ADDRESS
DELIVERED BEFORE THE
N. Y. State Agricultural Society;
AT THE
ANNUAL MEETING.
ALBANY, FEBRUARY 11, 1864.
BY EDWARD G. FAILE,
PRESIDENT.
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Gentlemen of the State Agricultural Society:

We, as a Society, the sole aim and purpose of which is the furtherance and improvement of the Arts of Peace, meet once again amid the alarms of War, and while as citizens of our common country, we have abundant cause for thankfulness toward that Good Providence which has so signally advanced the cause of human liberty and good government, since our last meeting, we have no less reason to be thankful for the abundant harvests which have in an almost unprecedented manner rewarded the labors of the husbandman.

We had, perhaps, sufficient cause for apprehension, lest the great drain both of men and money, the unavoidable consequence of the war against rebellion on so gigantic a scale, and naturally the all-absorbing topic of the times, should affect, unfavorably, our Annual Fair; yet it was eminently successful in the quality of the exhibition, in the numbers attending it, and in the interest mani-
fested in all its proceedings, especially the evening meetings, which were nightly crowded, and the scene of interesting and useful discussions on subjects important to farmers.

Acknowledgements are due to his Honor the Mayor of the city of Utica, to the Common Council, and to the citizens generally, for the hospitable and accommodating spirit shown, but especially should they be rendered to Mr. John Butterfield, for his strenuous and unremitting exertions in behalf of the Society, as to him we owe the possession of the most pleasantly located, spacious, and convenient grounds, and the most complete and comfortable buildings we have ever occupied.

The financial success of the Fair, the quality of the animals shown, the variety of products and number of implements exhibited, as set forth in the reports of the Treasurer and of our honored Secretary, rank it among the most successful ever held by the Society, notwithstanding the almost entire loss of the last day, owing to a storm of unusual severity.

In the department of Agricultural Implements there was an unusually full show, exhibiting many improvements upon valuable implements
and machines already in use, and also a considerable number of new inventions, showing that the enterprise of our mechanics is keeping pace with the increasing necessity for labor-saving machinery, arising from the scarcity of farm laborers; and I think that the Society have great cause to feel gratified that year after year has shown a steady and large increase in this most important department.

It proves that the manufacturers feel that the endorsement of the Society, through the prizes awarded after examination by competent judges, is an important element of success in the introduction of any new or improved implement, and also that the farming community have confidence in the justness and reliability of the awards so made.

This is to my apprehension one of the most important of all the avenues of usefulness open to, or I should rather say trodden by this Society. It is only by improved cultivation, that we of the older States, working soils partially exhausted, which require high culture and liberal applications of manure, can compete with the teeming West, and particularly now, when the high price of labor renders necessary every labor-saving implement.
And here I would suggest the expediency of the establishment of some system, by which a more timely and thorough examination of machinery and implements, as well as the opportunity to test their practical working, may be had.

At the Fair last fall there were Committees, whose lists numbered by hundreds, of implements and machinery, designed especially to promote the interests of farmers, many of them being of prime value and importance. Now, it is not possible that satisfactory examinations of such long lists can be made in so short a time as is of necessity allotted to them, and I think that the maintenance of the high and well deserved reputation of the Society, which has induced the large increase in this department, requires that timely action should be taken on this subject.

Standing in the presence of practical farmers, the majority of whom know more about the culture of the earth than I do, I should not venture, even if I had the ability, to propound scientific theories, or to indicate systems of agriculture: on one point only will I say a few words, namely, Tile Drainage.

From observation of the results of the thorough drainage of land, in which I have had a close
personal interest, I am so entirely convinced of the importance of the subject, that I think it cannot be too persistently urged upon the attention of our farmers. I have seen a large meadow of rank, coarse grasses intermixed with rushes, which was wet throughout the year, and did not yield even in pasturage, a tithe of the amount of the interest on its cost per acre, thorough drained with tile in the spring and early summer, fallowed, and the following summer yielding a fair crop of barley. In another case the land was a swamp, yielding absolutely nothing, and within one year, by thorough drainage, it was made to produce a crop of 54 bushels of shelled corn to the acre, which was followed the next season by a good crop of oats, and it is now sown to winter wheat, which gives extraordinary promise. There are small portions of similar wet land on many thousands of the farms in this State alone, which in the aggregate would make a large tract, now lying waste and useless, a large proportion of which could undoubtedly be reclaimed by tile drainage, and, being generally rich, strong soils, made to yield a good interest upon the outlay, to the owners, and at the same time add to the healthfulness of the neighborhoods, and the wealth of the State.
In thus speaking of the reclaiming of wet lands, I would by no means be understood as considering the beneficial effects of tile drainage as confined to them. On the contrary, the testimony of the leading agriculturists of Great Britain, where the system has been most extensively practiced, is uniform as to its wonderful effect in increasing the productiveness of their clay lands.

