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ADDRESS

DELIVERED AT THE

EIGHTEENTH ANNUAL FAIR AND CATTLE SHOW

OF THE

Rensselaer Co. Agricultu'l Society,

HELD AT

GREENBUSH, N. Y.,

SEPTEMBER 16, 1859,

✓
BY HON. L. CHANDLER BALL.

PUBLISHED BY REQUEST.

TROY, N. Y.:

FROM THE PRESS OF THE TROY DAILY TIMES, 208 RIVER STREET.

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ERRATA—Page 5 : 24th line, in lieu of "formed" read "performed."
Page 8 : 20th line, read "lights up" for "light up."

ADDRESS.

LADIES AND GENTLEMEN:—

I am obliged by the position in which the Society has placed me, to deliver the Address on this occasion; having endeavored unsuccessfully to procure a speaker from among the distinguished authors and lecturers of the country—some of whom, recognizing the immortal brotherhood of learning and labor, are happy at this season of ripening fruits and maturing harvests, to greet the husbandman with words of fraternal cheer, and set gems of glowing thought amid the pearly drops that gather upon the brow of toil. Honor to these noble men, who having ascended Pisgah, and seen the promised land, return to guide the sons and daughters of toil out of the wilderness of ignorance and humiliation, and introduce them to the golden fields, where their possessions lie.

The place in which it has been our good fortune to hold this annual festival, is full of historic interest. These grounds, now filled with the products of industry, employed in the peaceful pursuits of agriculture, were once devoted to the purposes of war, and bristled with weapons for human slaughter. Within sight are the highlands of Saratoga, where was fought one of the most important battles of the Revolution—a battle that arrested the march of hostile invaders, and consecrated to liberty the land it was fought to defend.

It is to that victory that we are indebted for the privilege of tilling these fields in peace, and eating our bread in secur-

ity; that instead of turning our plough-shares into swords and marching up to the harvest of death, our hands hold the implements of husbandry, and gather into bursting garner the fruits of peaceful labor; that instead of the morning drum-beat and the evening gun, birds sing the reveille that invites us to our daily toil, and lowing herds call us to our evening rest.

Grateful though we are to the men who by God's favor achieved our national independence, though earnestly hoping that on every field that human blood enriches, will grow wreaths to deck the brow of freedom—that Magenta and Solferino will be inscribed with Lexington and Bunker Hill on the scroll which liberty exhibits to her followers—we have not assembled here to offer our tribute of praise to the men who have won great victories and achieved imperishable renown upon the battle-field. We are not here to erect a statue to Mars and pour bloody libations around his smoking altars, but to bind with fresh garlands the brow of Ceres, and exhibit the trophies by which Peace proclaims her victories.

Though the occasion is one for thankfulness and congratulation, though I might dwell with pride upon the achievements of labor, and point with satisfaction to the evidences of taste and skill which these grounds exhibit, I shall indulge in no special laudation of Agriculture, nor describe those who work in her service, and live by her bounty, as having reached the summit of earthly felicity.

I shall rather use the point we have gained to ascertain our real progress in the art of Husbandry, and discover our relative position among the several *corps d'armee* who are bearing the banners of a higher civilization round the world.

The first thing to be considered in looking at any business, is the means which those engaged in that business possess of prosecuting it with success, and of working out amid its trials and conflicts the happy results of a well-spent life. It is to this thought in its special relation to agricul-

ture, that I propose to devote the half-hour which I shall venture to occupy on this occasion.

Let us see if the farmer possesses the means of prosecuting his business with success, so that all his professional duties shall be promptly performed, the claims of citizenship and of humanity honorably discharged, the demands of learning and religion fully satisfied; so that, after crossing with flying feet the brilliant boundaries of youth, after climbing to those serene heights on which mature and vigorous manhood achieves its triumphs, and records in the world's book of heraldry its honors, he shall go with quiet dignity down the hill of life, and watch with calm delight the glowing sunset that will gild and hallow life's closing day.

Now, gentlemen, you know that I am myself a farmer, sensitive to the reputation, and jealous of the honor of the class to which I belong. What I shall say, therefore, you may be sure is dictated by a sincere desire to benefit those to whom I speak. It is necessary sometimes, however, to present unpleasant truths, which if kindly taken will improve and beautify the human character, as bitter medicines strengthen and establish the human constitution.

Two items make up all the capital employed in business; or I might better say that two partners compose the firm by which the business of the world is formed and conducted—**HEAD AND HAND**. These should contribute equal amounts to the capital stock, and each invest all its earnings in the execution of God's command, to subdue the earth and exercise dominion over it. In a word, each should be educated up to the highest point of human achievement.

