

Address before the Wisconsin State Agricultural Society

Milwaukee, Wisconsin
September 30, 1859

Members of the Agricultural Society and Citizens of Wisconsin:

Agricultural Fairs are becoming an institution of the country; they are useful in more ways than one; they bring us together, and thereby make us better acquainted, and better friends than we otherwise would be. From the first appearance of man upon the earth, down to very recent times, the words "*stranger*" and "*enemy*" were *quite or almost*, synonymous. Long after civilized nations had defined robbery and murder as high crimes, and had affixed severe punishments to them, when practiced among and upon their own people respectively, it was deemed no offence, but even meritorious, to rob, and murder, and enslave *strangers*, whether as nations or as individuals. Even yet, this has not totally disappeared. The man of the highest moral cultivation, in spite of all which abstract principle can do, likes him whom he *does* know, much better than him whom he does *not* know. To correct the evils, great and small, which spring from want of sympathy, and from positive enmity, among *strangers*, as nations, or as individuals, is one of the highest functions of civilization. To this end our Agricultural Fairs contribute in no small degree. They make more pleasant, and more strong, and more durable, the bond of social and political union among us. Again, if as Pope declares, "happiness is our being's end and aim," our Fairs contribute much to that end and aim, as occasions of recreation -- as holidays. Constituted as man is, he has positive need of occasional recreation; and whatever can give him this, associated with virtue and advantage, and free from vice and disadvantage, is a positive good. Such recreation our Fairs afford. They are a present pleasure, to be followed by no pain, as a consequence; they are a present pleasure, making the future more pleasant.

But the chief use of agricultural fairs is to aid in improving the great calling of *agriculture*, in all it's departments, and minute divisions -- to make mutual exchange of agricultural discovery, information, and knowledge; so that, at the end, *all* may know every thing, which may have been known to but *one*, or to but a *few*, at the beginning -- to bring together especially all which is supposed to not be generally known, because of recent discovery, or invention.

And not only to bring together, and to impart all which has been *accidentally* discovered or invented upon ordinary motive; but, by exciting emulation, for premiums, and for the pride and honor of success -- of triumph, in some sort -- to stimulate that discovery and invention into extraordinary activity. In this, these Fairs are kindred to the patent clause in the Constitution of the United States; and to the department, and practical system, based upon that clause.

One feature, I believe, of every fair, is a regular *address*. The Agricultural Society of the young, prosperous, and soon to be, great State of Wisconsin, has done me the high honor of selecting me to make that address upon this occasion -- an honor for which I make my profound, and grateful acknowledgement.

I presume I am not expected to employ the time assigned me, in the mere flattery of the farmers, as a class. My opinion of them is that, in proportion to numbers, they are neither better nor worse than any other class; and I believe there really are more attempts at flattering them than any other; the reason of which I cannot perceive, unless it be that they can cast more votes than any other. On reflection, I am not quite sure that there is not cause of suspicion against you, in selecting me, in some sort a politician, and in no sort a farmer, to address you.

But farmers, being the most numerous class, it follows that their interest is the largest interest. It also follows that that interest is most worthy of all to be cherished and cultivated -- that if there be inevitable conflict between that interest and any other, that other should yield.

Again, I suppose it is not expected of me to impart to you much specific information on Agriculture. You have no reason to believe, and do not believe, that I possess it -- if that were what you seek in this address, any one of your own number, or class, would be more able to furnish it.

You, perhaps, do expect me to give some general interest to the occasion; and to make some general suggestions, on practical matters. I shall attempt nothing more. And in such suggestions by me, quite likely very little will be new to you, and a large part of the rest possibly already known to be erroneous.

