

Editor of Charleston Mercury.

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AN

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ON THE OPPOSITE RESULTS OF

EXHAUSTING AND FERTILIZING
SYSTEMS OF AGRICULTURE,

READ BEFORE

THE SOUTH-CAROLINA INSTITUTE,

AT ITS

FOURTH ANNUAL FAIR,

NOVEMBER 18TH, 1852.

BY EDMUND RUFFIN, Esq.,

OF VIRGINIA.

CHARLESTON:

STEAM POWER PRESS OF WALKER AND JAMES.

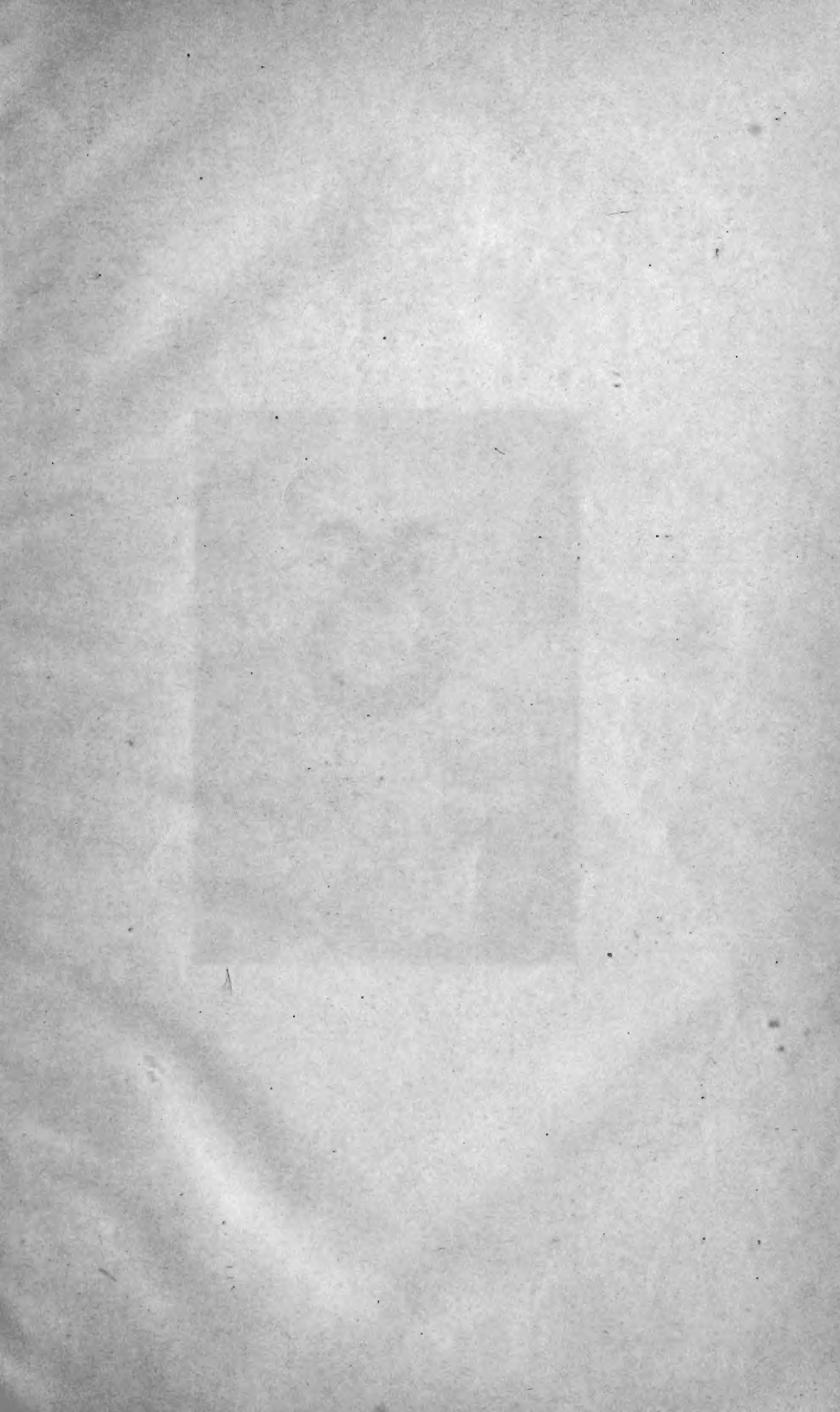
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A D D R E S S .

[A LARGE and intelligent audience assembled at Hibernian Hall, to hear the Agricultural Address of EDMUND RUFFIN, Esq., of Virginia. During its delivery, great interest was manifested, and at the conclusion a resolution was offered by Col. E. M. SEABROOK, to the effect that the thanks of South Carolina are due, and that the thanks of the South Carolina Institute are tendered to Mr. RUFFIN, for the able address delivered before the Institute that evening, and that a copy of the same be requested of him for publication by the Institute. The resolution was unanimously adopted.]

UPON this occasion, I am much gratified to renew with a portion of the people of South Carolina, a personal acquaintance, first begun about ten years ago, and which has long been suspended by remote separation. At that time, the unexpected and unsought for honour conferred on me, when personally an entire stranger to your country, and to nearly all its inhabitants, of an important public charge, induced me, at much personal sacrifice of interest, of ease, and of domestic comforts, to leave my home and family, and to devoté a year to a zealous effort to promote the agricultural improvement of your country. But however sanguine were my early hopes, and zealous the exertions, and faithful the performance of the service undertaken, I was greatly disappointed by the failure of the expected results. From the time of my resignation of the office of State Agricultural Surveyor, and retirement from the duties, it has continued to me a subject of painful reflection, that I failed to earn the great and most grateful recompense I had hoped for—the inducing the people of this State to begin, in earnest and properly, to use their wonderfully abundant and valuable resources for the improvement of their lands—and in rendering this benefit to them, to acquire for myself some just claim to be deemed a public benefactor. I may venture to acknowledge the promptings of this kind of ambition, at the same time with the failure of its object. No other kind, nor the ordinary

objects of ambition, would have drawn me from my private pursuits and my home.

Again, and after a long interval, a somewhat similar honour has now brought me to this place, and before this assemblage, in the invitation of the South Carolina Institute, to deliver the Agricultural Address at its Annual Meeting and Exhibition. The continued feeling of respect and regard for your people—the unabated wish to promote their best interests—the still surviving ambition (however feebly now encouraged by hope,) of adding to my own reputation by the performance of good and enduring service to your country and to mankind—all have co-operated again to draw me to this scene and to this effort. The honorary and transient, and altogether agreeable service now undertaken, is, indeed, a continuation of the former service of protracted labour and exertion, and of peril to health; and the present occasion will be used to urge the same great objects as were sought formerly.

It is, perhaps, superfluous for me to tell this audience, that I am as unaccustomed as unqualified to speak before public assemblages. I have not the ability, nor the habit of attempting to frame or to utter the language of eloquent declamation—nor can I even offer to my hearers the ordinary smoothness and fluency of words of common-place speakers. Therefore, I shall not affect or attempt the accomplishments of the orator, which are so far beyond my reach; but will simply and plainly state my general views of the importance, and the available profit, and other benefits to South Carolina, of the preservation and improvement of the fertility of her soil.

In treating this general subject, my difficulty is not what to say that would be pertinent and important, but to avoid repeating what I have stated and urged upon former occasions. Were I to frame a discourse deemed by me the most suitable to my object, and without reference to similar views of mine being extant, (though probably now forgotten, if ever known to any of this audience,) I should but repeat, in different manner, the opinions and precepts which I long ago uttered, and endeavoured to urge upon the consideration of your countrymen.* There

* Many of the earlier written opinions here referred to, are scattered through different volumes of the "Farmer's Register." A later and much more elaborate article was presented in my "Report of the Commencement and Progress of the Agricultural Survey of South Carolina." Some of my views in reference to the improvement of barren pine lands, and the draining and reclaiming of river swamps, which I deemed not well enough digested, or the facts on which they were founded too little known, (because of my slight opportunities for observation,) to be included in my report, were subsequently written to the Hon. Whitmarsh B. Sea-

is not, then, much left for me to offer of new as well as original views. But though the great objects of my recommendation will not be novel, the grounds or reasons urged for their adoption, will be mainly of latter occurrence. The particular object of the address which will now be read, is to exhibit in full, and place in contrast, the opposite results on a country and people, of exhausting and improving systems of Agriculture.

In every feeling and opinion there is no more true and zealous Southerner than myself. I have long studied the domestic life and institutions, and social and moral condition of the people of the slave-holding States, and in every important respect, I may truly say, that I concur with, approve, and sympathize with yourselves on these subjects. Yet it is my present design and business not to treat of our many points of perfect agreement of opinion, but of the few of difference; not to speak of your laudable works, but your errors; and to apply to the planters of South Carolina, censure where deserved, as readily as I would applaud them in other respects, which have no relation to my present general subject. Even in the general system of southern agriculture, in which there is so much to condemn, I cannot but admire the energy and intelligence exercised by the cultivators to attain the object usually sought—which is to draw from the land the greatest *immediate* production and profit. If their object were instead, as it ought to be, the greatest *continued* products and profits, and that object were pursued with as much ability, the people of South Carolina would soon stand in as exalted a position of agricultural success, as now and heretofore, for social and moral qualities, as men and citizens. Even for the few years which have passed since I investigated and reported upon your abundant resources for fertilization, and urged their use, if these means had been properly applied, already the agricultural production of half the arable lands of the State might have been increased full fifty per cent. I may dare to express this opinion, inasmuch as on a newly purchased farm, I have myself more than tripled that amount of increase by the means recommended, and within the same short time since uttering the precepts for the like improvement here.

The great error of southern agriculture is the general practice of exhausting culture—the almost universal deterioration of the productive power of the soil—which power is the main and essential foundation of all agricultural wealth. The merchant, or manufacturer, who was using

brook, then Governor of the State, at his especial request—and were embodied in his “Essay on the Agricultural Capabilities of South Carolina,” which was addressed to the State Agricultural Society, and published in 1848.

(without replacing) any part of his capital to swell his early income—or the ship-owner, who used as profit all his receipts from freight, allowing nothing for repairs, or deterioration of capital—would be accounted by all as in the sure road to bankruptcy. The joint-stock company that should (in good faith, as many have done by designed fraud,) annually pay out something of what ought to be its reserved fund, or of its actual capital, to add so much to the dividends, would soon reach the point of being obliged to reduce the dividends below the original fair rate, and, in enough time, all the capital would be so absorbed. Yet this unprofitable procedure, which would be deemed the most marvellous folly in regard to any other kind of capital invested, is precisely that which is still generally pursued by the cultivators of the soil in all the cotton producing States, and which prevailed as generally, and much longer in my own country, and which, even now, is more usual there than the opposite course of fertilizing culture. The recuperative powers of nature are indeed continually operating, and to great effect, to repair the waste of fertility caused by the destructive industry of man, and but for this natural and imperfect remedy, all these Southern States, and most of the Northern likewise, would be already barren deserts, in which agricultural labours would be hopeless of reward, and civilized men could not exist.

Let me not be understood as extending censure to all southern agriculture, and charging this great defect as being universal. It is truly very general—but there are numerous exceptions, of which it is not my purpose to treat. My present business is with the errors and defects of southern agriculture, and not with its points of admitted excellence—as, for example, the elaborate system of rice culture, and, for other tillage, the very general and commendable attention paid to the collection of materials for putrescent manures. Nothing has appeared to me more remarkable in the agriculture of this region, than the close neighbourhood, (often, indeed, seen on the same property,) of the best husbandry, in some respects, and almost the worst in most others.

The great error of exhausting the fertility of the soil is not peculiar to cotton culture, or to the Southern States. It belongs, from necessity, to the agriculture of every newly settled country, and especially where the land, before being brought under tillage, was in the forest state. When first settled upon, forest land costs almost nothing, and labour is scarce and dear. Even if labour is more abundant, it still will be long before enough land can be cleared to allow changes of culture and rest to the fields; and for some years after each new clearing, it would be even beneficial to continue the tillage of corn, tobacco or cotton, so as

effectually to kill all remains of the forest growth. But as soon as enough land can be brought under culture, and has been put in clean condition, so as to allow space for change of crops and due respite from continual tillage, the previous exhausting course will no longer be best even for early profit. Even in a new country, while land is yet fertile, it is cheaper to preserve that fertility from any exhaustion, than it is to reduce it considerably. And in an older agricultural country, like South Carolina, having abundant resources in marl and lime for improving fertility, it would be much cheaper, and more profitable, to improve an acre of before exhausted land, than it is to clear and bring under culture an acre of ordinary land from the forest state, allowing that both pieces are to be brought to the same power and rate of production.

New settlers are not censurable for beginning this exhausting culture. But they and their successors are not the less condemnable for continuing it after the circumstances which justified it have ceased. The system was first begun in Eastern Virginia, because it was the first settled part of the present United States, and it continued to prevail almost universally, until since the course of my adult life began, and only has partially ceased since, because the country was nearly reduced to barrenness and the proprietors to ruin. From this erroneous policy, so long pursued in Virginia, and the manifest and well known disastrous results in the general and seemingly desperate sterility of the older settled portion of the State, the younger Southern States might have taken warning, and have learned to profit by the woful and costly experience of others. But it seems that every agricultural community must and will run the same race of exhausting culture, and impoverishment of land and its cultivators, before being convinced of the propriety of commencing an opposite course—after the best means and facilities for making that beneficial change have been greatly impaired by the lapse of time, and progress of waste of fertility—if, indeed, these means are not then irretrievably forfeited.

If, at this time, the work of improvement, with the aid of marl and lime, were properly begun and prosecuted, there would be found here incalculable advantages over those of the pioneers in the like work in Virginia. These advantages would be—first, a tenfold better supply of far richer and cheaper marl than is found in Virginia; second, much more remaining organic matter, or original fertility of the soil, as yet unexhausted; third, full information to be obtained of the operations and opinions of thousands of experienced and successful marlers to refer to, of which advantage there was almost nothing existing thirty years ago. In South Carolina more marling could now be done in a year,

and in a proper manner, than was done in Virginia for the first twenty years; and, though judging merely by analogy, I infer that the benefit would not be less great in this region than in my own.