This great truth lies at the foundation of all successful human pursuits. It arrests the farmer at the very threshold of agricultural life—it meets him at the gate, follows him to the field, walks behind the glittering plough-share, drops with the falling seed, and accompanies the reaper as it gathers the golden harvest.

But in looking at the agricultural population of the country as a class, it is impossible, after according to it, as I cheerfully do, the possession of sterling worth, untiring industry, high morality, and devoted patriotism, it is impossible not to confess that it ignores and overlooks the great truth here announced—the relation of labor to mind. Hand asks no aid of Head, who is only a sleeping partner in the concern. Learning, in its higher signification, forms no part of the farmer's capital. Land, oxen, plough, are obtained; but a knowledge of the principles of agriculture and the laws of organic life, an acquaintance with science and the arts, are overlooked and dispensed with.

While no business in which man can engage, not even the professions of medicine, divinity and law, is more dependent for success upon deep and extensive learning, none has derived so little benefit from the great discoveries and inventions of the age as the business of farming; and while no class of men so much need, from their isolated situation and few social advantages, the refining, liberalizing and ennobling influences of education, none really obtain so little. No persons avail themselves so tardily and so reluctantly of those agents of human progress, which inventive genius and artistic skill have given to the world.

Commerce, manufactures and the mechanic arts are far in advance of agriculture in the extent of their researches, and in the readiness with which they appropriate to useful and beneficent purposes the discoveries and inventions of the age. Merchants, manufacturers and mechanics have a higher appreciation of the power of knowledge, and as a consequence occupy higher positions in society, and obtain more of the world's regard.

Merchants have their libraries, reading rooms, and lecture halls; mechanics have the same, and their evening schools, where, after the labor of the day is ended, after fashioning at the bench or the anvil, and fitting for human uses the

brilliant conceptions of genius, they assemble to obtain from books and teachers the information which is indispensable to success and honorable consideration.

Except the county fair, which does not receive half, nor a tenth part of the attention which its importance merits, can you show me the farmers' association for mutual improvement? Do farmers meet at the district school house, the village hall, or other convenient places, for instruction and improvement in agricultural science? Do they even employ at home those hours of leisure which occur in the most laborious life, in reading and study? Every household has means which, to an earnest lover of learning, are alone sufficient for the acquirement of a very respectable education.

Books which contain the accumulated knowledge of sixty centuries burden your library shelves. The great events, the rounds in the giant ladder by which the people have raised themselves from savage to civilized life, are recorded for your instruction. The lives of great men, whose deeds flood with glory the pathway of nations, are spread out upon the printed page and invite your perusal. Science, in embroidered robe and starry crown, offers passports to her imperial realms. Poetry, radiant with pearls and gems of unimaginable beauty, solicits your acquaintance. Music, breathing celestial harmonies, unfolds her purple wings and strikes the key note of earth's rejoicing hymn.

Yet all these attractions and advantages fail to induce the farmer to make suitable preparation for the duties of a life cast in the most eventful epoch in the history of the human race. Shield and helmet hang neglected on the wall—the sword of truth lies rusting in the scabbard—dust covers the trophies of intellectual achievement, and the bugle-call for volunteers to attack the strong holds of ignorance, and plant triumphal banners upon their dismantled towers and broken walls, is unheard, or, if heard, is disregarded.

Did the thought ever occur to you, gentlemen, that farmers are more interested in the diffusion of knowledge and in the

growth and permanency of free institutions, than any other class? Are you familiar with the fact that farmers everywhere, in all nations and climes, form the substrata of society, which if the sun of liberty and the light of knowledge do not penetrate, if not broken into and permeated by science and the arts, will forever remain like the undisturbed subsoil of your native hills, poor, cold and unprofitable? The farmer, who in all ages has done the least to plant and sustain liberal institutions throughout the world, owes more to liberty and learning than any other class, because they have raised him from a greater depth of suffering and degradation. Under despotic governments, where learning is prohibited to the masses, where the light of freedom only penetrates in fitful gleams, which like the lightning's flash to the sinking mariner, only serves to reveal the horrors of the scene, the condition of the agricultural laborer is miserable in the extreme, and degraded beyond expression. Not where the star of empire gilds with lurid light, crown and sceptre, high raised battlement and moated gate, but where the sun of freedom light up the halls of learning and the chambers of legislation with its heavenly splendor, is the farmer's mud-walled hovel changed into the neat and cheerful cottage; the abject and crouching serf into the erect and fearless citizen, and invested with the honors which belong to virtuous and independent manhood.