That eminently successful English farmer, Mr. Mechi, in his recently published edition of "How to farm profitably," remarking the difference in productiveness between drained and undrained clays, gives the following remarkable statement of his own experience. He says:

"Let me illustrate this from actual facts.

**PRODUCE OF UNDRAINED CLAY.**

First year, fallow, rent and expenses, £5 0s. 0d.

Second year, Oats producing 5 quarters, at 26s. 6 10 0

**PRODUCE OF DRAINED CLAY.**

First year, tares, fed off by sheep eating rape-cake, beans, &c. £5 18s. 4d.

Second year, Oats producing 10 quarters, at 26s. 13 0 0

"I quote this particular crop because I have watched it this year in comparison with my own,
but we may carry out the comparison in almost all the others.” We are not without instances of extensive draining by leading farmers of this State, and with strikingly favorable results; but with us it is exceptional, and not general, as in Great Britain, and I would urge upon our farmers the importance of giving the subject more consideration than it has yet received. I am convinced that in Tile Draining there is a mine of wealth, that if worked would add millions to the value of the agricultural productions of our State.

Through the years which have elapsed since the outbreak of this causeless and wicked rebellion, at times clouded by severe reverses, and again resplendent with glorious successes, the farmers of the country have held, with uninterrupted vigor and success, their onward way, and what they have done towards sustaining the Government in its great struggle, let a few figures, taken from the Report of the Department of Agriculture, show.

During the year 1860, the total of Agricultural exports, exclusive of Cotton, was $90,849,556. In 1862, when Civil War, in its most aggravated form, devastated the portions of the country in which it was waged, and by the death of Fathers,
Sons, Brothers, upon the field of battle, brought sorrow, and oftentimes desolation to many thousands of homes throughout our land; when the urgent wants of the Naval Department withdrew hundreds of vessels from our mercantile marine; when piratical cruisers, fitted out in the ports of a so-called neutral country swept the face of the ocean, in 1862, notwithstanding all these discouragements and drawbacks, our exports had rizen to $155,142,075, an increase of more than $64,000,000, and this was mainly in breadstuffs, the value of exports of which in 1860, was $26,989,709, while in 1862, it was $84,340,653, and this besides furnishing the provisions of every description for our greatly increased navy, and our armies in the field; those armies consuming a much larger percentage of products than they would at home, laboring as producers, as well as consumers, on the farms from whence a large proportion are taken.

Previous to the outbreak of the Rebellion, the products of the Southern States, mainly cotton, furnished the principal reliance for Exchange, and it would have been thought that ruin, instant and almost irretrievable, must follow the stoppage of their exportation; and yet the ports of the South
were suddenly closed, and its products, so far at least as the Free States were concerned, withdrawn from the market, and though followed by a brief period of comparative stagnation, it was quickly recovered, and the tide of Commercial prosperity now rolls on with as strong a flow as at any time in the history of the country. I think that there is not in the history of the world, another instance of such agricultural and commercial prosperity, under similar adverse circumstances, as has been exhibited in this country since the breaking out of the Rebellion, and I would press home to the consideration of every interest in our land, whether Financial, Commercial, or Mechanical, that the foundation upon which the prosperity of them all is based, is Agriculture!

I am sure that facts will sustain me in asserting, that so far as this State is concerned, its ability to maintain itself in the foremost rank, is largely due to the influence of this Society, brought to bear upon the people by its Annual Fairs, and by the publication, through its Journal and Transactions, of the practical beneficial results to Farmers, by the use of labor saving implements, and the practice of improved systems of Agriculture.
But to be enabled to gain the full benefit of the many experiments constantly being made to increase the productiveness of the soil by improved culture, and to carry them forward to profitable results, there is need for thorough agricultural education, the facilities for the attainment of which do not at present exist in this State.