And now I will state, from unquestionable official documents, something of what has been effected in Virginia, not merely in cases of particular farms, and those entirely marled, which might show tripled or quadrupled products and market returns, and tenfold *intrinsic* value, compared to their former low condition, but cases showing the bearing of the comparatively few marled and limed farms on the aggregate assessed value of all the lands in lower Virginia, and upon the receipts of land tax from the same, although not one-twentieth part of the whole tide-water district has yet been improved in fertility, or is the least better (and, probably, the great remainder is much poorer,) than when the marling of other lands first began to raise the general average of assessed values throughout this whole district.

It appears, from the latest state assessment of lands in Virginia, for 1850, that the actual increase of value in the tide-water district only, since 1838, the previous assessment, was more than seventeen millions of dollars. On this increase of valuation, and at the same rate of taxation, there is more than \$17,000 increase of land tax alone accruing annually to the state treasury. It is obvious that any increased value of lands, caused by their increased production, would necessarily require an increase of labour and of farming stock, and would produce proportional increase of general wealth of the improvers, and would add other receipts from taxes in proportion—all serving still more to augment the public revenue.

The recent addition to the aggregate value of lands in Eastern Virginia, is admitted to be the effect of agricultural improvements; and that more than all the nett increase is due to marling and liming only, would be equally evident, if I could here adduce the proofs, as I have done elsewhere.* Further; though 1838 was the date of the earliest assessment made after marling and liming had begun to increase aggregate production and value of lands, it is an unquestionable fact that the general impoverishment had been greater, and values much lower, about 1828. And if this earlier time and greatest depression had been marked by an assessment then made, the full increased value of lands from that time, would have appeared at least \$30,000,000 in 1850, in-

* In a communication recently made to the State Agricultural Society of Virginia, on "Some of the Results of the Improvement of lands, by Calcareous Manures, on Public Interests in Virginia, in the increase of Production, Population, General Wealth and Revenue to the Treasury."

stead of seventeen and a quarter millions, counting from the already partially advanced improvement and enhanced values of 1838. However, even if these, my deductions and estimates, go for nothing, there will still remain the proof, by official documents, of the actual increase of value of lands in twelve years, of seventeen and a quarter millions, or nearly one and a half millions yearly.

Now bear in mind that these are not the results of the improving of all the tide-water region, nor all of its much smaller arable portion, but, probably, of not more than one-twentieth of the cultivated land. All the remainder, if uncultivated, is stationary; and if cultivated, is generally in a continued course of exhaustion; and the small quantity of enriched land had first to make up for all deficiencies of the impoverished, and lessenings of production throughout the whole tide-water district, and after all such deductions, still exhibited a clear surplus of seventeen and a quarter millions of increased aggregate value. This is the result of but the beginning, and a very recent beginning of measures for improvement, executed in every case imperfectly, often injudiciously, and sometimes injuriously, and altogether on less than one-twentieth of the space on which calcareous manures are available. The great omitted space will hereafter be fertilized in the same manner. Then the actual increase of value of lands, founded on increased production, will be counted by hundreds of millions of dollars. And this anticipated enormous amount of fertility and capital to be created, might have been even now in possession, if our improvements by calcareous manures had been begun thirty years earlier, instead of there having been continued through all that time, the progress of wasting and destroying the remaining powers of the soil. South Carolina began exhausting culture much later, and is now full fifty years less advanced towards the lowest depth of that full descent which we had nearly completed. If that future of fifty years of continued exhaustion could now be cut off, and the improvement of lower South Carolina by calcareous manures could be at once begun and continued, the loss of at least one hundred millions of dollars of now remaining value would be saved, and a gain of three hundred millions from improvement would be reached sooner by the same fifty years. This would be better, by all the great value, than even the following out precisely the first sinking and now rising course of lower Virginia. In that region, the cultivators waited until the fertility of the land had so nearly expired, that it was supposed to be in *articulo mortis*—at the last gasp—before the work of resuscitation was begun.

The comparative results of the opposite systems of improving and

exhausting cultivation may be thus illustrated. Suppose a certain investment of capital will yield twenty per cent. of present annual interest, or nett products, and two persons invest equal amounts in the business. The more provident one draws and spends but fifteen per cent. annually of his income, and leaves the remaining five per cent. to accumulate and to be added to his interest-bearing capital. The other proprietor draws each year, and spends all of the certain and annual average returns of his capital, and five per cent. more of the capital stock itself. He reasons (may I say it ?) like many cotton planters, and infers that so small a detraction from his capital will do no harm, as he will have so much the more of quick returns for immediate use or re-investment. In less than twenty years, one of these individuals will have doubled his original capital, and also his twenty per cent. income, and the other will have exhausted his entire fund.

But it may be said, (as alleged in regard to the squanderers of fertility,) that as the latter person had received so much more of annual returns at first, he might have re-invested and thus have retained his over-draughts of annual products. If a planter—and, of course, his over-draughts had been from the fertility of his land—he might have bought another plantation, to work and to wear out in like manner. But even if so, wherein would be the gain? He would have had the disadvantages of a change of investment, of removal, and making a new settlement. But where one man would so save and re-invest his over-draughts from his capital, two others would use, or, perhaps, spend theirs, as if so much actual clear profit or permanent income. When the land is utterly worn out and the total capital of fertility wasted, (or the small remnant is incapable of paying the expenses of farther cultivation,) it will most generally be found that the channels into which the early full streams of income flowed, are then as dry as the sources.

I do not mean that it necessarily follows that the planter who exhausts his land, also lessens his general wealth. Would that it were so. For, then, such certain and immediate retribution would speedily stop the whole course of wrong doing and prevent all the consequent evils. It may be rarely, and it might be never the case, that the exhauster of land becomes absolutely poorer during the operation. He will have helped to impoverish his country, and to ruin it finally, (by the same general policy being continued,) he will have destroyed as much of God's bounties as the wasted fertility, if remaining, would have supplied forever, and as many human beings as those supplies would have supported, will be prevented from existing. And yet the mighty destroyer

may have increased his own wealth. Nevertheless, he does not escape his own, and even the largest share of the general loss he has caused. While thus destroying, say \$20,000 worth of fertility, the planter, by the exercise of industry, economy and talent in other departments of his business, or from other resources, may have grown richer by \$10,000. But if, as I believe is always true, it is as cheap and profitable to save as to waste fertility, in the whole term of culture, then the planter, in this case, might have gained in all \$30,000 of capital, if he had saved, instead of wasting, the original productive power of his land.

Even if admitting the common fallacy which prevails in every newly settled country, that it is profitable to each individual cultivator to wear out his land, still, by his doing so, and all his fellow proprietors doing the like, while each one might be adding to his individual wealth, the joint labours of all would be exhausting the common stock of wealth, and greatly impairing the common welfare and interest of all. The average life of a man is long enough to reduce the fertility of his cultivated land to one half, or less. Thus, one generation of exhausting cultivators, if working together, would reduce their country to one half of its former production, and, in proportion, would be reduced the general income, wealth and means of living, population and the products of taxation, and, in time, would as much decline the measure of moral, intellectual and social advantages, the political power and military strength of the commonwealth. The destructive operations of the exhausting cultivator have most important influence far beyond his own lands and his own personal interests. He reduces the wealth and population of his country and the world, and obstructs the progress and benefits of education, the social virtues, and even moral and religious culture. For upon the productions of the earth depends more or less the measure to be obtained, by the people of any country, of these and all other blessings which a community can enjoy. There is, however, one very numerous class of exceptions to this general rule, which is, when an agricultural people, or interest, is tributary to some other people or interest, whether foreign or at home. Such exceptions are presented in different modes, by the agriculture of Cuba being tributary to Spain, of many other countries to their own despotic and oppressive home governments; and of the southern states of this confederacy, to greater or less extent, to different pauper and plundering interests of the northern states, which, through legislative enactments, have been mainly fostered and supported by levying tribute upon southern agriculture and industry.

The reason why such woful results of impoverishment of lands, as

have been stated, are not seen to follow the causes, and speedily, is that the causes are not all in action at once and in equal progress. The labours of exhausting culture, also, are necessarily suspended, as each of the cultivators' fields is successively worn out. And when tillage so ceases, and any space is thus left at rest, nature immediately goes to work to recruit and replace as much as possible of the wasted fertility, until another destroyer, after many years, shall return again to waste, and in much shorter time than before, the smaller stock of fertility so renewed. Thus, the whole territory so scourged, is not destroyed at one operation. But though these changes and partial recoveries are continually, to some extent, counteracting the labours for destruction, still the latter work is in general progress. It may require (as it did in my native region,) more than two hundred years from the first settlement, to reach the lowest degradation. But that final result is not the less certainly to be produced by the continued action of the causes. I have witnessed, at home, nearly the last stage of decline. But I have also witnessed, subsequently, and over large spaces, more than the complete resuscitation of the land, and great improvement in almost every respect, not only to individual, but to public interests; not only in regard to fertility and wealth, but also in mental, moral and social improvement.

Inasmuch as my remarks would seem to ascribe the most exhausting system of cultivation especially to the slave-holding States, the enemies of the institution of slavery might cite my opinions, if without the explanation which will now be offered, as indicating that slave labour and exhausting tillage were necessarily connected as cause and effect. I readily admit that our slave labour has served greatly to facilitate our exhausting cultivation; but only because it is a great facility—far superior to any found in the non-slaveholding States—for all agricultural operations. Of course, if our operations are exhausting of fertility, then certainly our command of cheaper and more abundant labour enables us to do the work of exhaustion, as well as all other work, more rapidly and effectually. But if directed to improving, instead of destroying fertility, then this great and valuable aid of slave-labour will as much more advance improvement, as it has generally heretofore advanced exhaustion. The enunciation of this proposition is perhaps enough. But if any, from prejudice, should deny or doubt its truth, they may see the practical proofs on all the most improved and profitable farms of Lower and Middle Virginia. On the lands of our best improvers and farmers, such as Richard Sampson, Hill Carter, John A. Selden, William B. Harrison, Willoughby Newton, and many others, slave-labour is used

not only exclusively and in larger than usual proportion, (because more required on very productive land,) but is deemed indispensable to the greatest profits, and operating to produce more increase of fertility, and more agricultural profit, than can be exhibited from any purely agricultural labours and capital north of Mason and Dixon's line.

There is another and stronger reason for the greater exhausting effects of southern agriculture, and, therefore, of tillage by slave-labour. The great crops of all the slave-holding States, and especially of the more southern—corn, tobacco and cotton—are all tilled crops. The frequent turning and loosening of the earth by the plough and hoe—and far more, when continued without intermission year after year—advance the decomposition and waste of all organic matter, and expose the soil of all but the most level surfaces to destructive washing by rains—and rains the more heavy and destructive in power, in proportion as approaching the south. The northern farmer is guarded from the worst of these results, not because he uses free-labour, but because his labour is so scarce and dear that he uses as little as possible for his purposes. Besides this consideration, his climate is more suitable to grass than to grain, and his other large crops are much more generally broad-cast than tilled. These are sufficient causes why, in general, the culture of land in the Northern States should be less-exhausting than in the Southern, without detracting anything from the superior advantages which we of the South enjoy, in the use of African slave-labour.

At the risk of uttering what may be deemed trite or superfluous to many of those who now honour me by their attention I beg leave to state concisely, the fundamental laws, as I conceive them to be, of supply and exhaustion of fertilizing matters to soils, and aliment to plants.

All vegetable growth is supported, for a small part, by the alimentary principles in the soil, (or by what we understand as its fertility,) and partly, and for much the larger portion, by matters supplied, either directly or indirectly, from the atmosphere. More than nine-tenths usually of the substance of every plant is composed of the same four elements, three of which, oxygen, nitrogen and carbon, compose the whole atmosphere. The fourth, hydrogen, is one of the constituent parts of water; and, also, as a part of the dissolved water, hydrogen is always present in the atmosphere, and in great quantity. Thus, all these principal elements of plants are superabundant, and always surrounding every growing plant; and from the atmosphere, (or through water in the soil) very much the larger portion of these joint supplies is furnished to plants; and so it is of each particular element, except nitrogen; much the smallest ingredient, and yet the richest and most important

of all organic manuring substances, and of all plants. This, for the greater part, if not for all of its small share in plants, it seems is not generally derived even partially from the air, though so abundant therein, but from the soil, or from organic manures given to the soil.

But though bountiful nature has offered these chief alimentary principles and ingredients of vegetable growth in as inexhaustible profusion as the atmosphere itself, which they compose, still their availability and beneficial use for plants are limited, in some measure, to man's labours and care to secure their benefits. Thus, for illustration, suppose the natural supplies of food for plants furnished by the atmosphere to be three-fourths of all received, and that one-fourth only of the growth of any crop is derived from the soil and its fertility. Still, a strict proportion between the amount of supplies from these two different sources, does not the less exist. If the cultivator's land, at any one time, from its natural or acquired fertility, affords to the growing crop alimentary principles of value to be designated as five, there will be added thereto other alimentary parts, equal to fifteen in value, from the atmosphere. The crop will be made up of, and will contain, the whole twenty parts, of which five only were derived from, and served to reduce, by so much, the fertility of the soil. These proportions are stated merely for illustration, and, of course, are inaccurate. But the theory or principle is correct; and the law of fertilization and exhaustion, thence deduced, is as certainly sound.

Then, upon these premises, there is taken from the land, for the support of the crop, but one-fourth of the aliment derived from all sources for that purpose. And, if no other causes of destruction of fertility were in operation, one green or manuring crop, (wholly given to the land and wholly used as manure,) would supply to the field as much of alimentary or fertilizing matter as would be drawn thence by three other crops, removed for consumption or sale. But in practice there *are* usually at work important agencies for destruction of fertility, besides the mere supply of aliment to growing crops. Such agencies are, the washing off of soluble parts, and even the soil itself, by heavy rains, the hastening of decomposition and waste of organic matter, by frequent tillage processes and changes of exposure—and ploughing or other working of land when too wet, either from rain or want of drainage. Also, a cover of weeds left to rot on the surface, or any crop ploughed under, green or dry, as manure, is subject to more or less waste of its alimentary principles, in the course of the ensuing decomposition. Therefore it is nearer the facts, that two years' crops or culture, for market or removal, would require one year's growth of some manuring crop to replace and to maintain undiminished, or increasing,

the productive power of the field. The poorest and also the 'cheapest of such manuring crops, will be the natural or "volunteer" growth of weeds on land left uncultivated, and not grazed; and the best of all will be furnished in the whole product of a broad-cast sown and entire crop of your own most fertilizing and valuable field peas.

