTINUES TRIUMPHANT!



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.

☞ I have, within the past eighteen months, made great improvements in the WATT PLOW, and can, with greater confidence than ever, commend it to the farming community everywhere.

GEORGE WATT.

Premiums received during the last three weeks of October 1873:

Virginia and North Carolina Fair, at Norfolk, October 7, 1873—ALL FIRST PREMIUMS AWARDED ON PLOWS.

The test of plows took place in a sandy loam, with weeds, &c., from four to six feet high. The Watt Plow did not choke at all, and buried the vegetation perfectly.

North Carolina State Fair, at Raleigh, October 14, 1873—ALL PREMIUMS AWARDED ON PLOWS.

Piedmont Agricultural Fair, Culpeper Courthouse, Va., October 14, 1873—ALL PREMIUMS AWARDED ON PLOWS.

The test took place in a hard, stiff clay soil not plowed since the war, and covered with running briers. The Watt Plow was run seven inches deep without difficulty, and never choked, burying everything under.

Virginia State Fair, Richmond, October 28, 1873—ALL THE PREMIUMS ON EACH SIZE, RIGHT AND LEFT HAND.

Also, two special premiums from the Society. Also, two special premiums from the city of Richmond.

The Plows were tested in a sodded and heavy pipe soil. The working of the Watt Plow was admired by all.

Western (N. C.) Fair at Salisbury, October 7, 1873—HIGHEST PREMIUM.

Darlington (S. C.) Fair, October 11, 1873—HIGHEST PREMIUM.

The WATT PLOW of all sizes, from one to four horses, warranted to do better work, with more ease, than any plow in use. If they do not prove so after one week's trial, they may be returned to us, and the purchase money will be refunded.

HARROWS, CULTIVATORS and ALL KINDS OF FARMING IMPLEMENTS for sale on the best terms.

Send for Circulars.

dec

WATT & CALL,
Sole Manufacturers, Richmond, Va.

EGGS THAT WILL HATCH!

An Amateur to Pay Expenses, Offers his Eggs at $2.50 Dozen.

THE POLISH FAMILY A SPECIALTY.

White Crested, Black, White, Silver and Golden, Light and Dark Brahmas, Buff and Black Cochins, all bred from premium chickens, carefully packed and delivered at express.

FRANK EVANS,
No. 5 South Paul St., Baltimore, Md.

To Sell—1 trio White Cochins $10.
2 trios Buff " 10.
2 " Light Brahmas 7.50

Orders received for all kinds delivered by July 1st at low prices. ∫my—2m

MARYLAND AGRICULTURAL COLLEGE.

Located on the Washington Branch of the B. & O. R. R., nine miles from Washington and twenty-eight from Baltimore.

The next session will commence on the 15th of September, 1874, and end the last week in June 1875. It is divided into two terms of twenty weeks each.

In addition to Agriculture and the Sciences pertaining thereto, a full Collegiate Course is taught. Students who do not desire to take the whole course are allowed within reasonable limits, to select such studies as their parents or guardians may designate.

THERE IS NO CHARGE FOR TUITION.

Charge for board, including fuel, gas, washing, &c., $100 per term, and a matriculation fee of $5.

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Piedmont Air-Line Railway.

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CONDENSED TIME TABLE.

In effect on and after Sunday, October 12th, 1873.

GOING NORTH.

STATIONS.	MAIL.	EXPRESS.
Leave Charlotte,	10.00 P. M.	8.15 A. M.
" Air-Line Junction,	10.06 "	8.30 "
" Salisbury,	10.06 A. M.	10.21 "
" Greensboro,	3.30 "	12.45 P. M.
" Danville,	6.20 "	3.12 "
" Burkeville,	11.35 "	7.36 "
Arrive at Richmond,	2.17 P. M.	10.17 "

GOING SOUTH.

STATIONS.	MAIL.	EXPRESS.
Leave Richmond,	1.28 P. M.	5.00 A. M.
" Burkeville,	4.45 "	8.29 "
" Danville,	9.18 "	12.48 P. M.
" Greensboro',	12.20 A. M.	3.50 "
" Salisbury,	2.38 "	6.06 "
" Air-Line Junction,	4.29 "	8.10 "
Arrive at Charlotte,	4.35 "	8.15 "

GOING EAST.

Read down.

STATIONS.	MAIL.
Leave Greensboro'	3.30 A. M.
" Co. Shops,	4.45 "
" Raleigh,	8.05 "
Arrive at Goldsboro,'	11.15 "

GOING WEST.

Read up.

	MAIL.
Arrive	12.20 A. M.
	9.35 "
	5.26 "
Leave	2.30 P. M.

NORTH WESTERN N. C. R. R.

Salem Branch.

Leave Greensboro' 4.30 P. M.; arrive at Salem 6.25 P. M.; leave Salem 8 A. M.; arrive at Greensboro' 10.00 A. M.

Mail trains daily, both ways.

On Sundays Lynchburg Accommodation leave Richmond at 9.45 A. M., arrive at Burkeville 12.45 P. M., leave Burkeville 5.35 A. M., arrive at Richmond 8.45 A. M.

Pullman Palace Cars on all night trains between Charlotte and Richmond (without change).

Papers that have arrangements to advertise the schedule of this Company will please print as above.

For further information, address

S. E. ALLEN,
General Ticket Agent, Greensboro', N. C.

T. M. R. TALCOTT, Eng'r & Gen'l Sup't.

nov—tf

CHESAPEAKE AND OHIO R. R.

On and after SUNDAY, April 19th, 1874, passenger trains will run as follows:

FROM RICHMOND:

8:30 A. M. MAIL TRAIN.—For Gordonsville, Charlottesville, Staunton, White Sulphur, Hinton, and all intermediate Stations, daily (except Sundays), arriving at Hinton at 10:20 P. M. This train connects at Gordonsville for Orange, Culpeper, Warrenton, Manassas, Alexandria, Washington and the North, and at Charlottesville for Lynchburg, Bristol, Knoxsville, Chattanooga and the South.

4:45 P. M. ACCOMMODATION TRAIN.—For Gordonsville and all intermediate Stations, daily (except Sunday), arriving at Gordonsville 8:30 P.M.

9:30 P. M. CINCINNATI EXPRESS.—For Gordonsville, Charlottesville, Staunton, Goshen, Milboro', Covington, White Sulphur, and all Stations west of White Sulphur, daily (except Sunday), arriving at Huntington, 5:30 P. M. This train connects at Gordonsville for Washington, Baltimore and the North, and for Lynchburg, Bristol, and the South, and at Huntington with the Steamers Bostona and Fleetwood for Cincinnati and all points West and Southwest, arriving at Cincinnati 6 A. M.

Baggage checked through.

FOR THROUGH TICKETS, rates and information, apply at 826 Main Street Ballard and Exchange Hotel, or at company's Office, Broad Street and Sixteenth

A. H. PERRY, General Sup't.

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☞ *SEND FOR TESTIMONIALS.* ☜

This paint has been *tested* in all sections of the country, and is a *reliable* article, one gallon covers 200 square feet of tin or iron. Felt roofs can be made durable, and *water tight* at a small expense. The paint never cracks nor scales off.

☞ *CONTAINS NO TAR* ☜

And is supplied, mixed *ready for use, at 80 cents a gallon.* *Warped* shingles it brings to their places *decaying* ones it *preserves* for many years and will

☞ *SAVE EXPENSE OF RESHINGLING* ☜

Giving the entire roof the *ornamental* appearance and *fire proof* qualities of *slate itself.*

Send for circular containing full particulars and references.

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July—3t.