It is not necessary, nor indeed expedient for me here, to enter into any lengthy statement in regard to the effort to establish an Agricultural College, at the town of Ovid. Many of you are aware, that commencing under comparatively favorable circumstances, it was confidently anticipated that the College would soon become self-supporting; but before there was time to develop its practical usefulness, this terrible war broke upon us, and its capable and zealous President, General M. R. Patrick, Provost Marshal of the Army of the Potomac, yielding to the urgent call of the Governor of the State, resigned the charge of it to enter the service of the State, in a more arduous and responsible position, and has since been called to the service of the General Government, to which he is still patriotically devoting his time and talents.
Subsequently, from various causes arising out of the war, the number of students decreased, and the Board of Trustees, with feelings of profound regret, found it necessary to close the doors of the College. Before doing so, however, they went before the Legislature with a statement of its affairs, asking an appropriation of the small sum of $5,000 per annum, for the period of five years, and though more than this sum would be required, it was their intention, by the aid of the appropriation, to keep the Institution in operation and free of debt for that length of time. The appropriation was not made, and as a result, the College was closed, and probably must so remain until wiser councils prevail in our Legislature.

The Congress of the United States, with a just appreciation of the vast importance of the agricultural interests of the country at large, granted munificent endowments of public lands to the several states, for the purpose of establishing Agricultural Colleges, and for the promotion of the general interests of the farmers and mechanics of our land. The quantity of land received by the State of New York, was 990,000 acres, and the Trustees of the College, with, as I think, no unreasonable expectation, anticipated that a portion
of this great endowment would be appropriated to the sustainment of an Agricultural College already organized; but the Legislature, in their wisdom, have disposed of it differently.

Do the Farmers feel that the disposition made of this endowment by the Legislature was the wisest and best that could be made under the circumstances, and likely to redound most largely to the advantage of those interests which it was intended to foster and promote? If not, with them rests the power to compel a reconsideration of this legislation, and to cause such disposition of the revenue arising from this source, as will secure its full benefits.

In view of the great results from the Agricultural industry of the Free States, and the development of power and resource, to an extent which few, even of the most sanguine, anticipated, does it not behoove us to look well to it, that the interests of our Agriculturists should receive timely and proper attention?

The proud motto of our State is "Excelsior," and she yet maintains the first place in population, in value of agricultural products, and in commerce; and most earnestly do I hope that our noble State will always hold that proud pre-emi-
nence. Yet others are pressing hard after, and as a well recognized means to the end aimed at, (the increase of their agricultural products,) are with wise foresight fostering the interests of the producers, by liberal appropriations of the public money.

For instance, the Legislature of the comparatively weak State of Michigan, has made appropriations of the following amounts for the establishment and support of an Agricultural College, viz:

In 1855—The proceeds of the sale of 22 sections of Salt Springs Land... $56,320.

In 1857—An appropriation of... 40,000.
" 1859—Do. 37,500.
" 1861—Do. 16,500.
" 1863—Do 18,000.

In 1861, the State donated 6,000 acres of Swamp land, valued at $5.00 per acre... 30,000.

Making a total of... $198,820.

And in addition to all this, the Legislature, at its session last winter, passed over to the College the Congressional grant of 240,000 acres of land.
How very forcibly does their enlightened liberality contrast with the course of our Legislature!

This subject of Education, with a particular reference to Agricultural Pursuits, is one of such great importance to the State, to the community, and to every individual citizen, that I am unwilling to pass it lightly. With our last President, I feel it to be a great misfortune, that the feeling should so generally exist among our farming community, that the mere rudiments of education are sufficient for the boy who intends to be a Farmer, often for the sake of his assistance on the farm, depriving him of availing to anything like the full extent, of the advantages which are afforded by our noble system of common schools; whilst, for the one who chooses to follow some one of those called the Learned Professions, he recognizes the necessity of a longer period for study, and all the advantages for the attainment of general information, and mental training, offered by a Collegiate course.

Now, there is no man in any profession or pursuit in life who more needs the aid of a thorough education, especially in the physical sciences, than the farmer. Whether he farms for
the production of cereals alone, gives his attention to the feeding of animals for market, or to the introduction and improvement of Stock, he is constantly brought in contact with the great laws of nature; and, though he may and does learn much that is valuable by mere experience, how much more might he learn and communicate for the general benefit, if that experience was utilized by a general intelligence, and a knowledge of the laws and principles that govern all production.