Thus, of each manuring crop, (as of all others,) or of the fertilizing matter thus given to the land, the cultivator has contributed but five parts from the land, or its previous manuring, and the atmosphere has supplied fifteen parts. If, then, the cultivator by still more increasing his own contributions, will give ten parts of alimentary matter to the land and crop, there will be added thereto from the atmosphere in the same three-fold proportion, or thirty parts, and the whole new productive power will be equal to forty. And if the soil is fitted by its natural constitution, or the artificial change induced by calcareous applications, to fix and retain this double supply of organic matter, the land will not only be made, but will remain, as of much increased fertility, under the subsequent like course of receiving one year's product for manure, for every two other crops removed. But, on the other hand, if more exhausting culture had been allowed, instead of either increased or maintained production—or if the crops take away more organic matter than nature's three-fold contributions will replace—then a downward progress must begin, and will proceed, whether slowly or quickly, to extreme poverty of the land, its profitless cultivation, and final abandonment. In this, the more usual case, the cultivator's contributions of aliment, (obtained from the soil,) are reduced from the former value, designated as five, first to four, and next successively to three, two, and finally less than one; and nature keeps equal pace in reducing her proportional supplies, from fifteen, first to twelve, and so on to nine and six, and less than three parts. So the strongest inducement is offered to enrich, rather than exhaust the soil. For whatever amount of fertility the cultivator shall bestow, or whatever abstraction from a previous rate of supply he shall make, either the gain or the loss will be tripled in the account of supplies from the atmosphere, furnished or withheld by nature.

In another and more practical point of view, the loss incurred by exhausting culture, may be plainly exhibited. According to my views, (elsewhere fully stated,*) soils supposed to be properly constituted as

* In a recent communication to the Virginia State Agricultural Society, entitled "New Views of the Theory and Laws of Rotation of Crops, and their practical application." These views I deem especially applicable to the agricultural condition of South-Carolina, and of importance next to the main subject of the present address.

to mineral ingredients, do not demand for the maintaining and increasing of their rate of production, more than the resting or the growth of two years in every five; mainly to be left on the land as manure. These are the proportions of the five-field rotation, now extensively used on the most improving parts of Virginia. And one of these two years the field is grazed, so that parts of its growth of grass is consumed, instead of all remaining on the field for manure. To meet the same demands, the more southern planter might leave his field to be covered by its growth of weeds (or natural grasses) one year, (and also to be grazed,) and a broad-cast crop of pea-vines to be ploughed under in another for every three crops of grain and cotton. But the ready answer to this, (and I have heard it many times,) is, "What! lose two crops in every five years? I cannot afford to lose even one." It may be that the planter is so diligent and careful in collecting materials for prepared manure, that he can extend a thin and poor application, and in the drills only, over nearly half his cotton field; and perhaps he persuades himself that this application will obviate the necessity for rest and manuring crops to the land. The result will not fulfil this expectation. But even if it could, the manuring thus given directly by the labour of the planter, is more costly than if he would allow time and opportunity for nature to help to manure for him—whether alone, or still better if aided by preparing for and sowing the native pea, to the production of which your climate is so eminently favourable. All the accumulations of leaves raked from the poor pine forest, with the slight additional value which may be derived from the otherwise profitless maintenance of poor cattle, will supply less of food to plants, and at greater cost, than would be furnished by an unmixed growth of peas, all left to serve as manure.

The native or southern pea, (as it ought to be called) of such general and extensive culture in this and other, as Southern States, is the most valuable of manuring crops, and also offers great and peculiar advantages as a rotation crop. Theseeds, (in common with other peas and beans,) are more nutritious as food, for man and beast, than any of the cereal grains. The other parts of the plant furnish the best and most palatable provender for beasts. The crop may be so well made, in your climate, as a secondary growth under corn, that it is never allowed to be a primary crop, or to have entire possession of the land. It will grow well broad cast, and either in that way, and still better if tilled, is an admirable cleansing growth. It is even better than clover as a preparing and manuring crop for wheat. In one or other of the various modes in which the pea-crop may be produced, it may be made to suit well in a rotation with any other crops. Though for a long time I had

believed in some of the great advantages of the pea crop, and had even commenced its culture as a manuring crop, and on a large scale, it was not until I afterwards saw the culture, growth and uses in South-Carolina, that I learned to estimate its value properly, and perhaps more fully than is done by any who, in this State avail themselves so largely of some of its benefits. Since, I have made this crop a most important member of my rotation; and its culture, as a manuring crop, has now become general in my neighbourhood, and is rapidly extending to more distant places. If all the advantages offered by this crop were fully appreciated and availed of, the possession of this plant in your climate would be one of the greatest agricultural blessings of this and more Southern States. For my individual share of this benefit, stinted as it is by our colder climate, I estimate it as adding, at least, one thousand bushels of wheat annually to my crop.

From this digression to a particular branch, I will now return to the general subject, of the neglect of rest and manuring crops, for land.

The incessant cultivator does not the less rest, and lose the use of his land, by refusing any cessation of tillage so long as he can avoid it. If such cultivators manure so abundantly that there is no general decline of production, then they do not come under my past remarks and censure. If there be any such, I will only say of their mode of maintaining fertility, that it is less effectual and more costly, than if aided and substituted in part by manuring crops and a judicious rotation of crops. But as to many other planters, who, whether slowly or rapidly, are certainly impoverishing their lands, they will, at some future period, be compelled to allow a greater proportion of time for the land to rest, and to greater disadvantage, and less profit, than if allowing regularly either one year in three or two in five. Suppose the land to yield cotton, (or sometimes corn,) continuously for thirty, or even forty years—or, with much manuring, sixty years. In such cases, it is true, there were as many crops obtained as the land was kept years for tillage. But after the first few years, the products were declining; and for the last five or ten years, on the general average, they scarcely paid more than the expenses of cultivation. The crops also suffered during the whole time the evils of a want of rotation, and the land of want of change of condition. At the close, the land must be turned out to rest, because manifestly, not worth longer cropping. This compelled cessation and rest will continue for twenty, thirty, or forty years, when the land will be again cleared of its second (or perhaps its third) growth of trees; and with this and other extra labours, will be again brought under continued tillage, to be again, and much more speedily, exhausted of its

smaller recovered amount of productive power. In this manner, though at long intervals, more than the full proportion of rest, required by an improving system of rotation, is given to the land, and enforced by its exhaustion; and the manner is such as to make the least return of benefit for the greatest expense incurred for the respite of the land from cultivation.

My former engagement in South-Carolina, and the then especial object of my investigations and labours, served to make me better acquainted with a large portion of your territory than any other as extensive elsewhere. From that acquaintance was derived the opinion, which I have since asserted and still maintain, that no other as extensive region, known to me, possesses half as great advantages and resources for agricultural improvements, or more needs the employment of these means. The proper and full use of your wonderfully abundant, rich and easily accessible marl, and the recent shells and other marine remains, offer the best principle and indispensable means of fertilization, and which are available for half your territory. Another great resource, and almost as much neglected, is presented in your great inland swamps, now only wide-spread seed-beds of disease, pestilence and death; and which, by drainage, with certainty and great profit, might be converted into dry fields of exuberant fertility. It is true, that existing legal obstacles oppose these extensive plans for drainage; but these difficulties might be removed by wise legislation, with great benefit to the interests of all concerned—and improvements might be permitted and invited which would render these now worthless and pestilential swamps as fruitful as the celebrated borders of the Po.

The draining of the inland swamps of rich alluvial soil, together with the general application of marl to these and also to the now cultivated higher ground, would go far to remove the long prevailing unhealthiness to which Lower South-Carolina is subject, and which is the only important evil which is not entirely in the power of the inhabitants to remedy. I will not presume to say how far this great evil may be lessened by these works of industry and improvement. But, when so much of your country consists of low and wet swamp, and of partially wet, higher lands, and all easy to be drained, it does not seem over-sanguine to suppose, that, with such drainage and the general extension of the also sanitary operation of marling and liming, the country would be as much improved in healthiness, as in fertility. Such change to greater healthiness has been most marked in my own country, in the extensively marled neighbourhoods, even where there has been no considerable draining operations executed or required. This improvement of

health, is ascribed by all who have experienced the beneficial change, mainly to the sanitary influence of the now calcareous soil.

Your extensive and rich river swamp lands offer another great object for improvement, and increase of agricultural profit and wealth. Even "sandy pine barrens," now unfit for tillage, or for any useful production, other than the magnificent pine forests which cover them, if made calcareous and put under Bermuda grass, (the curse of tillage lands so infested) would be made as valuable land for pasturage, as the equally barren chalk downs of England.

Your high lands are mostly level, or of gently undulating surface, and easy to till, and the soils generally well suited to your great staple crops, corn and cotton. The navigable rivers which pervade Lower South-Carolina, in their number and character, present a remarkable geographical feature, as singular as it is valuable. The main canals required for extensive drainage of the inland swamps, would be so many additions to the existing navigable highways. So low are the intervening swamp lands, that nearly all the deep navigable rivers, might be connected by canals of level or nearly level water; and in that respect, Lower South-Carolina might possess the peculiar facilities of Holland for extensive inland navigation. These connecting canals, by diverting some of the superfluous supply of fresh waters of some rivers, to others where it is deficient, might perhaps serve to extend greatly the present area of tide covered land, capable of being flooded for rice culture. If such canals, mainly for drainage, but serving also for navigation, were made to connect the Edisto with the Ashley, the Cooper and the Santee, there would be another incidental advantage as remarkable as it would be valuable. The excavation of the canals through the great swamps, (and certainly between those stretching from the Ashley nearly to the Santee,) would generally penetrate into marl of the richest quality, lying a few feet below the surface of the swamps. If duly appreciated, this rich calcareous earth, to be used as manure, would go far to reimburse the costs of the excavation; and if used for lime-burning, would furnish good lime, and at one-third of the price of that for which South-Carolina has paid and continues to pay millions of dollars to the lime-burners of New-England. This voluntary tribute, at least, which is one of so many unnecessarily paid by the South to the North, might be ended to the immediate and great profit of both the sellers and the buyers of the substituted lime, made of the abundant, cheap and excellent native material. The buying of Northern lime by South-Carolina and Georgia, is as unprofitable and as absurd a procedure as the usage of importing Northern hay. But of these and of many similar things,

we of the South have no right to blame any but ourselves. All the commodities which we import from the Northern States, and which might be more cheaply provided at home, serve indeed to make up an enormous amount of annual tribute. But this part of our general burden is fairly and properly levied by northern enterprise and industry upon southern listlessness and indolence. Very different, however, is the case as to the far greater proportion of the general amount of tribute paid by southern to northern interests—from which we have no defence, because government induces and enforces the payment, by the legislative machinery of protecting duties and the indirect bounty system. But I am straying from my designed subject, the improvement of southern agriculture to its governmental and political oppression.

Putting aside all speculative and untried subjects and modes of improvement—and counting upon nothing more than the proper use of your calcareous manures and judicious tillage, and the early results of both—and supposing that your country should be so benefitted only in the same degree as has been the small portion of mine already marled or limed—the most moderate estimate of the agricultural values so to be created would now appear to you to be so greatly exaggerated as to be altogether incredible. But however much I would desire to avoid the position of a discredited witness, I will not be restrained by that fear from stating general results, which are notorious in Virginia, and to sustain the truth of which, thousands of particular facts can be adduced. These results, susceptible of clear proof, or exhibited by official documents, are that thousands of farms have been doubled or tripled, and some quadrupled in production, and the general wealth of their proprietors as much increased—the assessed values of marled lands increased by many millions of dollars, while those of similar lands, not so treated, have continued to decline as all did before; and the treasury of the commonwealth is already benefitted by many thousands of dollars received annually from the counties containing these improved lands, and derived from them, while the revenue from lands of the neighbouring and before similar counties, is still decreasing.

So far, I have spoken as to benefits which have already occurred, and which are unquestionable, and which have been derived from resources and facilities for improvement not to be compared in amount and value with those of South-Carolina. I have elsewhere estimated the possible future and full fruition of this system of improvement, in Lower Virginia only, at five hundred millions of dollars of increased pecuniary value of capital thereby to be created. The full employment of your much greater resources of this kind, and over as wide a surface, would not be

worth less. Then your other great resources, which have been named but not estimated, would be so much more in addition.

But agricultural production and pecuniary values are not the only or the greatest gains; and though others rest upon opinion only, and are incapable of being measured, their existence and their value are not the less acknowledged by all judicious observers, in our country most improved in agricultural production by calcareous manures. The improvement of health has been mentioned; the improvement of economical and social habits, morals and refinement, and better education for the growing generation, have been sure consequences of greatly increased and enduring agricultural profits; and these moral results will hereafter be increased, in full proportion to the physical and industrial producing causes. Population, though a later effect, is already sensibly advanced by these agricultural causes. The strength, physical, intellectual and moral, as well as the wealth and revenue of the commonwealth of Virginia, will soon derive new and great increase from the growing improvement of that one and smallest of the great divisions of her territory, which was the poorest by natural constitution—still more the poorest by long exhausting tillage—its best population gone, or going away, and the remaining portion sinking into apathy and degradation, and having no hope left, except that which was almost universally entertained of fleeing from the ruined country, and renewing the like work of destruction on the fertile lands of the far west. Terms of reproach and contempt, (once not undeserved,) have been so long and so freely bestowed on this tide-water region of Virginia, and had become so fixed by use, that it will be long before they will cease to be deemed applicable; or before many persons who now know this region, only by the memory of former report, will learn that it is not altogether a land of galled and gullied slopes, or broomsedge-covered fields, over whose impoverished and dwindling population, indolence and malarious disease contend for mastery.