As in civil liberty, so in the arts. Every discovery and invention, every improvement in machinery, every addition to the means of travel and transportation, and the transmission of intelligence, are of greater importance to the farmer than to any other class; because they tend to distribute and equalize the elements of wealth and power, of civilization and refinement, and to place him on an equality, social, political and intellectual, with the people who dwell in the great centres of business and of population. Let learning cease among the people, let knowledge die out among the masses, liberty would at once be dethroned—the Stars and Stripes, the flag

"by angel hands to valor given," would be the winding sheet of freedom. Then wealth and power would be seized by a few—the laborers of the nation would be the first and greatest sufferers, and the tillers of the soil would be reduced to their old condition of hereditary serfs and bondmen.

These are the mighty truths which the farmer ignores and overlooks, while he permits the world's harvest of knowledge to be gathered by a few, to be retailed to needy applicants at usurer's prices, or thrown out to starving beggars, like crumbs from the rich man's table.

The consequence of this inattention to intellectual wants is, that farmers as a class not only do not possess the means of prosecuting their business with success, but they fail to represent in their own lives and characters the intelligence and the inspiration of the age in which they live.

In this age of progress, the man who stands still a single day will be left behind in the grand march of human improvement. The people, I do verily believe, have taken their final exodus from the bondage of ignorance and error, and with priest and prophet, with fire and cloud, are pushing on through wilderness and sea, to take possession of that glorious heritage which they hold by promise.

More has been achieved during the present century than had been obtained before since the first feeble rays of intellectual light broke in upon the dark ages of the world. The rapid strides which science has made within the last few years, the perfection to which art has reached, the intellectual activity of the people, who like an invading army, nightly bivouac on the battle-field, with sentinels posted and watch-fires burning, and with the first glinting of the sun on shield and banner, move on to another and greater victory—these, while they strike the mind with wonder and admiration, fill the heart with thanksgiving and open the mouth with praise.

It is easy to see that in an age so prolific in useful discoveries, so fruitful in inventions adapted to the business of life, to lessen its burdens, increase its profits and multiply its plea-

tures, education cannot possibly be overlooked. I don't mean that education only which is obtained in the school room, but that enlarged and comprehensive training which consists in acquiring habits of neatness, order, and useful employment; in establishing principles of truth, justice and honor; obedience to law, and a just regard for the conventional rules of polite social intercourse; a correct estimate of one's own character, and a clear perception of the position one has a right to take, and is qualified to maintain; a watchful eye to the discoveries of genius, and a prompt application of all useful inventions to the business and the elevating enjoyments of life—this, added to that acquaintance with science and the arts which it is the peculiar province of the schools to teach, is the kind and amount of education which every American citizen, be he farmer, merchant, manufacturer, or artisan, is bound to obtain.

There can never be any considerable space between the great body of the people and the educated men of the country, without endangering all the cherished institutions of civilized and christian life. The further, therefore, that genius and learning penetrate the mysteries of nature and unfold the principles of eternal truth and justice, the more imperative is the duty, and the more absolute the necessity for the people to press up and secure and make forever their own, the knowledge that has been thus obtained. Don't let the great truths of philosophy and science, the wonderful creations of art, remain the exclusive property of the discoverer and inventor; but make yourselves the depositaries of all the important facts which genius and skill have acquired, and use them to improve and extend your business, to educate and ennoble yourselves, and enrich and exalt the nation. Until this is done, until the farmer obtains an amount of information adequate to the highest demands of this progressive age, he will not possess the means of securing that pecuniary independence, which is one of the necessary adjuncts of free citizenship, and he will also fail to reach that

elevated social position, wherein man's best and highest powers are developed and exercised, and the happiest results of a well spent life worked out.

There is a physiological fact connected with this subject of learning, which is worthy of your consideration. An educated man, all else equal, can perform a greater amount of labor, work more hours, produce greater results, and resist longer the antagonist forces of nature, than an ignorant, uneducated man. If you examine the subject, you will find that the history of all great enterprises, all difficult and hazardous undertakings demonstrate this fact.

It was observed in the Mexican war that in acts of bravery, in the performance of those heroic deeds which required unusual and long continued bodily exertion, the West Point Cadets bore the palm. The exploring expeditions of Lieut. Strain in the wilderness of tropical America, of Colonel Fremont among the desolate gorges of the Rocky Mountains, and of Dr. Kane amid the eternal snows of the Polar circle, where the physical powers of the men were tasked to the utmost limit of human endurance, show the same result—that upon the educated men of the parties, who performed the greatest amount of labor, and preserved the most buoyant and hopeful spirits, the safety of the expeditions depended.

The fact might be stated still stronger. Persons of feeble constitution and poor health, confirmed invalids, have by the mere force of education, high mental discipline, performed valorous deeds, and exhibited bodily powers, such as belong to the very Anaks of the race. William of Orange, afterward King of England, and the French Duke of Luxembourg, are examples; both had weak, sickly constitutions—both were enfeebled by disease, and racked by cruel pains. Macaulay, describing a terrible battle in which these two sickly beings were opposing commanders, says that “among the hundred and twenty thousand soldiers marshalled around Neerwinden under all the standards of Western Europe, the two

feeblest in body were the hunchbacked dwarf who urged on the fiery onset of France, and the asthmatic skeleton who covered the slow retreat of England."