Isaac Newton, the Commissioner of Agriculture, in his late interesting and valuable Report, says: "Agriculture is a growth like the plant it cultivates, and like the mind also, the more it is developed the more it yields. It can be easily shown that there is no occupation of life where extensive knowledge is more necessary than in the proper cultivation of the soil. There is no occupation so intimately blended with all the branches of the natural sciences, to which geology, chemistry, botany and entomology are such valuable auxiliaries. Of all human pursuits, Agriculture is first in order, in necessity and importance. The best farmer is always the most intelligent man, and a community of knowledge is one of the strongest ties that can bind and bless
society. The simple argument, therefore, is this: increased scientific and practical knowledge, in any occupation, increases man's power in a tenfold ratio; Agricultural knowledge, therefore, begets productiveness, and in the same proportion develops the wealth, the prosperity and the progress of our country.” Sir Humphrey Davy once remarked, when speaking of the future influence of Agricultural Chemistry, that “nothing is impossible to labor aided by science. The objects of the skillful Agriculturist are like those of the thoughtful patriot. Men value most what they have gained with effort, and a just confidence in their own powers results from success. They love their country better because they have seen it improved by their own talents and industry, and they identify with their own interests the existence of those institutions and pursuits, which have afforded them security, independence and the multiplied enjoyments of civilized life.” If these remarks of this eminent man were applicable to the British Agriculturist, are they not tenfold more so to the American, who owns the soil he cultivates, and the main leading interest of whose comparatively boundless country is, and must always be, Agriculture!
Do Americans realize the gigantic strides which Agriculture has made, and is making in the West? Take a single decade, and look at the vast increase of productions! I take the following figures from the Report of the Department of Agriculture:—

Iowa, in 1850, produced 1,530,581 bushels of wheat, and in 1860, 8,433,205 bushels; of Indian Corn, in 1850, 8,656,799 bushels, and in 1860, 41,117,000 bushels.

Minnesota produced of Wheat, in 1850, 1,401 bushels, and in 1860, 2,195,812 bushels; of Indian Corn, in 1850, 16,725 bushels, and in 1860, 2,987,570 bushels.

And this increase runs through all their Agricultural productions, in nearly the same ratio. Nor is it confined to the States mentioned, but will be exhibited in a greater or less degree in every Western State.

Now, we of the older States have sent forth, and will for a long period continue to send forth, the stalwart men by whose untiring labor and ready intelligence the Great West has been developed, and the consequent immense addition to the wealth of the country; and is it not highly important that they should go armed with scientific knowledge as well as practical experience,
that they may preserve, by judicious culture, the pristine richness of these garden lands of our country, which will, in a not remote future, become the central granaries, whence swarming millions will draw the Staff of Life?

One other remark in regard to Agricultural Education, and I have done.

The question has often been asked me, as it has doubtless of many of those before me this evening, by gentlemen resident in cities, professional men or merchants: "Where can I send my son to learn farming? Is there any Agricultural School or College in this State?" I do not know of any. I might advise that he be placed with some good farmer, to learn practical farming, in the absence of any institution, where he might learn both theory and practice; but there again I am at fault, for I cannot name to him any farmer with whom he may be placed, nor do I know how he can ascertain whether there are any farmers who would take this class of young men to be educated in the profession they desire to learn.

Every man of intelligence knows full well the importance of capital to thorough farming operations. I should rather say, the necessity of it—and one great reason why there are so many poor
farmers and so much poor farming in this country, undoubtedly is, the very small percentage of capital employed to the breadth of land cultivated. In England it is estimated that the working capital of a farmer should average from $35 to $50 per acre; and while we cannot expect this, and perhaps do not need so much in this country, yet there is great room for improvement, and consequently every reason why the opportunity of learning how to farm should be open to the class who, possessing capital, could, and if we judge from the results in England, would do much to improve the general character of our farming, and to increase the average productivness of our land.

No one, I think, can doubt this who has observed the immense improvement in neat stock alone, effected during the past ten years by a few of the leading farmers of this State, most if not all of them active and prominent members of this Society; and the effects of their improvements, great and valuable as they are in the present, will be carried forward with an increasing ratio of value into the far future.

Individually, and as a Society, we may bring a great influence to bear in forwarding the cause of Agricultural Education, and I think posterity will
award high honor to those who shall be instrumental in establishing a complete and thorough working system.

During the year which has elapsed since, by your kind partiality, I was called upon to preside over the interests of this Society, we have to mourn the loss of two active and prominent members—the one stricken down on the field of battle while in the brave and faithful discharge of a patriot's highest duty,* and the other dying from the results of exposure while in the service of the country.† We regret them as friends, we miss them as earnest and able co-workers in our wide field of usefulness, and will garner their memories among our kindest remembrances.

In closing, let me say that, in devolving the Presidency upon another, I lay aside only official duties and honors. My earnest and hearty interest in and for the Society endures, and I look forward while life and health are spared me, to a continuance of my pleasant labors in its ranks.

There now only remains to me the pleasant duty of introducing my successor.

* Col. Sherrel, of Geneva. † Col. Francis M. Rotch, of Otsego.