From these matters, referred to for proof or illustration, I return to my main subject, more immediately connected with, and more likely to be interesting to my auditors.

There is not one of the industrial classes of mankind, more estimable for private worth and social virtues, than the landholders and cultivators of the Southern States. With them, unbounded hospitality is so universal, that it is not a distinguishing virtue—and in truth, this virtue has been carried to such excess, as to become a vicious tendency. Honourable, high-minded, kindly in feeling and action, both to neighbours and to strangers—ready to sacrifice self-interest for the public

veal—such are ordinary qualities and characteristics of southern planters. Many of the most intelligent men of this generally intelligent class, are ready enough to accept and to apply to themselves and their fellow planters, the name of “land killers.” But while thus admitting, or even assuming this term of jocose reproach, they have not deemed as censurable or injurious, their conduct on which this reproach was predicated. They have regarded their “land-killing” policy and practice merely as affecting their own personal and individual interests—and if judged by their continued action, they must believe that their interests are thereby best promoted. Their error, in regard to their own interests, great as may be, is incomparably less than the mistake as to other and general interests not being thus affected. As I have already admitted, individuals may acquire wealth by this system of impoverishing culture, though the amount of accumulation is still much abated by the attendant waste of fertility. But with the impoverishment of its soil, a country, a people, must necessarily and equally be impoverished. Individual planters may desert the fields they have exhausted in South-Carolina, and find new and fertile lands to exhaust in Alabama. And when the like work of waste and desolation is completed in Alabama, the spoilers, (whether with or without retaining a portion of the spoils,) may still proceed to Texas or to California. But South-Carolina and Alabama, must, nevertheless, suffer and pay the full penalty of all the impoverishment so produced. The people, who remain to constitute these States respectively, as communities, are not spared one tittle of the enormous evils produced—not only those of their own destructive labours, but of all the like and previous labours of their fellow-citizens and predecessors who had fled from the ruin which they had helped to produce. And these evils to the community and to posterity, greater than could be effected by the most powerful and malignant foreign enemies of any country, are the regular and deliberate work of benevolent and intelligent men, of worthy citizens, and true lovers of their country.

I will not pursue this uninviting theme to its end—that lowest depression which surely awaits every country and people subjected to the effects of the “land-killing” policy. The actual extent of the progress toward that end, throughout the Southern States, ought to be sufficiently appalling, to induce a thorough change of procedure and reformation of the agricultural system of the South.

In addition to all increase of the other benefits of agricultural improvement which have been cited—pecuniary, social, intellectual and moral—there would be an equal increase of political power, both at home and abroad, which at this and the near approaching time, would

be especially important to the well-being and the defence of the Southern States, and the preservation of their yet remaining rights, and always vital interests. If Virginia, South Carolina, and the other older slave-holding States, had never been reduced in productiveness, but, on the contrary, had been improved according to their capacity, they would have retained nearly all the population they have lost by emigration, and that retained population, with its increase, would have given them more than a doubled number of representatives in the Congress of the United States. This greater strength would have afforded abundant legislative safeguards against the plunderings and oppressions of tariffs to protect Northern interests—compromises (so-called) to swell Northern power—pension and bounty laws for the same purposes—and all such acts to the injury of the South, effected by the greater legislative strength of the now more powerful, and to us, the hostile and predatory States of the confederacy. Even after Virginia, with more than Esau like fatuity, had sacrificed her magnificent north-western territory, which now constitutes five great and fertile States, (and a surplus to make, by legislative fraud, a large part of a sixth State,*) and all of which are now among the most hostile to the rights of the people of the South—if Virginia had merely retained and improved the fertility of her present reduced surface, her people would not have removed. Their descendants would now be south of the Ohio, ready and able to maintain the rights of the Southern States, instead of a large proportion, as now, serving to swell the numbers, and give efficient power to our most malignant enemies. The loss of both political and military strength, to Virginia and South Carolina, are not less than all other losses, the certain consequences of the impoverishment of their soil.

If it were possible that, for all lower South-Carolina, the system of improvement could be directed by one mind and will, as much as the

*A condition made by the Government of Virginia, in the act of cession, to the United States of all her north western territory, was that this territory should afterwards be divided into not more than five new States. Five have already been carved out of this great domain, Ohio, Indiana, Illinois, Michigan and Wisconsin, and a space of 22,336 square miles remains, in the new territory of Minnesota, which will hereafter constitute so much of another State, in violation of the act of cession by Virginia, and of the faith of the present Federal Government, and in which space, with all the north-western territory, slavery was interdicted by the ordinance of 1787, of the Confederation. This space of 22,336 square miles, which ought to have been included in the five anti-slavery States already formed, but which will go to constitute a sixth, is nearly as large as South Carolina, and larger, by nearly 1000 square miles, than the united surfaces of New Hampshire, Massachusetts and Connecticut.

operations of any one great individual estate, the most magnificent results could be obtained, with great and certain profit, and in a few years. Without any additional labour or capital, more than now possessed, for beginning the improvement—and with only the subsequent increase of means which would be supplied by the clear profits of the improvements as they became productive—most of the lands accessible to marl or lime could be covered by these manures in ten years. In twenty years from this day, all such lands could be thus improved, and, by that time, might yield doubled or tripled general products, and would exhibit a proportionally greater increase of value as capital. The new clear profits of this one great improvement would be enough in amount to effect all the practicable drainage of inland and river swamps in twenty years more. Or, in that additional time, the increased revenue of the State treasury, from these new sources only, would suffice to construct all the great works of drainage, which would be beyond the means of individual proprietors.

In all opinions expressed as to the value and effects of the agricultural improvements proposed for South-Carolina, my data are the experienced and unquestionable results of like labours in Virginia. The legitimate deductions, and the only one for untried operations, is that like causes will produce like effects in both these different localities. I cannot conceive any reason, founded on existing differences of climate, soil or subjects of culture, that can make calcareous manures less efficient, or less profitable, with you than with us. Nevertheless, I have learned from mere rumor, that in the small extension of their use, by new operators, which occurred here, there was no general and important benefit obtained. And such, I must infer, was the conclusion reached by nearly all the makers and observers of these trials, from the irresistible, though negative evidence (which only is before me,) that nothing considerable of such improvements, or of public notoriety, has been effected in latter years. In the absence of all particular information of the actual trials, their results and the accompanying circumstances, of course I cannot pretend or be expected to explain the causes of disappointment, which must be the general result, as it seems that marling has languished, if not ceased, in general, after a few faint efforts.* But I infer that the main and usual cause of supposed failure, or of inconsiderable benefit, has been the same prevailing bad practice, before de-

*There is, however, one important case known to me, of at least partial exception to the general rule of failure in marling in South Carolina, in the very extensive and also profitable labours and improvements of Gov. Hammond, on his estate bordering on the Savannah.

nounced, of incessant, or, at least, much too frequent tillage, which does not permit the fields to receive and retain organic matter from their own growths especially. This cause had operated on nearly all the trials of marl made previous to my service in South Carolina. Of all such cases of alleged failure, that I was enabled to see and investigate the circumstances, the causes were such as I now suppose of the still later failures. These cases of failure and of disappointment, and the known causes, were brought fully to view in my Report of the Agricultural Survey; and from the more extended remarks, I will quote a short passage, to show my then opinion of the facts and the causes of previous failures, and my earnest warning against the general course pursued. After reciting the general facts of failure of previous trials of marling, I proceeded in these words: "Can any opponents of marling desire more full admissions than these? And yet they all serve but to illustrate what I have continually striven to impress, *that without vegetable matter to combine with, calcareous manures will be of little value.* But, on the other hand, I have heard of no trial of marl on land in proper condition, that is, recently and sufficiently rested, and thereby provided with vegetable matter, in which the effect has not been very great *on the first crop.* And three or four of such results only, would be enough to explain the causes, (of failure in all other cases,) and to prevent all inferences unfavourable to marling, if from a hundred failures of early efforts under reverse circumstances." Then followed particular statements of two different experiments, carefully made that year, (and the circumstances noted at my request,) of marling on new land, and, therefore, not exhausted of its vegetable matter, and in which the products (which were cotton,) were nearly doubled in the first year of the application.

Here, then, even in the few lines quoted from the much more full precepts to the same purport, there is full evidence of my having stated, in advance of all later trials, the sure cause of failure; and in the warning against that cause, I may claim to have predicted all later failures of like occurrence. And if there had been thousands of failures, preceded and accompanied by very frequent and exhausting tillage, all of them would but the more strongly confirm my long entertained and often expressed opinions and instructions, as to the action of calcareous manures; and all such cases would not detract a tittle from the alleged available values. When urging the use of lime, I have never omitted to state that it gave no fertility of itself, or by direct action; and that vegetable matter in sufficient quantity, and in conjunction, was essential to the beneficial operation of calcareous manure. The required organic matter may be supplied mainly in the growth of the land to be im-

proved. But it *must* be supplied in some form, and in sufficient quantity—and, also, should be, in part, present in advance of the use of calcareous manures, to secure their best early effects.

Planters of South-Carolina—I have offered to you in plain and unvarnished language, and, possibly, it may be in ungracious and distasteful terms, the last advice and admonition that I can expect to utter to you, or to any similar audience. My burden of years, and infirmities much greater than even suited to my age, admonish me that my labours must soon close. I would deem it a reward of more value to me than will be the short remainder of my life, if you and your fellow-labourers, even at this late time, (in reference to myself,) would heed my words, and fully profit by them. It is but little that a private individual can do, to warrant to a great commonwealth or community, the beneficial results predicted upon stated premises and conditions. But so perfect is my confidence in the general results I have predicted, that I would willingly hazard upon the issue all that I have, in property, reputation, and even life itself. For illustration, and in mercantile or business language—if I possessed hundreds of millions of dollars, to that full amount, for a premium of ten per cent., I would insure as much clear profit to South Carolina, to be gained by conforming to my directions, for saving and increasing the fertility of her soil. As, however, it is impossible for me to offer any such guaranty, and for me either to incur risk of loss, or to derive pecuniary gain from the results, I can only offer my earnest verbal assurances of your available gain, as great and as sure to be obtained by your pursuing a proper course of improvement, as will be the growing loss and eventual ruin of your country, and humiliation of its people, if the long existing system of exhausting culture is not abandoned. It is not merely my feeble voice and my questionable personal testimony, but also thousands of unquestionable facts, and the sure experience and realized profits of thousands of farmers, which offer to your acceptance the highest agricultural prosperity, in exchange for present decline and approaching exhaustion of the remaining fertility of your land. Choose, and choose quickly! And remember, as my last warning, that your decision will be between your purchasing, at equal rates of price, either wealth and general prosperity, of value exceeding all present power of computation, or ruin, destitution, and the lowest degradation to which the country of a free and noble minded people can possibly be subjected.

REPORT

OF THE

DIRECTORS OF THE SO. CA. INSTITUTE.

IN presenting to the members of the Institute their Report for the year 1852, and the Fourth Annual Fair, the Board of Directors cannot but be aware that at no exhibition has there been so small a number of articles presented for competition. While frankly making this admission, the Board are neither discouraged by this apparent want of success, nor disheartened from prosecuting their efforts to give permanency to so desirable an object. Every thinking and candid mind will confess that obstacles of a formidable character were interposed during the past year. The deluge by which this and the neighbouring States were inundated, not only cut off supplies from reaching the interior of these States, thus impeding the work of such as were preparing articles for exhibition, but, also, in many cases, turned the persons thus employed entirely from their designs, by forcing upon them such press of necessary work, as to afford no time to prepare their articles. The sickness, too, engendered by this flood, had some effect throughout the country, in stopping the preparation of such work as was designed for the Fair. While the prevalence of Yellow Fever in Charleston not only stopped much of the work there in preparation, but deterred many from sending from the country. But the day before the opening of the Fair, a heavy black frost enabled the Charlestonians conscientiously to say to their friends from other places, that no risk could be run in visiting the city, a period too short to enable publicity to be given through the country, and allow contributors to bring down their articles. These were formidable obstacles, and such as no human precaution could guard against, or human energy overcome. And that these were the causes which prevented the Fair from being unusually large and attractive, are not mere speculations of the Board, but the testimony borne by very

many letters addressed to the proper officer, both early in the year, and immediately prior to the opening of the Fair.

Very shortly after the close of the Fair of 1851, the Board of Directors commenced preparations for the Fair of 1852; by advertisements in the newspapers of several States, publicity was early given, and the correspondence which speedily commenced indicated that many persons in this and the adjoining States, were aroused to the benefit to be derived from these exhibitions. During the latter part of the spring, the Board had circulars struck off, and sent wherever an opportunity presented; by means of this, still further attention was attracted to the approaching Fair. And, in addition to the above, the Board also sent out upwards of four hundred circular letters addressed to gentlemen of note in every district in South Carolina, and to as many in North Carolina, Georgia, Alabama and Tennessee, as they could learn were interested in developing the industry of the country. Communications were also opened, during the year, with several of the institutes established in other parts of the United States, both south and north. The prospect of the approaching Fair was so promising, that the Board determined upon the erection of a temporary building, of size sufficient to accommodate the articles which they reasonably hoped would be offered for exhibition. And as notice had been given by several gentlemen of their intention to exhibit stock, cattle, sheep, hogs, &c., preparation was made, by the erection of sheds within the enclosures around the building, to receive and exhibit to advantage, this new and highly desirable addition to the former Fairs. The calamities which befell both the country and city, disappointed the reasonable expectations of the Board.— But while thus disappointed, the Board find reason to hope for the permanent success of the Institute in those causes which rendered the preparation for the Fair of 1852 necessary. It may not only be hoped, but reasonably believed, that very many years will pass away ere a season similar to the summer of 1852, will again occur. The annually increasing health of Charleston, and the constantly lessening risk of Yellow Fever, gives promise that many years will go by, ere a visitation from this disease will recur. And the history of the land tells that deluges, such as produce the Yazoo and Harrison freshets, and that of 1852, occur but seldom in a century.