If education can produce such effects as these, if learning can increase the vigor of the body, and so exalt the powers of life as to overcome pain, sickness and disease, is it not worthy the attention of the farmer, whose whole life is one of toil and exposure? If the farmer knew that he could use with more effect the shovel and the hoe, remain longer at the plough and in the harvest field, and endure with less danger summer's sun and winter's storm, by being educated, he would doubtless bestow more labor upon the cultivation of the mind, and give a more liberal support to institutions of learning.— And if boys knew and appreciated this fact, that learning quickens, concentrates and strengthens man's bodily powers, that it does really send the blood along its crimson channels in swifter currents, and returns it in fuller volumes to renovate and exalt the powers of life, they might perhaps devote to the lofty purpose of education, those hours which are now spent in hanging about taverns and street corners, in driving fast horses, and in urging to a more vigorous growth the vices and base passions of their nature.

Yet such is the fact: the boy who learns most can do most—the boy who leads his class in the school room, will lead his fellow men in the battle of life, whether that battle is fought with the pen, the bayonet or the plough.

Learning is a diamond in the crown of labor; not placed for ornament alone, but to shed effulgent light around the footsteps of toil, and draw from the soil of humanity those choicer fruits and larger crops, which, after perfuming the earth with fragrance, will be gathered by the Divine Husbandman, presented at the last great Exhibition, and receive premiums in Heaven.

The education of which I have spoken relates exclusively to the head, and is not simply nor mainly to enable its pos-

essor to superintend and direct the labor of others, but to make more perfect and complete the work of his own hands. These, therefore, must be educated and trained, and compelled to perform their part in producing those grand results which mark the progressive movements of the race.

Manual skill and dexterity must be acquired,—habits of industry fixed,—regular, continuous, effective labor performed. Too many men, and especially young men, attempt to evade that universal law which makes wealth depend upon labor, and endeavor to obtain riches by other and ignoble means; by that shrewdness which entraps the credulous and the unwary; by sharp bargains and cunning devices; by practicing the unworthy arts of the speculator, whose hands were never hardened by contact with the implements of toil, whose brow was never moistened by the sweat of honest labor. Some crowd into those avenues which should be exclusively devoted to females; and though formed to wield the axe, hold the plough and swing the flail, are ambitious to measure tape and sell laces. Some refuse to work and provide the necessaries and comforts of life, on the arrogant assumption that the world owes them a living.

The world owes no men a living but those whose sublime deeds have benefitted the world, and whose modesty prevents them from claiming their great reward. All we can justly claim, or have a right to receive, is the fruit of our own labor—that which our own hands have made, or our own brains wrought out.

But nothing is denied to faithful, intelligent, well directed labor. It is the “open sessame” to nature’s profoundest secrets, and earth’s richest treasures. Power and dominion wait upon it, and higher honors than were ever paid to royalty and its costly pageants. The time has passed when idleness, whatever its rank and lineage, can take precedence of the sons of toil. The age of chivalry, of pastoral indolence, and fairy legend, has gone by. The pomp and glory of the

Crusaders, the renown of the victor at the Olympic games or gladiatorial combat, the shout that welcomed war's conquering hero home, and gave him a niche in the temple of the Gods—these, with the tilt and tournament and gay song of the troubadour, have all passed away with the times that gave them birth, and it has become the settled conviction of the present age, that to be pre-eminently great, it is necessary to be pre-eminently useful.

Though this is an age of high intellectual development; though learning and refinement gild the rougher features of life, and shed a golden lustre round the brow of toil, it is no less the age of plain, practical, calculating industry; having definite aims, and producing positive and beneficial results. The column that art rears and genius decorates, must rest on solid foundations, and form a necessary support to the structure it adorns. The principle of utility has at length come to be recognized as embraced in that divine injunction, "Six days shalt thou labor."

The noblemen of this age, therefore, are those who use to the fullest extent and for useful purposes, all the powers of body and mind with which God has endowed them. No herald's college can confer a better patent of nobility than this—no stars or ribbons on brodered garment worn, no device emblazoned on panel cup or shield, give higher evidence of greatness than labor writes upon the manly form and open brow of its sincere and intelligent followers.