Notwithstanding the comparative paucity of articles presented at the Fair for exhibition, the analysis shows that a steady progress has been made towards improvement, and the hard working industry of the country is gradually developing itself through this agency. This analysis is not made only as a comparison of the recent with former Fairs, but, al-

so, as a comparison with the Fairs of other Institutes. In all exhibitions of this character, throughout the United States, there appears to be a strong effort to elevate the standard of feminine employments, and the result has been to bring out, for exhibition, a large proportion of such work as is usually done exclusively by females. The Fairs of the South-Carolina Institute have, from the commencement, shewn this trait. The walls have been draped with quilts; and artificial flowers, crochet-work, millinery, embroidery, needle-work, have adorned the tables. Preserves and their kindred of the domestic economy, made their appearances at the last exhibition, and the Board anticipate with pleasure, the day when, through the Fairs of the South-Carolina Institute, it will be demonstrated that a great economy may be exercised in the making of small things. A far higher end, however, is subserved by this attention to female occupations than the mere pecuniary benefit. Woman is raised in her own estimation, as well as in the opinion of the community; from being the help, she becomes the companion of man; while the more laborious occupations of life call his attention, it becomes her pleasing duty so to weave such comforts for his fireside, as to draw him back from the engrossing pursuits of trade, to the rightful appreciation of the beauties of nature and art. Through her handiwork she can appeal to his tenderest feelings, and make man, man. Yet another useful purpose is served, through the call for female industry. When thrown upon her own resources for livelihood, the fate of woman is hard indeed, and whatever tends to ameliorate this condition is a blessing. In the crowds who visit the Annual Fairs, an opportunity is afforded to the deserving, but indigent, labouring female, to exhibit her needlework, and thus draw to her some share of the employment so necessary in every community.

At the recent Fair, there were offered for exhibition in the departments of female industry, twenty-six specimens of crochet-work, thirty-six of needle-work, six of millinery, thirteen of embroidery, and sundry other articles, such as pictures, wax-flowers, preserves, cakes, &c., which are necessarily included under other heads. To the female contributors were awarded forty-five premiums, consisting of reticules, porte monnaies, gold thimbles, furnished books or housewives and crochet handles. Without desiring or intending to make any invidious distinction, the Board believe that benefit is to be derived to the community generally, from attention being particularly called to two articles, neither of which took first prizes, yet each of which are worthy the consideration of all good housekeepers. The first was a mat of scrap cloth, exhibited by Mrs. G. B. Reid. It was made of the scraps and little odds and ends

which necessarily accumulate on the hands of every house-wife, was neat in appearance, and as one of the steps towards promoting domestic economy, is worthy, at least, of thought. The second article to which the Board desire to call attention, was a pair of Palmetto baskets, exhibited by Miss V. A. Thomson. These baskets were woven of the leaf of the Palmetto, and presented not only a neat appearance, but from the well known durability of the material, will probably prove very serviceable. The willow basket for these two qualities has attained so great repute, that if another material, growing within our immediate reach and of comparatively no cost, can be made to attain similar repute, this of itself would be such a development of industry, as would repay the Institute for its exertions. The basket-maker's trade affords occupation and support to a large number of persons in other places, and no reason can be imagined why it should not do the same wherever this new material can be procured. From Georgetown to the point of Florida, the Palmetto can readily be obtained, and surely the three States of Florida, Georgia and South Carolina, are interested in whatever will enable them to add another article to their list of exports. The Catalogue annexed hereto, will exhibit the names of the other contributors to the female department, while the list of premiums awarded, also accompanying this report, will show those who have been successful in the praiseworthy contest for superior excellence. The particularizing of the two above articles, is made only because they indicate a new mode of economy, and point out a new industry.

In pursuing the analysis of articles exhibited, besides the female department above spoken of, there were of upholstery, four articles; of the arts, thirty; of food, thirty; of natural products, sixteen, of which eleven were fit for food; of medical preparations, three; of natural history, nine; of cattle stock, &c., thirteen; of manufactures, thirteen, and of mechanical industry, one hundred and three, of which seventeen were of iron, brass, steel, &c. This analysis shows that not only new things are being exhibited, but considering the paucity of articles exhibited, from the causes before stated, indicate that a higher degree of excellence is sought.

It would be nearly impracticable to dwell at any length on the various departments; suffice it then briefly to touch upon such as are most important. Under the head of arts were included, pen, pencil and crayon drawings, as well as paintings. Daguerreotype pictures, also, fall under this branch; two or three busts, both modelled and sculptured, indicated that some latent talent could be developed by judicious encouragement, and while all cannot hope to rival Praxiteles, Michael Angelo, Titian, Raphael, Canova, Thorwaldsen, or Powers, still conside-

rable merit can be attained. There are, doubtless, many pieces of art in this city, which could be exhibited at the Fairs, not as competing for prizes, but by way of exhibition, from which the aspirant for artist distinction could gather many valuable suggestions, and it is to be hoped that the day is not far distant when the possessors of such pictures, &c., will deem it of consequence by their exhibition to aid in the encouragement of this plan. At some future time, and it is hoped that such time is fast approaching, the Board contemplate the establishment of a School of Design, as an appendage to the Institute. Should this prove as successful as it has done at other Institutes, a rapid development of artistic skill may reasonably be expected. The Board cannot pass from this subject without calling particular attention to one exhibitor in this department, one of whom South Carolina may justly be proud as a son. Allusion is made to Mr. Thomas B. Welch, whose engraving of the head of Washington, after Gilbert Stuart's original painting, is a work of so high merit, as to place Mr. Welch high among the list of engravers. Exhibited at the Fair of the American Institute, this engraving proved a successful competitor, and was pronounced by the judges to possess very great merit. It is executed by a union of the line and stipple modes of engraving, and possesses in a high degree the excellence of each, particularly in that portion engraved under the stipple process, is it worthy of close study. The peculiar benefit of this latter mode is well exemplified by the softness given to such portions of the head as were thus executed. By the same artist were also exhibited two other engravings, heads of Jackson and Scott, both of which are highly creditable, but showing, at the first glance, that the same degree of labour was not put upon them, as was exercised in the preparation of the head of Washington.

A few years since, the medical profession of this State considered that benefit had been conferred by a treatise emanating from the pen of Dr. F. Peyre Porcher, upon the herbs and roots of South-Carolina, and their applicability to the purposes of the profession. Among the herbs noticed by Dr. Porcher, was the common Catfoot, or Life-Everlasting, the *Gnaphalium Polycephalum* of botanists. A syrup made from the flower of this herb was exhibited by the Hon. T. J. L. Gourdin, and was intended by him to call attention to the medicinal properties which it possesses. As a remedy for coughs, this syrup has many soothing qualities, while it is slightly narcotic and sudorific. The Board notice this contribution in the hope that it may be taken up by druggists and such analysis given to it, as will shew whether it really is of service. It is to be hoped that the other herbs and roots possessing medicinal quali-

ties may also be examined, and that the subsequent Fairs of the Institute will find many contributions to the domestic *Materia Medica*.

Of articles of food, &c., thirty kinds were exhibited, embracing biscuits, vegetables, olive oil, fruit, preserves, &c. A mammoth squash, sent by Mr. J. S. Havener, would doubtless have stood prominent even in the Horticultural Exhibitions of Philadelphia. Three bottles of orange wine, contributed by Dr. B. B. Sams, afforded a novel and pleasant beverage. At some future time, the orange growers of Florida may find it worthy to turn some attention to this preparation. A bunch of dates, exhibited by Mr. J. Hamilton Couper, attracted much notice. As did, also, the bottles of olive oil, exhibited by the same gentleman and by Mr. P. M. Nightingale. The exhibition of this oil, and at the Fair of 1851, as well as at the present Fair, of the olive itself, by Mr. Chisolm, indicate that the soil and climate of Georgia and South Carolina are both fitted for the growth of the olive tree. It is distinctly in the recollection of many inhabitants of Charleston, when several olive trees grew and bore fruit, and it has been mentioned to the Board by a gentleman, that he has repeatedly eaten the fruit just picked from the tree. One of these trees long flourished in the yard of the residence now owned by Alonzo J. White, Esq., at the corner of Meeting and Tradd-streets. That sugar too can be produced in South Carolina, was evinced by the keg sent by Mr. Henry J. Bailey, who communicated to the Board, that he could produce from one thousand to twelve hundred weight to the acre. This is the second contribution of sugar exhibited at the Fair of the Institute, Mr. Seabrook having sent some to the Fair of 1850. By Mr. Hammarskold was exhibited some enormous beans, under the name of Giant Shanghai Beans: they are, in fact, the bean generally known as the sugar bean, are easily cultivated, hardy, productive, and an excellent article of food. To gardeners this bean is worthy of consideration.

Premiums having been offered for agricultural products, stock, cattle, hogs, &c., a fair exhibition was the return. The planters are particularly interested in this department, and the initiative step having been taken, it is earnestly to be hoped that each succeeding year will find a large addition to the number of exhibitors. At the Fairs of other Institutes, this department is one of great interest, and every reason exists why as large a comparative exhibition should be made at the Fairs of the South Carolina Institute, as elsewhere. The appended catalogue will show the exhibitors, and the things exhibited.

To Professor Francis S. Holmes, the Board are indebted for a large

number of specimens of Natural History, and the constant crowd in their vicinity, indicated the interest felt in this part of the exhibition.

To the Rev. C. W. Howard, the Board return thanks for the contribution of a handsome piece of black marble, quarried on his farm, near Kingston, Geo., and remarkably well worked. This marble will compare in beauty with any quarried in the United States.

In the department of manufactured goods, the exhibition was not as good as at the Fair of 1851. The newly awakened attention of North Carolina, South Carolina, Georgia, Alabama and Tennessee, to the importance of manufactures, is so great, that a large exhibition can be made, did the various manufactories deem it worthy of contending. That such competition is worthy of their consideration, is evinced by the anxiety displayed at the Fairs of other Institutes, and even at the World's Fair, at London, by manufacturers, to display the results of their skill. So great is the importance attached, that piles upon piles of manufactured goods are annually submitted to the judges. The Board indulge the hope that a similar spirit will animate the manufacturing companies of the Southern States. When American manufacturers first began their labours, it was confidently believed by the British people, that England must retain the superiority. Time, however, has taught another tale, and in certain kinds of goods, American fabrics are considered so far superior, that the American brands have been put upon English goods. So in the heavier kinds of cotton cloths, the Southern manufactories bid fair to surpass the looms of Lowell, and the Northern manufactories generally. At more than one Fair of the American Institute, the homespuns of Georgia and South Carolina have borne off the palm. This fact should induce a greater desire on the part of Southern manufacturers, by exhibition and competition, to produce still greater excellence in their fabrics. To some of the articles exhibited, the Board would particularly invite attention. By Mrs. Francis Holman was exhibited specimens of domestic cassimeres, tweeds, wool cord, lindsey, white flannel and corded skirts. These were of purely domestic manufacture, were woven in a common hand-loom, and dyed with the colouring matter found in our own forests. They were of substantial make, and point out a new way of making great savings by attention to small matters. By Messrs. Duffus & Co., were exhibited coils of Manilla and hempen rope, made at their rope-walk, in Charleston. The neat and substantial appearance of this work was highly creditable and worthy of the encouragement of ship-chandlers. Many years since a rope-walk existed in Charleston, and great credit is due to these enterprising gentlemen, for their effort to re-establish a decayed industry.

In the department of mechanical industry, the exhibition was highly creditable. Not only a large number of articles were put into competition, but many were of a most useful character, and of a very high order of merit. By Mr. E. B. Baker, was exhibited a Rail-Road Wheel, of sufficient novelty and merit to entitle it to a patent from the government of the United States. By Messrs. E. T. Taylor & Co., was exhibited the Excelsior Straw Cutter, and the rapidity as well as efficiency of its work, constantly attracted around it a crowd of visitors. This machine has been practically tried by many persons, and found to answer the purposes for which it was intended, in an eminent degree. A Cotton Gin, for Sea Island Cotton, sent by Mr. S. L. Burney, is said to possess much merit; these gins are largely used in the lower parts of Georgia and in Florida, and have given much satisfaction. By Mr. M. Coburn, was exhibited two Violins, of a form widely different from those now in use, and for which he is seeking a patent. Mr. Coburn claims a superiority for these instruments, over the old forms, and it is to be regretted that he was not present to point out the excellencies of his invention. The judges, through want of this information, were unable to pay such attention to them as they possibly deserved. A steel Hammer, by Mr. Wm. M. Walker, was a work of much merit. A water power Cotton Packing Press, exhibited by Mr. J. B. Armstrong, displayed in its construction considerable ingenuity. It may be doubted whether the steam press can be displaced in cities by this press of Mr. Armstrong, but to planters it may be worthy of attention. Mr. Thornton Carpenter, exhibited several specimens of Electro-Gilding, both on silver and steel. Mr. Carpenter was of impression that his work was the first of its kind exhibited; this is a mistake—at the Fair of 1850, plating of a very similar description was exhibited by Mr. Gamble, and a diploma awarded him. To Mr. Carpenter, however, great credit is due for the high state of perfection to which his work has attained. By Messrs. Tomlinson, Wood & Co., was exhibited a fine Cabriolet. Mr. J. C. Wolf sent a handsomely finished trotting Buggy. Messrs. Douglass & Post, a shifting top Buggy, of much merit. Messrs. Smoak & Ray, exhibited a Buggy made at their work shop in Orangeburg, which, from its high finish and general appearance, bore off the first prize for buggies. One of the most attractive articles in the exhibition was a Clarence Coach, made and exhibited by Mr. John Artman. The rich appearance and elaborate workmanship of this coach, attracted a constant crowd around it, and public opinion, not less than the award of the judges, declared it entitled to the first prize. By Messrs. E. T. Taylor & Co., were exhibited two Saw Gins, for Upland Cotton, to

which a prize was awarded by the judges. A Saw Gin, by Mr. John Dubois, was said by him to be an improvement. By Messrs. Parkhurst, the gin well known as Parkhurst's Saw Cotton Gin, was sent for exhibition, but a fire destroyed it and the building in which it was stored, thereby preventing it from coming into competition. By Mr. J. Cushing Torrey, the proprietor, was exhibited Parker's Sawing Machine. The machine being put into operation, was found to answer very well the purposes for which intended. A Rifle, made by Mr. Happoldt, was much admired for its high finish and workmanlike appearance. From the South-Carolina Armory, was contributed muskets, rifles, double barrelled guns, dragoon pistols and sabres, manufactured in Columbia. The substantial appearance of these arms, added to the high finish which they had received, constantly surrounded them with an admiring crowd of visitors. By Mr. G. U. Pruden, was exhibited Grover & Co's Sewing Machine; the motion of the needle being perpendicular, this machine is probably less liable to derangement, than most of those in use; it is of solid make, and is largely employed at the Northern Shoe Factories, for stitching the leather. To the Portfolio of papier maché, made by two young ladies in Charleston, too much praise can scarcely be awarded. To the industry and ingenuity of these fair artizans, the Fairs of the Institute have heretofore been indebted for contributions indicating in an eminent degree, taste, skill and genius. The Portfolio exhibited, was made by these ladies for their own amusement, and in every part was the result of their own industry. The papier maché was remarkably well made, while the inlaid work, made from the sea shells, was most exquisite. The high finish of this contribution, would make it a formidable competitor to the best work, even of those whose daily occupation leads them to this branch of industry. The Board believe that it may not prove wholly uninteresting to state a few facts relative to the papier maché manufactory, now becoming an important branch of industry. Originally, scraps of paper alone were used in the preparation, and ornamental work the only use to which it was applied. Under the skill of Charles Bilefield, of London, cotton rags, and whatever can be used to make paper, have been turned to use; and papier maché becomes in his hands, a most useful ally to the carpenter; panels, partitions, grate slabs, and even blocks for the exterior of houses are being made of this material—it can be turned in the lathe, and fastened with screws or nails. Being a non-conductor of heat, climate has little effect upon it, and availing himself of this quality, Mr. Bilefield has recently fitted up the interior of a steamboat for the Pacha of Egypt, which he confidently expects to outlast any portion of the wooden work. By Mr.

C. Werner, a display was made most creditable to his skill as a worker in iron, and to his taste for execution. The elaborately worked lamp post, the cast iron steps, the iron floorings, the iron fencings, cannot easily be forgotten by any who saw them. To Mr. Werner, Charleston is indebted for a new branch of industry, and she may well be proud of his skill and taste. To the paper exhibited by Messrs. H. and R. J. Evans, and by Mr. D. Murphy, the Board refer more by way of suggesting to the paper manufacturers, the value of rice straw, than because paper is any novelty at the exhibitions. In the New England States it is estimated that 20,000 tons of rice straw is used in making paper, and a value given to it of upwards of a million and a half of dollars. With this material so abundant and so accessible, no reason exists why it should not be also used in the factories of North-Carolina, South-Carolina and Georgia, engaged in this business. To the cotton seed planter, exhibited by Mr. Thomas Carter, credit is due for its simplicity and ingenuity. Mr. Carter states that he planted his last year's crop by its aid. By Mr. R. Hawley, was exhibited Kerseymere Hats, made by him in Columbia, and by Mr. P. V. Dibble, Moleskin Hats made by him in Charleston, To the workshop of the latter gentleman, the Board have had access, and witnessed with pleasure the process of hat finishing. To Mr. Dibble's courteous explanations, the Board are enabled to give the following description:—The making of hats is divided into two distinct departments; the first is the preparation of the body of the hat, which is done generally at small manufactories, the most important of which are in Connecticut and New Jersey. When issuing from these factories, a hat has very much the appearance of a woollen bag. It is in this state that the factories usually called hat factories, such as Genin's, Bebee's, &c., take them. And it was in this state that the Board found them at Mr. Dibble's. By a preparation of shellac, glue, &c., strength is given to the flexible body, form is imparted by means of the block, and a skeleton hat makes its appearance. The next process is to cover the skeleton with the soft, smooth moleskin; this moleskin is made in France, and is a species of plush, which is brought to the United States in rolls, by the hatters it is cut and shape given it, by means of a little water and a hot iron, this plush is fastened, indeed almost incorporated with the original body, and by dexterous manipulation the glossy finish and appearance so much admired, is imparted to it. Mr. Dibble stated that the same process is gone through in every hat manufactory. Although so seemingly simple, great skill is required; several hats were exhibited to the Board, some under the hands of the workmen, some finished, and their appearance, feeling and lightness, were most highly

creditable to the workshop of Mr. Dibble. By Mr. F. P. Canfield, was exhibited a model, which he claims as an improvement on the crank; while there may be much that is valuable in the suggestion, there are some practical difficulties to be overcome, not the least of which is the danger of breakage, from the sudden and heavy jar which occurs when the motion is reversed. The thought, however, is worthy of being pursued, and the Board would be much gratified by the exhibition of a larger model at the next Fair, and some application made of it to test its qualities. By Messrs. Boatwright & Pomeroy, a neat little Rockaway was exhibited, in every way creditable to their skill. The "Violet," a race boat, made by Messrs. Grier, Easterby and others, attracted much attention—its graceful lightness, correct run and other points, with its handsome finishing, daily drew around it admiring crowds. While none could forget that it was built by young men of Charleston, to uphold the honour of that ancient seaport in the Regatta; and although not the successful competitor in the principal races, the gallant bearing of the little bark won for it the earnest good wishes of many spectators. At the further end of the hall in which the exhibition was held, was undoubtedly the great attraction of the Fair, the steam engine of Messrs. Cameron, Mustard & Co. None can have visited the mint in Philadelphia without being particularly struck with the engine employed in the coining department, nor leave it without a vivid recollection of its smooth and noiseless working. The engine exhibited by Messrs. Cameron, Mustard & Co., can almost rival the mint engine for its noiseless working, and certainly can in the plain yet high finish displayed in its several parts. The interest manifested by all the visitors at the Fair, justify the Board in here inserting the following account of the engine furnished by the makers.

"The Engine exhibited in operation at the Fair of the South-Carolina Institute, and which received the special premium, was manufactured and entirely built by Cameron, Mustard & Co., Phoenix Iron Works, Charleston. The engine is designated as a high pressure, horizontal, stationary steam engine. The bed plate that supports the other parts of the engine is made of entire cast iron, and so arranged as to be adapted to wood, brick or stone foundation, with the necessary holding bolts. The cylinder occupies one end of the bedplate, the pedestal, in which the fly-wheel shaft revolves, sits near the other end, it thus connects and supports the whole line of motion through which the power is communicated. The cylinder is ten inches in diameter, thirty inches stroke, making fifty-six revolutions a minute, with sixty lbs. steam on boiler, which, according to James Watts' standard rule, proves itself an engine of fif-

ten horse power. A stop valve, to admit and shut off the steam, a throttle, or regulating valve, moved by the governor, to keep the engine in uniform motion. Whatever may be the change of power required to drive the machinery, a slide valve arrangement in conjunction with the fly wheel, brings the crank easily over the centres. The piston is on the most improved plan, having metallic packing, with large surfaces, set with spiral springs, and not liable to get deranged. The cylinder is provided with brass cocks to eject the water that may settle, while the engine is at rest—also, a disengaging eccentric hook and starting bar, so that the engine can be started and worked by hand, if required. The governor is of the most approved nature, and pronounced by an experienced European machinist, of unsurpassed workmanship. The lift pump, which lifts the water from well to heater—the force-pump, which forces the water into the boilers, with the pendulous beam motion that moves them, are superior to any other plan now in use. The motions and journals being all highly finished, and moving and revolving in brass guides and boxes, with syphon oil cups, relieve the engine from a great amount of friction, which consequently occurs with rough and unfinished bearings. The material of which the engine is constructed, instead of being painted, is all planed and polished, showing the soundness of the material, and the merit of each and every part. The ornamental parts of the engine are all carried out in mechanical order and the effect of taste secured. The engine is adapted to drive machinery of any description within its power, say fifteen horse.”

The Board cannot close their report without saying something of the financial condition of the Institute. The arrears of membership are purposely placed at a sum little more than nominal, One Dollar per annum, in the expectation that a very large number of the citizens of this State would feel it both a privilege and a duty, to enroll themselves as members. This reasonable expectation has been disappointed. As yet, our citizens scarcely appear to realize the benefits to be derived from this Association. We are sleeping, while others are up and doing—should we be left behind in the race, upon our own sluggishness must be laid the blame. Yet does a bright ray of light shadow forth a brighter day—the General Assembly at its recent session, by its noble contributions to the various enterprises projected for the advancement of the State, has shown that the spirit of improvement is awakening. In the message of Governor Means, the Institute was commended to the Legislature as worthy of the fostering care of the State—the statesman-like suggestion has met the approval of our Legislators, and an appropriation of ten thousand dollars passed, to be paid whenever a similar

amount shall be raised by the Institute. The obtaining of these sums will enable the Board to erect a suitable Hall, wherein to hold their annual Fairs, to establish in time a school of design, a library and other attendant advantages. With patriotic and wise liberality, the City Council appropriated twenty-five hundred dollars to the Institute during the past year. With these examples, and with this condition annexed to the State appropriation, the Board of Directors now approach their fellow citizens of the State, to ask their aid in raising the requisite amount. The object for which aid is sought, must commend itself to every wise and thinking mind. Whatever tends to develop the resources or promote the industry of the State, is directly of interest to every inhabitant thereof. What creates wealth for one, must affect others, and the greater the number of avenues opened, the larger the number who can travel therealong. But not to the interest only of our citizens do we appeal for aid. We boldly call upon their patriotism to come to this work. It has long been a matter of pride among her citizens that they are South-Carolinians; to that pride an appeal is now made. Will her citizens consent that South-Carolina shall be a laggard in the contest now waging throughout the world for supremacy in the works of peace? Will her citizens consent that South-Carolina shall be last in the race of improvement? Will her citizens consent that it shall be said South-Carolina lives in the recollection of her former deeds? Will her citizens consent that it shall be said South-Carolina is energetic in her vauntings, but supine in her actions? These things cannot be—her people love her too dearly to allow the finger of reproach to be pointed to her. To every inhabitant, then, of South-Carolina, to all, the young and the old; to her daughters as to her sons, to each individually, an appeal is now made for aid in the permanent establishment of this Institute.

LIST OF ARTICLES

EXHIBITED AT THE

FAIR OF THE SOUTH-CAROLINA INSTITUTE.

1. A Crochet Bonnet ; Miss Ayer, Charleston.
2. A pair of Window Blinds ; C. A. Trouche, Charleston.
3. Two Drawings in Ink ; Dr. W. H. Ford, Charleston.
4. Piece of Crochet Work ; Miss A. Rotereau, Charleston.
5. Patent Rail Road Wheel ; E. B. Baker.
6. Two Quilts ; Mrs. S. A. Chafee, Charleston.
7. Pair of Spanish Pillow Cases ; Miss E. W. Chafee, Charleston.
8. One Shaving Tidy—Crochet work ; Miss Harriet Ronan, Charleston.
9. Pyramid of Paper Flowers ; Miss M. E. Baker, Charleston.
10. One Quilt ; Mrs. Todd, Cambridge, S. C.
11. Velvet Tapestry, Brussels Tapestry, Honey Comb Venetian Carpeting and two Rugs : Baillie & Lambert, Charleston.
12. Worsted worked Picture ; Miss Eugenia Huchet, Charleston.
13. Excelsior Straw Cutter—Patent ; E. T. Taylor & Co., Columbus, Ga.
14. Piece of Embroidery ; Miss Julia Whilden, Charleston.
15. One Cotton Gin—for Sea Island Cotton ; S. L. Barnes, St. Mary's, Ga.
16. A Hair Wreath ; Miss E. M. E. Veronee, Charleston.
17. A Soda Fount and Apparatus ; Nathaniel Fields, Charleston.
18. Two Violins—of an improved form ; M. Coburn, Savannah, Ga.
19. One Table Net ; Miss E. V. Holmes, Charleston.
20. Two cases of Ginger Nuts ; R. S. Millar, Charleston.
21. One case of Charleston (Boston) Crackers ; R. S. Millar, Charleston.
22. One case of Water Crackers ; R. S. Millar, Charleston.
23. One box of assorted Crackers ; R. S. Millar, Charleston.
24. One Love Veil ; Miss J. G. Elliott, Charleston.

25. Three Tin Leader Heads; G. H. Veronee, Charleston.
26. Three Tin Gutters; G. H. Veronee, Charleston.
27. Crochet Table Cover; Miss J. B. Whitney, Charleston.
28. Crochet Tidy; Miss J. C. Whitney, Charleston.
29. Two pair of Pantellets; Miss J. C. Whitney, Charleston.
30. Crochet Quilt; Miss M. A. Yates, Charleston.
31. Steel Hammer; Wm. M. Walker.
32. Quilt; Wm. White.
33. Piano Stool; Miss E. Quinan.
34. Two Fire Screens; Miss E. Quinan.
35. One bale of Cloth; Howard Manufactory, Columbus, Ga.
36. Miniature Mahogany Table; S. Daggett, Charleston.
37. Specimen of Brain Coral; Professor Holmes, Charleston College.
38. Block of Black Marble, worked; Rev. C. W. Howard, Cass County, Ga.
39. Water power Cotton Packing Press—model; J. B. Armstrong, Barnwell District, S. C.
40. Model of Charleston—cut in paper: C. W. Davis, Sumterville, S. C.
41. Model of Savannah—cut in paper; C. W. Davis, Sumterville, S. C.
42. Fancy Cuttings in Paper; C. W. Davis, Sumterville, S. C.
43. Wooden Chain, ball and socket, &c. do. do.
44. Crochet Work; Collins & Bulkley.
45. Mammoth Squash; J. S. Havener, Swallow Savannah, Barnwell District, S. C.
46. Worsted Worked Picture; Miss Mary E. Hard, Graniteville, S. C.
47. Daguerreotype Specimens; T. Carpenter, Camden, S. C.
48. Electro Gilding on silver; T. Carpenter, Camden, S. C.
49. Electro Gilding on steel; T. Carpenter, Camden, S. C.
50. Specimen of Mill Machinery; John C. Dyhes, Barnwell District, S. C.
51. Two Laid Work Quilts; Miss Ann E. Holman, Barnwell District, S. C.
52. Worsted Mat; Miss Eliza Mason, Camden, S. C.
53. Bales of Cloth; F. & H. Fries, Salem, N. C.
54. Cassimeres; F. & H. Fries, Salem, N. C.
55. Box of Boston Butter Crackers; J. H. Claussen, Charleston.
56. Box of Soda Biscuits; J. H. Claussen, Charleston.
57. Box of Pilot Bread; J. H. Claussen, Charleston.