This is that high order of physical training, that education of the hand, which should accompany and be joined to the learning of the head, and complete that character for persevering effort and successful achievement, which belongs in an eminent degree to the American citizen. Though the farmer may obtain all the information that books can give, and leave the halls of learning crowned with collegiate honors, yet if he has not graduated in the field and obtained a diploma from nature, if he has not performed the labor necessary to familiarize himself with all the operations of husbandry, to

give health to the body, strength to the muscles, skill to the hand, and confidence in the success of manly effort, he lacks one of the indispensable elements of agricultural success; for only by a union of the greatest skill of the hand, with the highest powers of the head, can success, complete and satisfactory, be obtained, and those sublime results which crown a life of useful labor be secured.

There are, doubtless, a few individuals in the country who possess in an eminent degree these qualifications. But these stand like Saul among the Israelites, head and shoulders above the class they are supposed to represent; while we are obliged to acknowledge that the great mass of farmers have not sufficiently educated either the head or the hand, and consequently do not possess the means of prosecuting their business with success, nor of working out, amid its trials and conflicts, the happy results of a well-spent life.

It has not been my intention to attempt to instruct the farmer in the special duties of his profession; but if I should venture to name any act of farming, to which knowledge and skill can be applied with more profit than to any other, it would be the treatment of the soil, which is impoverished and worn out by ignorant and unskillful management.

There was once a peasant who owned a goose, that every day laid a golden egg. This small supply of gold was sufficient for the daily wants of the peasant and his family, and their only care was to preserve the life of the remarkable animal from which they derived their support. But at length the peasant, stimulated by unnatural desire, required more gold, and unwilling to wait the tardy operations of nature, cut open the body of the goose to obtain the coveted treasure, and thereby killed the animal, and lost his means of support.

The soil is the goose that annually deposits a golden egg in the lap of the farmer. While properly fed and tended, this operation will not cease; as years roll on, true to the appointed hour, it will pay its annual tribute down; age will

not dim its plumage, nor diminish its productive power, for it contains within itself the elements of unfading beauty and immortal youth.

But there are some farmers who, like the peasant in the fable, are in haste to grow rich ; and in their attempts to anticipate the rewards that follow patient toil, in their efforts to grasp to-day the wealth that belongs to and is necessary to the enjoyment of to-morrow, destroy the means by which that wealth is obtained—they starve and kill the goose that laid the golden egg.

If the soil is neglected, overtasked or otherwise improperly treated, in vain will be the labor of the husbandman ; the sun may warm, the air permeate, and the dews of heaven moisten, and yet no increase will reward the farmer's toil—no golden harvest crown the year.

The preparation and management of the soil are points upon which farmers are most deficient. Notwithstanding man has been laboring upon, and drawing his support from, the soil ever since he was driven from the garden which God planted, yet he is at this moment, with few exceptions, as ignorant of its origin, composition, capacity, and the means necessary to be used for its renovation, as he was on that day when with a crooked limb for a plough, and a sharpened stick for a spade, he first attempted, mid thorns and thistles, and in the sweat of his face, to draw his support from the bosom of his mother earth.

This fact is proved by the vast quantity of deteriorated land which is left to recover, by the unassisted operations of nature, its former fertility. Man annually records upon the soil he cultivates, the evidence that is to establish his power to subdue, and his claim to hold dominion over the earth and its lower forms of animal life ; or in crooked lines and misshapen characters he furnishes testimony to convict himself of disobedience to the divine command, and cut him off from among the inheritors of the promise.

The difference in fertility between lands in a state of nature and those which have been brought under the plough, should be largely in favor of the latter; nevertheless the contrary is the fact.* In the older portions of the country, it is not uncommon to witness the abandonment of farms once rich in all the elements of fertility, and yielding to the husbandman an annual tribute of sixty and a hundred fold, now impoverished, worn out, incapable of supplying the necessities of life to those who were born upon it, or whose stalwart arms reclaimed it from the wilderness and the savage. These worn out lands are sold for any sum they will bring, and a new home obtained in a new State, where the glittering plough-share has not penetrated, nor the song of the reapers been heard.

Here, while those substances which nature during long ages had prepared for the support of vegetable life last, the new home puts on the appearance of comfort and substantial prosperity—grass clothes the meadows, grain waves in the breeze, fruits load the orchard.

But one after another the ingredients required to produce these results, to clothe the fields with herbage, and fill the

*The following table in some measure shows the falling off that has taken place within a period of ten years in the annual yield of wheat in several of the states :

The number of bushels produced was, in	1840.	1850.
Connecticut,	87,000	41,000
Massachusetts,	157,923	31,211
Rhode Island,	3,098	49
New Hampshire,	422,124	185,658
Maine,	848,166	269,259
Vermont,	495,800	535,955
Tennessee,	4,569,692	1,616,386
Kentucky,	4,803,162	2,142,822
Georgia,	1,801,830	1,088,534
Alabama,	838,052	294,044
Sum total,	14,026,847	6,204,918

These figures show pretty conclusively that in all parts of the Union the land must have been deprived of some of its most essential elements, and that its fertility is constantly on the decrease. There can be no doubt but that three-fourths of the arable soil of the Union are undergoing, to a greater or less degree, this exhaustion process.

barns with grain, disappear from the soil. Crops dwindle, orchards decay, animals deteriorate; and before the forest is fairly removed, or the tough soil of the prairie completely subdued, the farm presents the old picture of poverty and dilapidation.