58. A Carriage ; A. Roulain, Charleston.
59. A Buggy ; A. Roulain, Charleston.
60. Picture in Needle Work ; Miss M. R. Payne, Charleston.
61. Two Cotton Gins ; E. T. Taylor & Co., Columbus, Ga.
62. A Buggy ; Smoak & Ray, Orangeburg, S. C.
63. Three Bottles of Orange Wine : Dr. B. B. Sams, Beaufort, S. C.
64. Specimen of Drafting ; Justus Myrman, Charleston.
65. Crochet Piano Cover ; Miss Martha A. Alderson, Charleston.
66. Crochet Collar, " " " "
67. Netted Waiter Cover, " " " "
68. Crochet Tidy, " " " "
69. Pair of Doyleys, " " " "
70. Pair of Pitcher Covers, " " " "
71. Pair of Crochet Mitts, " " " "
72. Sawing Machine—Parker's Patent ; J. C. Torrey, Boston, Mass.
73. Miniature—Portrait and Landscape Painting ; Arnold De Enzling.
74. Worsted Worked Arm Chair ; Mrs. Howland, Charleston.
75. One Sheaf of Rice ; John H. Tucker, Waccamaw, S. C.
76. Worked Shirt Bosom ; Mrs. Runken, Charleston.
77. One Bale Sea Island Cotton ; Edward Whaley, Edisto Island, S. C.
78. Bunch of Dates, grown on St. Simons Island ; J. Hamilton Couper, St. Simons Island, Ga.
79. Silk worked Picture ; Miss McCann, Charleston.
80. One Painting ; Miss Sarah Howland, Charleston.
81. Two Oil Paintings ; Mrs. Robert C. McClure, Charleston.
82. Two Pin Cushions ; Mrs. Robert C. McClure, Charleston.
83. Two Cooking Stoves ; James Sullivan, Savannah, Ga.
84. Worsted Worked Picture ; Mrs. Chalk, Charleston.
85. Two Architectural Designs ; A. P. Hammerskold, Charleston.
86. Clarence Coach ; John Artman, Charleston.
87. A Rifle ; J. H. Happoldt, Columbus, Ga.
88. Specimen of Flooring Boards, planed with Beardlee's Patent Planing Machine ; N. B. Prothro, Charleston.
89. Grover, Baker & Co.'s Patent Sewing Machine ; G. U. Pruden, Agent, Boston, Mass.
90. A Cabriolet ; A. Roulain, Charleston.
91. Specimens of Penmanship—Various kinds ; J. A. Pelot, Charleston.

92. Models in Glass, of the Kohn i Noor Diamond, size and shape exact; Professor Shepherd, So. Ca. Medical College.

93. One Ruled and Bound Ledger—Binding and Ruling; Stokes & Guenveur, Charleston.

94. Piece of Shell Work; Capt. Tessier.

95. Boots; John Meitzler, Charleston.

96. Fire Proof Bricks; C. Rhodes, Edgefield, S. C.

97. Earthen Ware Jugs; C. Rhodes, Edgefield, S. C.

98. Patent Leather Boots; W. Wolfe, Charleston.

99. A Bonnet made of Pine Grass; Mrs. J. H. Hudson.

100. Model of a Ship; J. G. Marsh, Charleston.

101. Model of a Steamship; J. G. Marsh, Charleston.

102. An Album; Mr. Shuckman, Charleston.

103. One Cushion; Mr. Shuckman, Charleston.

104. Picture in Worsted; Mr. Shuckman, Charleston.

105. A piece of Coral, found on the coast of Charleston Harbor; John Sheppard.

106. A Netted Turkish Cushion; Miss A. Rielly, Charleston.

107. Netted Zephyr Wool Shawl; Miss M. A. Rielly, Charleston.

108. Phrenological Bust of George Colé; Francis W. Rielly, Charleston.

109. Two Work Baskets; Mrs. E. J. Anderson, Charleston.

110. Mat made of scrap Cloth; Mrs. G. B. Reid, Charleston.

111. Five Pea Fowl Brushes; Mrs. J. M. Caldwell, Charleston.

112. Two colored Crayons; Miss A. Crews, Charleston.

113. Braided Merino Cloak, Mrs. Riker, Charleston,

114. Three Patch Work Quilts, “ “ “

115. One Quilt, “ “ “

116. Braided Merino Sack, “ “ “

117. Suits of Crimson Merino, “ “ “

118. Orange Colored Suit, “ “ “

119. Cough Syrup, made from the flower of the Life Everlasting; T. L. Gourdin, Pineville, S. C.

120. One Axe B. D. Clark, Orangeburg, S. C.

121. One Drawing Knife, “ “ “ “ “

122. One Side Saddle, with jumping horn; Love & Wienges, Charleston.

123. Pair of Cork sole Boots; P. Lepper.

124. Quilt Miss J. H. Holman Black.

125. Counterpane, “ “ “ “ “

126. Domestic Tweeds, Mrs. Frances Holman Black.

127. Domestic Cords, Mrs. Frances Holman Black.
 128. Domestic Cassimeres, " " " "
 129. Domestic Lindsey, " " " "
 130. Two Domestic Corded Skirts, " " " "
 131. Domestic Flannel, " " " "
 132. Three Crayon Drawings; P. M. Johnson, Columbia, S. C.
 133. A Paper Maché Portfolio, inlaid with sea-beach shells; Misses Withers, Charleston.
134. Lot of Baskets; Mrs. M. White, Spartanburg, S. C.
 135. Pincushion, stitched in imitation of Marseilles: Miss J. G. Elliott, Charleston.
136. One Toilet Cover; Mrs. Fredrick.
 137. Two Shirts; by a young lady of Sumter District, S. C.
 138. Crochet Work; by a young lady of Charleston.
 139. One Boat; R. D. Bacot, Charleston.
 140. Two Quilts, " " " "
 141. Three Crayon Drawings; R. D. Bacot, Charleston.
 142. Specimens of Door Plates; Samuel J. Harrod, Columbia, S. C.
 143. Case of Millinery; Mrs. A. G. Parker, Charleston.
 144. 4 Stoves; Mr. Veronee, Charleston.
 145. A Picture of the Store of Messrs. Bowning & Leman; George Seignious, Charleston.
146. 4 Paintings; S. N. Carvalho, Charleston.
 147. Head and Horns of Elk, Prof. Holmes, Charleston College.
 148. Arctic Fox; " " " "
 149. Seal; " " " "
 150. Birds, &c.; " " " "
 151. Ruled and Bound Ledger; Walker & Evans, Charleston.
 152. Fancy and other Binding; " " " "
 153. One Work Basket; Miss Fanny Blanchard, Washington City.
 154. One Book Mark; " " " "
 155. Iron Castings for Fences; C. Werner, Charleston.
 156. Iron Castings, Ornamental Faces, &c., stands, &c.; C. Werner, Charleston.
157. Iron Lamp-frames; C. Werner, Charleston.
 158. One pair of Glass Dishes cut in Charleston; Mrs. Yates, Charleston.
159. Premium Impression Paper, manufactured in Charleston; Robert F. Beebee & Co.
 160. Ready-made Clothing; Dunn & Duryea, Charleston.
 161. Folding Spring Mattress, with patent Springs; T. E. Denaux, Charleston.

162. Daguerreotype Specimens; Mr. Glen, Charleston.
163. 4 bottles of Olive Oil, made in 1851, at St. Simon's Island; J. Hamilton Couper, St. Simon's Island, Geo.
164. Printing on Satin, Charleston Courier; A. S. Willington & Co., Courier Office, Charleston.
165. One Satin Bonnet; Miss Ann Cummings, Charleston.
166. Specimens of Graining, a grained Door, &c.; N. Thomson, Charleston.
167. Fossil Remains of the Ichthyosaurus intermedius, from Lias, State of Boll, in Wurtemberg; Professor William Hume, of Citadel Academy.
168. Specimens of Silver Ware; Wm. H. Ewan, Charleston.
169. 2 pair Patent Leather Boots; Wm. Dallas, Charleston.
170. Pair of Pump-sole Boots; " " "
171. Coil of Manilla Rope; Duffus & Co., Charleston.
172. Coil of Hemp Rope; " " "
173. Specimens of Manufactured Paper; D. Murphy, Fayetteville, N. C.
174. New Cotton Press; L. Speisegger, Savannah, Geo.
175. One Safe; B. Johnson, Charleston.
176. Buggy and other Umbrellas; B. Johnson, Charleston.
177. Crotchet Tidy; by a young lady of Charleston.
178. Box of Preserved Tomattoes; Mrs. D. C. Webb, Charleston.
179. One Musket, manufactured in Columbia; So. Ca. Armory, Columbia, S. C.
180. One Rifle, manufactured in Columbia; So. Ca. Armory, Columbia, S. C.
181. One Dragoon Pistol, manufactured in Columbia; So. Ca. Armory, Columbia, S. C.
182. One Sabre and Scabbard, manufactured in Columbia; So. Ca. Armory, Columbia, S. C.
183. 2 Bottles of Syrup; Nathaniel Fields, Charleston.
184. Barrel of Irish Potatoes, 2nd crop, from seed of 1st crop, G. DeWitt, Charleston.
185. Specimens of Horse Shoes; Richard Chapman, Charleston.
186. Basket of Pecan Nuts; C. W. Graves, Charleston.
187. Carolina Pressed and Grey Bricks; C. W. & A. D. Graves, Charleston.
188. Drawing of the Steam Engine exhibited by Messrs. Cameron, McDermid & Co.; J. McDougal, Charleston.
189. Specimens of Daguerreotypes; George S. Cook, Charleston.

190. Silver Ware ; John Mood, Charleston.
191. Mustang Liniment ; O. F. Bragg.
192. 3 pieces of Netting ; by a young lady of Charleston.
193. Crochet Work ; by a young lady of Charleston.
194. Engraving of Washington, after Stuart's painting, line and stipple ; Thos. B. Welch, Charleston.
195. Engraving of Jackson ; Thos. B. Welch, Charleston.
196. Engraving of Scott ; Thos. B. Welch, Charleston.
197. 2 Vases Wax Flowers ; Mrs. E. W. Beecher, Charleston.
198. 2 Lamp Shades ; Misses Kate and Mary Drayton, Charleston.
199. Crayon Drawing ; W. S. Brewster, Charleston.
200. Crayon Portrait ; S. M. J. Prothro.
201. Silver Ware : Hayden, Brother & Co., Charleston.
202. Map of Charleston ; published by Hayden, Brother & Co., Charleston.
203. Pair of Crochet Doyleys ; Miss A. E. Brown, Charleston.
204. Map of North-Eastern Rail-Road ; Wm. Keenan, Charleston.
205. 6 Frames ; Wm. Keenan, Charleston.
206. Specimens of Plumbing ; Jos. F. Church, Charleston.
207. One Bust ; Mrs. Osborne, Charleston.
208. 2 Bonnets ; Mrs. Osborne, Charleston.
209. Specimens of Daguerreotypes ; Mr. Osborne, Charleston.
210. One 4 Panelled Door ; Albert Elfe, Charleston.
211. Plantation Brogans ; Francis Lynch, Cheraw, S. C.
212. Pictures ; by a young lady of Columbia, S. C.
213. 6 Bottles of Olive Oil, manufactured in Georgia ; P. M. Nightingale, Georgia.
214. One Quilt ; Miss L. S. Dial, Columbia, S. C.
215. Specimens of Foreign Rice, presented to the South Carolina Institute, by Thomas Fisher, Esq., Philadelphia.
216. Baskets, from Female Orphan Asylum, Virginia ; sent by John W. Stoy, Charleston.
217. Sugar, made in Georgetown Dist., from ribbon cane ; Henry J. Bailey, Georgetown Dist., S. C.
218. Moss Baskets ; Miss M. E. Johnson, Charleston.
219. Bead Bag ; " " " "
220. Cotton Seed Drill and Planter ; Thomas Carter.
221. Laid Quilt ; Miss M. E. Ward, Edgefield, S. C.
222. Castings in Brass, Cameron, Mustard & Co., Charleston.
223. Castings in Iron, " " " " "
224. Domestic Pattern ; Miss Mary Roberts, Orangeburg, S. C.
225. One Dray ; Arch. McLeish, Charleston.

226. Cotton Gin, claimed as an improvement ; John Dubois, Greensboro', Ala.
227. Seed Bag ; Miss M. M. Johnson.
228. Crochet Sideboard Cover ; Miss H. E. Stone.
229. 2 Lemons, grown in Winnsboro', of extraordinary size ; Miss P. Barkley, Winnsboro', S. C.
230. Oil Painting ; J. Maier.
231. Specimens of Gilding and Ornamenting ; E. Currant, Charleston.
232. Crochet Hat ; Miss Victoria E. L. Shier, Charleston.
233. Toilet Cushions ; " " " " "
234. Doyleys ; " " " " "
235. Moleskin Hats, manufactured in Charleston ; P. V. Dibble, Charleston.
236. 2 Palmetto Baskets ; Mr. Thomson.
237. 6 very large Pomgranates ; Miss Ann Avinger, Orangeburgh, S. C.
238. An Ear of Corn 15 inches long ; James Walker, Chester District, S. C.
239. Brass and Iron Bound Water Buckets, manufactured in Christ Church Parish ; John Hamblin, Christ Church, S. C.
240. 4 Bottles Bitters ; Jas. Morehead, Charleston.
241. Steeple Cake ; Mrs. Cordes, Charleston.
242. Pin Cushion worked on satin ; Mrs. Cordes, Charleston.
243. One Fire Screen ; Mrs. Wille, Charleston.
244. Patch Work Quilt ; Miss E. Mackey, Winnsboro', S. C.
245. 2 Crochet Collars ; Miss Nettleblatt, Winnsboro', S. C.
246. One Guinea Squash ; Dr. S. Fair, Columbia, S. C.
247. 3 Pomgranates ; " " " "
248. Burr Basket ; A. Draglier.
249. Model of an Improvement on the Crank ; F. P. Canfield, Barnwell Dist., S. C.
250. One Toy House ; S. Roberts, Charleston.
251. A Rockaway Wagon ; Boatwright & Pomeroy, Columbia, S. C.
252. Network Purse ; Miss D. Elfe, Charleston.
253. Pair of Hose, spun and knit in Columbia, S. C. ; Mrs. G. A. Petton.
254. Case of Hats manufactured in Columbia, S. C. ; R. Hawley & Co., Columbia, S. C.
255. Case of Hats, manufactured in Charleston ; R. Hawley, Charleston.
256. Needlework ; by a lady of Texas.
257. Pair of Moose Horns ; sent by John Harberson.
258. Alcott Corantin Lathe ; Thos. N. Coffin.