That man's occupancy of the soil should be followed by deterioration and loss, is opposed to the laws of organic life, and the object of man's creation. The power to conquer and subdue includes the duty to enrich, to improve, to bless. Otherwise the possession of power would be an evil and a curse. Man's conquering march over the earth should be conducted by science, accompanied by the arts, and marked by annual ovations to Ceres, whose blooming garland and golden cornucopia diffuse fragrance and scatter plenty over the land.

It could not have been the design of the Creator that the soil should ever become exhausted of its fruit and grain-producing qualities, nor that the introduction of the human race should violate the laws of life, and disturb the balance of organic nature. Provision has been made for the preservation of all the substances which compose the earth, and the plants and animals it contains. In fact, no atom of matter is or ever can be destroyed. Though earth and air and water, under the direction of the Great Designer, are constantly entering into new combinations, and building up new bodies, now forming the tender herb that a single frost destroys, now building the oak that braves the storms of a thousand winters, now composing the flower whose breath lends fragrance to the gale, now forming the fruits and grains which human hands tend and garner; yet in the countless forms in which matter is exhibited, it is not fixed for a single moment. Built into forms which appear solid and indestructible, yet appointed agents are unceasingly at work, liberating from rock and ore, from plant and animal, the ingredients of which they are composed. These are converted into their original elements, and return to that exhaustless reservoir from whence the materials of all earthly bodies are drawn.

A few substances, barely a dozen in number, contained in the earth and in the air, unite in the vegetable and form starch, sugar, gluten, oil, &c., &c., these consumed by animals are converted into blood, muscle, bone. But the animal cannot retain for a single moment possession of the substances of which its body is composed; it is compelled by the laws of its being to give up and restore to the earth and the air, all the materials it has consumed.

But you will observe that these dozen substances removed from the soil by cultivation, must be restored to the particular fields from whence they were taken, or else those fields will become exhausted, and fail to yield remunerative crops. Every ton of hay, every bushel of roots or grain, every animal taken from the farm, removes a portion of those ingredients upon which its fertility depends, and enriches the district in which they are consumed.

Though the elements of fertility are always the same, and cannot be diminished, yet they may be so distributed and appropriated, that while one farm or district is clothed with verdure and enriched by bountiful harvests, another may be stripped of its gorgeous vesture, despoiled of its wealth, and left to exhibit in barrenness and dilapidation, the ignorance and folly of its owners.

The soil must be kept in a high state of fertility by restoring to it all its annual loss by tillage, and by putting it in such a mechanical condition as regards depth, lightness and permeability, as will allow the fertilizing ingredients it contains to enter freely into the growing crop.

This leads me to add that drainage and irrigation are subjects of such great importance that they cannot be much longer overlooked by the intelligent farmer. Water forms a very large portion of all organized bodies, and is the chief element in causing fertility; I mean that however complete may be the number, and however large the quantity of other ingredients, they would without water be entirely useless for the

wants of vegetation. Where water is absent vegetation dies ; where it exists in excess, useful plants and grasses disappear. This is sufficient to show that water should be supplied to the soil in definite proportions, to be regulated by the wants of the growing crop. If there is an excess, it must be removed ; if a deficiency, it must be supplied.

Another subject of great practical importance, is the cultivation of grasses, both for pasturing and for winter forage. At present, the farmer relies principally upon such grasses as he finds growing naturally in his fields, without reference to their nutritive qualities, or the season of their maturity. The result is that in early spring, the pastures are nearly destitute of herbage, and in mid-summer are thinly covered with hard, dry, innutritious plants, which do not give sufficient nourishment to the flocks and herds that are expected to live and fatten upon them. Successive crops of sweet, wholesome, and nutritious grass, adapted to different seasons, and reaching from early spring to the killing frosts of autumn, would enable the farmer to increase his stock of sheep and cattle, and render them more valuable for the uses to which they are put. Such crops may be grown at small cost, and will double the value of any farm on which they are systematically introduced.

Other subjects, if time would permit, might be mentioned. Nearly all the details of farming are important, and might with great benefit receive your attention. There is probably no department of husbandry, whether it relates to the soil, the plant or the animal, which is not susceptible of great improvement, both in its manual operations, and in the principles upon which the necessary labor is conducted. It would be strange if it were not so. Agriculture was not born, as many seem to suppose, like Minerva, full-grown and armed for conquest. Like every other business, it has advanced from rude and imperfect beginnings to its present condition ; which though not one for much self-laudation, is nevertheless in some degree creditable to those engaged in it, and indicative

of that complete and crowning victory which it is destined to achieve. Though at present somewhat behind other institutions in the skill and knowledge with which its operations are conducted, yet this position is unnatural and temporary ; for when farmers display the same zeal that characterizes men engaged in other professions, the same patient investigation, the same earnest seeking after higher truths and better modes, and the same willingness to be instructed, then agriculture will be placed in advance of every other institution as an agent for the extension of knowledge, the spread of liberal principles, and the subjugation of the world to the influences of enlightened christian civilization.

Whenever I have had the honor of addressing my brother farmers, I have embraced the opportunity to inculcate a taste and love for the beautiful, both in nature and in art ; believing that where this taste and love exist, they will be exhibited in a better system of cultivation, more comfortable and happier modes of living ; in increased means of enjoyment, and a more rational use of the blessings which God has spread over the earth,—a more pleasing personal demeanor, higher graces of speech and manner, and a more correct performance of all social and christian duties.

I beg leave to introduce the subject to *your* notice, as one of great practical importance, affecting the value of property and the habits of the people.

Let the farmer increase the natural beauties of his farm by suitable ornamentation—let him adorn and embellish his house and grounds—let him have genial intercourse with his fellow men, and practice in their presence the highest forms of politeness and good breeding. Let him build neat school-houses, that shall give visible expression to pure and lofty thought—let him erect beautiful churches, and incorporate into their walls and towers and rising spires, the spirit of piety and devotion. If this was a proper occasion, and time would permit, I could demonstrate that a small, dirty school-

house, and a homely, ill-constructed church edifice, instead of being what such buildings ought to be, objects of taste and beauty, and helpers in the great work of human improvement, are positive injuries to society; because they lower and degrade and bring down to the level of animal desires and brutish instincts, the exalted idea of human intelligence, and the holy sentiment of religious hope and trust.

It is not without a purpose that learning has been represented to us under forms of transcendent beauty, with her seats fixed in pleasant places, by the side of sparkling fountains, and amid groves garlanded with roses and amaranth. It is not without a purpose that religion has been invested with pure and shining robes, crowned with glory, and with golden harp, filling the courts of Heaven with praise. It is not without a purpose that the earth has been beautifully formed and gorgeously appared—diversified with hill and plain, mountain and valley, forest and prairie, lake and river, and singing brook—arrayed in robes of more than royal magnificence, forever changing, yet forever new, perfumed with the spices of Araby, jeweled with dew drops brighter than the gems of Golconda, and performing its majestic revolutions in company with ten thousand glorious orbs,—

“Forever singing as they shine,
The hand that made us is divine.”

Physical beauty is a power in the world before which the highest human intelligence bows in homage. Goodness has superior charms, virtue stronger attractions, and wisdom greater power when moulded into forms of beauty, and draped in the flowing robes of elegance and grace.

For this reason, because it is one of the essential elements of power, let the farmer cultivate and acquire a taste and love for all the bright and beautiful things of earth. Let him build handsome dwellings, neat school-houses, and beautiful churches; let him adorn and embellish the field and the road side; let him multiply objects of grace and beauty, until the whole land glows and brightens in the light of a pure and exalted taste.

Then will his fields put on a richer vesture, and yield a more abundant harvest. Then will finer flocks and better herds feed in his pastures and lie in the shade of his woods and groves. Then will blither songs and words of loftier cheer mingle with the sounds of labor. Cords of sympathy will unite in one electric circle, whose continuity will never cease, the industry, the genius and the skill of all nations. Then the unity of the world's great Army of Occupation will be declared, the claims of universal brotherhood recognized, and humanity achieve its last and greatest triumph.

Previous to the delivery of the foregoing Address, a selected choir of ladies and gentlemen sung the following original ode, written for the occasion by Mrs. L. H. SIGOURNEY, America's favorite poetess:

ODE FOR THE AGRICULTURAL EXHIBITION OF RENSSELAER COUNTY.

When Man was in his pristine strength,
Unstain'd, unfallen, undismayed,
His Maker gave a genial task,
To dress and keep the garden glade.

Then angels deign'd his guests to be,
By sinless Eden's crystal springs,
And oft at hush of day he heard
The hovering of celestial wings.

E'en now, though thorns and thistles claim
Dominion o'er the uncultur'd soil,
From Nature and from God he finds
A blessing on his rural toil.

Earth is his friend, and freely yields
The treasures of her fruitful breast,
And Industry, the nurse of health,
Sheds sweetness o'er his nightly rest.

No sword of flame, no guarded gate
Excludes him from his home of love,
But Peace and Hope, like angels wait,
And point to Paradise above.