259. Quilt; Miss Eloise Mackey, Winnsboro', S. C.
260. Bottle of Long Beard Black Barley; Mr. Heriot.
261. Giant Shanghai Beans, grown in Charleston; Mrs. Hammer-skold, Charleston.
262. Bottles and Tumblers of Preserves; Mrs. Meyers, Charleston.
263. Japonica in Wax; Mrs. B. J. Parker.
264. 3 Bales of Cotton; Dr. Witten, Georgia.
265. R. Hoe & Co., Card Printing Press; Joseph Walker, Charleston.
266. 3 Bales of Cotton; J. B. Bull, Abbeville Dist. S. C.
267. Silk and Wool Cassimere; Geo. Kiddell.
268. Netted Sideboard Cover; Miss Eason.
269. 3 Bonnets; " "
270. 7 pieces Crochet work; " "
271. 2 Crayon Pictures; Nath'l Levin.
272. The Violet, a Race Boat, made in Charleston, to contend at the Regatta; Messrs. Easterby and others, Charleston.
273. Goat Skin Scull, brought to contend at Regatta; Mr. Decker, New York.
274. Two year old Colt; A. T. Shier, St. James Goose Creek, S. C.
275. A Marsh Tackey, called La Fayette, 4 years old; Wm. M. Otis, Charleston.
276. A Plantation Tackey, called Vampa, 3 years old; Chs. H. Wilson, Wadmalaw Island, S. C.
277. Pair of Devon Calves; Judge Warren, Augusta, Geo.
278. Ayrshire Heifer Calf; Richard Peters, Atlanta, Geo.
279. Pair of Suffolk Pigs, 5 months old; J. R. Wilson, John's Island, S. C.
280. 3 Dogs and Ferrets, trained for Rats, raised in Charleston; Walter John Dobbins.
281. A Canadian Stallion, between 6 and 7 years old, from the French settlement near Montreal, and imported for Dr. North; Dr. Edward North, Charleston.
282. A Trinket Poney, 5 years old, raised in S. C.; E. H. Carsten, Charleston.
283. A Nubian Sheep, 7 months old; Dr. S. H. Dickson.
284. 2 Cashmere Goats, half-blood, 6 months old; Dr. S. H. Dickson.
285. A Colt out of Eclipse, by a common mare, 15 months old; J. Holman, Blackville.
286. Bottles of Native Olives; Robert Chisolm, Beaufort, S. C.
287. A Stationary Engine, 15 horse power, 10 inch diam. cyl., stroke 30½; Cameron, Mustard & Co., Charleston.

PREMIUMS AWARDED
AT THE
ANNUAL FAIR FOR 1852,
OF THE
SOUTH CAROLINA INSTITUTE.

- Miss Martha A. Alderson, Crochet Handle, Crochet Work.
“ “ “ “ First Reticule, Netted Waiter Cover.
Miss E. J. Anderson, Second Porte Monnaie, two Ladies Work Baskets.
John Artman, Silver Medal, Clarence Coach.
Miss L. Ayer, Crochet Handle, Crochet Bonnet.
E. B. Baker, Silver Medal, Improved Rail Road Wheel.
Miss M. E. Baker, Third Porte Monnaie, Pyramid of Paper Flowers.
Mrs. E. W. Beecher, Silver Medal, Vases of Wax Flowers.
Boatright & Pomeroy, Silver Medal, Rockaway.
Miss A. E. Brown, Crochet Handle, Crochet Doylies.
Mrs. J. M. Caldwell, Furnished Book, Pea Fowl Brushes.
Cameron, Mustard, & Co., Gold Medal, Superior Steam Engine.
Cameron, Mustard & Co., Silver Medal, Castings in Brass.
G. Carpenter, Diploma, Electrotyping on Steel and Silver.
S. N. Carvalho, Silver Medal, Bust of a Beggar.
Miss E. W. Chafee, Gold Thimble, Spanish Pillow Cases.
R. Chapman, Silver Medal, Horse Shoes.
B. D. Clarke, Diploma, Axe and Drawing Knife.
J. C. H. Claussen, First Premium Diploma, Soda Biscuits, Pilot Bread,
and Butter Crackers.
M. Coburn, Diploma, Violins.
J. Hamilton Couper, Diploma, Native Olive Oil.
Misses Kate and Mary Drayton, Third Porte Monnaie, two Lamp Shades.
E. Currant, First Premium Diploma, Specimens of Ornamenting and
Gilding.
Wm. Dallas, Silver Medal, Patent Leather and other Boots.

- C. W. Davis, Diploma, Cuttings in Paper.
 Miss M. A. DeLorme, Gold Thimble, Two Shirts.
 T. E. Denaux, First Premium Diploma, Folding Spring Mattress, with patent hinges.
 Miss S. Dewar, Crochet Handle, Crochet Tidy.
 P. V. Dibble, Silver Medal, Best Moleskin Hat.
 E. S. Dodge, Silver Medal, Miniature.
 Douglass & Post, First Premium Diploma, Shifting top Buggy.
 Duffus & Co., Silver Medal, Best Bale Rope.
 Miss Eason, First Porte Monnaie, Embroidered Bonnets.
 Miss Eason, Crochet Handle, Crochet Work.
 Miss D. E. Elfe, Crochet Handle, Net Work Purse.
 A. Elfe, Jun., First Premium Diploma, Panelled Doors.
 Miss J. G. Elliott, Second Porte Monnaie, Imitation Marseilles Pin Cushion.
 Miss J. G. Elliott, Gold Thimble, Bobbinet Lace Veil.
 H. & R. J. Evans, Diploma, Wrapping Paper.
 N. Fields, First Premium Diploma, Soda Water and Syrups.
 Miss Julia Fisher, First Porte Monnaie, Crayon Drawing, "Anna."
 Mrs. Frederick, Furnished Book, Toilet Cover.
 D. L. Glen, Silver Medal, best Daguerreotype Heads.
 C. W. & A. D. Graves, Silver Medal, Carolina Grey and Pressed Brick.
 Stuart Grier, Silver Medal, The Violet, a Race Boat.
 Miss A. Hamlin, First Reticule, Crochet Work.
 John Hamlin, Silver Medal, Water Buckets.
 P. M. Hammarskold, Silver Medal, best Architectural Draughting.
 J. H. Happoldt, Silver Medal, a Rifle.
 S. J. Harrod, Silver Medal, Door Plate Engraving.
 R. Hawley & Co., Silver Medal, best Kerseymere Hats.
 Hayden, Brother & Co., Silver Medal, Silver Ware.
 Miss J. Holman, Furnished Book, Patchwork Quilt.
 Mrs. F. Holman, Furnished Book, Domestic Tweeds, Kerseymeres and Linseys.
 Miss E. V. Holmes, Second Reticule, Table Net.
 Horton & Park, Silver Medal, best Plumber's Work.
 Howard Manufactory, Silver Medal, Bale of 4-4 Brown Sheeting.
 Mrs. A. C. E. Howland, First Porte Monnaie, Worsted Work Arm Chair.
 Miss Eugenia Huchet, Third Porte Monnaie, Worsted Picture.
 Mrs. Daniel Huger, Gold Thimble, Two Quilts.
 Miss M. E. Johnson, Second Porte Monnaie, Two Moss Baskets.
 B. Johnson, First Premium Diploma, Wire Safe.

- B. Johnson, First Premium Diploma, Specimen of Umbrellas.
 Wm. Keenan, Silver Medal, Embossed Envelope and Card Engraving and Printing, Copperplate, &c.
 Love & Wienges, First Premium Diploma, Lady's Saddle.
 F. Lynch, Silver Medal, best Leather and Brogans.
 Miss McCann, Second Porte Monnaie, Silk Work Picture.
 A. McLeish, First Premium Diploma, best Dray.
 A. & R. B. McKensie, Silver Medal, Double and Single Harness.
 Miss Eloise Mackey, Gold Thimble, a Quilt.
 J. Maier, Silver Medal, Composition Painting Portrait of a child.
 James G. Marsh, Silver Medal, Models, Ship and Steamship.
 Miss Eliza Mason, Third Porte Monnaie, Worsted Mat.
 Mrs. Meyer, Second Porte Monnaie, Preserves.
 R. S. Millar, First Premium Diploma, Best assorted and Water Crackers and Nuts.
 S. Morehead, First Premium Diploma, Wine Bitters.
 D. Murphy, Diploma, Best Printing Paper.
 Miss Nettlebladt, Crochet Handle, Two Crochet Collars.
 P. M. Nightingale, Silver Medal, Native Olive Oil.
 Edward North, Silver Cup, Brown Canadian Stallion for draught.
 J. M. Osborne, Silver Medal, Best Composition Daguerreotypes.
 Mrs. Osborne, Gold Thimble, Dress Making.
 Mrs. A. G. Parker, Gold Thimble, Case of Millinery.
 Miss M. B. Payne, Gold Thimble, Picture in Needle Work.
 J. A. Pelot, First Premium Diploma, Best Specimens of Penmanship.
 Miss Mary Pelot, Gold Thimble, Baby Dress.
 F. Y. Porcher, Silver Cup, Brown Stallion.
 N. B. Prothro, Silver Medal, Flooring Boards, planed by Beardsley's Patent Planing Machine.
 Mrs. G. B. Reid, First Porte Monnaie, Mat made of Scrap Cloth.
 C. Rhodes, Diploma, Fire-proof Hearth Bricks and Jugs.
 Miss M. A. Riley, First Reticule, Netted Wool Shawl.
 Mrs. Caroline H. Ripley, Second Reticule, Krittled Work.
 Miss Sarah Jane Ripley, Crochet Handle, Crochet Work.
 Mrs. M. T. Robinson, Gold Thimble, Needle Work.
 Miss Harriet-Ronan, Crochet Handle, Crochet Tidy.
 Miss Rotureau, Crochet Handle, Crochet Work.
 Mrs. Runken, First Porte Monnaie, Worked Bosom Shirt.
 Mrs. Shuckman, Gold Thimble, Gold Embroidered Cushion and Album.
 Scott & Deveaux, Agents, Silver Medal, Sea Island Cotton Gin, S. L. Burney, St. Mary's, Geo.
 Miss V. E. L. Shier, Crochet Handle, Crochet Work.

- Smoak & Ray, Silver Medal, Best Buggy.
- South Carolina Armory, Silver Medal, Specimens of Fire Arms.
- Stokes & Guenveur, Diploma, Book Binding in full calf, with Marbled Edges, (a new feature in Southern work.)
- Miss H. E. Stone, Furnished Book, Crochet Sideboard Cover.
- James Sullivan, Agent, First Premium Diploma, Granger's Patent Cooking Stove.
- E. T. Taylor & Co., Silver Medal, Cotton Gins, Saw Gins.
- E. T. Taylor & Co., Silver Medal, Patent Excelsior Straw Cutter.
- Miss V. A. Thomson, First Porte Monnaie, Two Palmetto Baskets.
- N. Thomson, Silver Medal, Graining on Wood.
- D. L. Thomson, Silver Medal, Arrow Root, Tomattoes Catsup, Cayenne, Mustard, &c.
- Mrs. Todd, Gold Thimble, a Quilt.
- Tomlinson, Wood & Co., Silver Medal, Cabriolet.
- J. C. Torrey, Silver Medal, Circular Saw for hand use.
- C. A. Trouche, First Premium Diploma, Window Blinds.
- Miss M. E. E. Veronee, Second Porte Monnaie, Hair Wreath.
- G. H. Veronee, Diploma, Tinner's Work.
- W. H. Veronee, Agent, 1st Premium, Diploma, Stanley's Parlor Stoves.
- Joseph Walker, Agent, Diploma, Hoe & Co.'s Patent, Card Printing Press.
- Walker & Evans, Silver Medal, Best Blank Book Ruling and Binding.
- Walker & Evans, Diploma, Best Bound Books, in full and half binding.
- Mrs. D. C. Webb, Furnished Book, Preserved Tomattoes.
- Thomas B. Welch, Silver Medal, Engraving of Head of Washington, from Stuart's Painting.
- C. Werner, Silver Medal, Ornamental Castings in Iron.
- C. Werner, Silver Medal, Design of Ornamental Iron Work.
- C. Werner, Silver Medal, Ornamental Wrought Iron Work.
- Edward Whaley, Silver Cup, Best Sea Island Cotton.
- Miss Julia Whilden, Third Porte Monnaie, Piece of Embroidery.
- Mrs. White, Second Reticule, Crochet Quilt.
- Mrs. M. White, First Premium Diploma, Baskets.
- Miss J. C. Whitney, Third Porte Monnaie, Crochet Work.
- Miss J. B. Whitney, Second Reticule, Crochet Table Cover.
- J. S. Witten, Silver Cup, Best Long Staple Upland Cotton.
- Charles H. Wilson, Silver Cup, Fine Marsh Tackey Stallion.
- Misses Withers, Pair of Silver Salt Cellars, Papier Mache Port Folio.
- J. C. Wolf, First Premium Diploma, Best Trotting Buggy.
- Miss M. A. Yates, First Reticule, Crochet Quilt.
- Mrs. Yeadon, Second Reticule, Crochet Piano Cover.





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