His Excellency, Gov. E. D. MORGAN, having arrived upon the Fair Grounds, he was escorted by the officers of the Society to the President's stand, where he was welcomed by the President, Mr. BALL, in the following remarks:

GOVERNOR MORGAN: I am very happy to meet you on the Fair Grounds of this Society; amid these implements of our art and surrounded by the trophies we have won from field and orchard and garden, from stall and pasture, which proclaim the certainty with which bounteous Mother Earth rewards her skillful and industrious children. You, sir, have gained a fortune, and won a distinguished name in another and broader field of labor, in which talent, industry and perseverance reach their highest development; yet you must have observed that the springs of commercial prosperity rise far away from the great centres of business. Like the rills that feed brook and river and fill the ocean, they rise deep in the country; amid the fields, along the slopes and on the mountain side, where the patient husbandman performs his daily toil, and converts by nature's subtle alchemy, soil and air, sunlight and dew, into fine sheep and fat cattle; into luscious fruit and yellow grain. But if Agriculture is the parent of Trade and Commerce, these hardy children have not failed in love and duty to their common mother. While Trade, with busy hands, fills up the deficiencies of one district from the surplus of another, and equalizes the means of human subsistence, Commerce, spreading her adventurous sails, and kindling her gleaming fires, crosses the ocean, ascends rivers, explores the earth from the tropics to the poles, for spoils to weave into the robe of Agriculture, and braid among her golden tresses. We acknowledge with gratitude the obligations of the world to Trade, to Commerce, to Manufactures, and the Mechanic Arts; and we intend to compete with them for the prize which will henceforth be awarded in blessings upon that department of labor, that does most to develop the arts of peace, extend Christian civilization, and increase the happiness of man. Every exhibition that represents the industry of the district in which it is held, must be interesting; because it shows the progress, and relative position of the people, and the condition of those arts that belong to the higher developments of civilized life. In the examination which I invite your Excellency to make of this Exhibition, I hope you will find that Rensselaer is not behind her sister counties, in the extent and variety of her productions, nor in her contributions to the substantial prosperity of the State and Nation.

Gov. MORGAN replied in the following very sensible and well delivered remarks:

MR. PRESIDENT:—It is my agreeable duty to acknowledge the cordial and kind manner in which you have welcomed me to the Rensselaer County Fair. I esteem it both a privilege and a high honor to be present upon this occasion, to listen to your address, and to examine these implements of art and these trophies won by the good people of Rensselaer, from "field and orchard and garden, from stall and pasture." You have alluded to the fact that my occupation has been other than that of agriculture, and have been pleased to say that I have occupied a somewhat broader field in the pursuit to which I have devoted the most of my life. It is true that for many years I have been engaged extensively in commercial pursuits; but I have been a farmer also—not a mere theorizer, but a genuine, practical, hard-working farmer—[applause,]—during my youth, and what we learn in our youth, we are not apt to forget. I think I can safely assert that there is not and never has been, a man in the county—and I say it for the encouragement of young men—who worked harder and had fewer privileges, both of time and money, than I had prior to my seventeenth year; and if, as remarked, I have attained any measure of success in life, I owe it all to the principles inculcated and the habits formed on my father's farm. [Applause.] There is no occupation more necessary, useful or honorable, and none more neglected, than the cultivation of the soil; and it is very much to be deplored that so many young men leave the country for a clerkship or a profession in the city, not more than one in an hundred of whom are successful, and whose time and labors are but poorly requited in the pursuits they follow, when the same expenditure in the more moral and healthful calling of the farmer would have secured them an abundant reward. I thank you for your indulgence and for the invitation to visit your exhibition.

The exercises closed by the singing of the following hymn,
written by Rev. JOHN PIERPONT, D. D.:

AGRICULTURAL HYMN.

To God, the gracious Giver,
Of sunshine, dew and rain.
Of hill-side, vale and river,
And broad and fertile plain—
Who giveth to our mountains
The glory of their trees,
And poureth out the fountains
That fill our inland seas—

Who wrappeth Winter's bosom
In His soft, wooly snows,
And openeth every blossom
That Spring around us throws,—
To Him, our tribute bringing,
Of thankful hearts, we come.
With joy and gladness singing
Our hymn of "Harvest Home."

Shall we, Thy sons and daughters,
Withhold our grateful lays,
While all Thy winds and waters
Are vocal in Thy praise?
No! while all earth rejoices
In Thy parental care,
Will we lift up our voices,
Oh God, in praise and prayer.

God, who our patient labor
With plenty crown'st thus,
Help us our suffering neighbor
To bless, as Thou do'st us;
And while Thy gifts we gather,
From field and fold and stall,
So serve the good All-Father,
Who giveth all to all.

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