My first suggestion is an inquiry as to the effect of greater *thoroughness* in all the departments of Agriculture than now prevails in the North-West -- perhaps I might say in America. To speak entirely within bounds, it is known that fifty bushels of wheat, or one hundred bushels of Indian corn can be produced from an acre. Less than a year ago I saw it stated that a man, by extraordinary care and labor, had produced of wheat, what was equal to two hundred bushels from an acre. But take fifty of wheat, and one hundred of corn, to be the *possibility*, and compare with it the actual crops of the country. Many years ago I saw it stated in a Patent Office Report that eighteen bushels was the average crop throughout the wheat growing region of the United States; and this year an intelligent farmer of Illinois, assured me that he did not believe the land harvested in that State this season, had yielded more than an average of eight bushels to the acre. The brag crop I heard of in our vicinity was two thousand bushels from ninety acres. Many crops were thrashed, producing no more than three bushels to the acre; much was cut, and then abandoned as not worth threshing; and much was abandoned as not worth cutting. As to Indian corn, and indeed, most other crops, the case has not been much better. For the last four years I do not believe the ground planted with corn in Illinois, has produced an average of twenty bushels to the acre. It is true, that heretofore we have had better

crops, with no better cultivators; but I believe it is also true that the soil has never been pushed up to one-half of its capacity.

What would be the effect upon the farming interest, to push the soil up to something near its full capacity? Unquestionably it will take more labor to produce *fifty* bushels from an acre, than it will to produce *ten* bushes from the same acre. But will it take more labor to produce fifty bushes from *one* acre, than from *five*?

Unquestionably, thorough cultivation will require more labor to the *acre*; but will it require more to the *bushel*? If it should require just as *much* to the bushel, there are some *probable*, and several *certain*, advantages in favor of the thorough practice. It is probable it would develop those unknown causes, or develop unknown cures for those causes, which of late years have cut down our crops below their former average. It is almost certain, I think, that in the deeper plowing, analysis of soils, experiments with manures, and varieties of seeds, observance of seasons, and the like, these cases [causes?] would be found. It is certain that thorough cultivation would spare half or more than half, the cost of land, simply because the same product would be got from half, or from less than half the quantity of land. This proposition is self-evident, and can be made no plainer by repetitions or illustrations. The cost of land is a great item, even in new countries; and constantly grows greater and greater, in comparison with other items, as the country grows older.

It also would spare a large proportion of the making and maintaining of inclosures - - the same, whether these inclosures should be hedges, ditches, or fences. This again, is a heavy item -- heavy at first, and heavy in its continual demand for repairs. I remember once being greatly astonished by an apparently authentic exhibition of the proportion the cost of inclosures bears to all the other expenses of the farmer; though I can not remember exactly what that proportion was. Any farmer, if he will, can ascertain it in his own case, for himself.

Again, a great amount of "locomotion" is spared by thorough cultivation. Take fifty bushes of wheat, ready for the harvest, standing upon a *single* acre, and it can be harvested in any of the known ways, with less than half the labor which would be required if it were spread over *five* acres. This would be true, if cut by the old hand sickle; true, to a greater extent if by the scythe and cradle; and to a still greater extent, if by the machines now in use. These machines are chiefly valuable, as a means of substituting animal power for the power of men in this branch of farm work. In the highest degree of perfection yet reached in applying the horse power to harvesting, fully nine-tenths of the power is expended by the animal in carrying himself and dragging the machine over the field, leaving certainly not more than one-tenth to be applied directly to the only end of the whole operation -- the gathering in the grain, and clipping of the straw. When grain is very thin on the ground, it is always more or less intermingled with weeds, chaff and the like, and a large part of the power is expended in cutting these. It is plain that when the crop is very thick upon the ground, the larger proportion of the power is directly applied to gathering in and cutting it; and the smaller, to that which is totally useless as an

end. And what I have said of harvesting is true, in a greater or less degree of mowing, plowing, gathering in of crops generally, and, indeed, of almost all farm work.

The effect of thorough cultivation upon the farmer's own mind, and, in reaction through his mind, back upon his business, is perhaps quite equal to any other of its effects. Every man is proud of what he does *well*; and no man is proud of what he does *not* do well. With the former, his heart is in his work; and he will do twice as much of it with less fatigue. The latter performs a little imperfectly, looks at it in disgust, turns from it, and imagines himself exceedingly tired. The little he has done, comes to nothing, for want of finishing.

The man who produces a good full crop will scarcely ever let any part of it go to waste. He will keep up the enclosure about it, and allow neither man nor beast to trespass upon it. He will gather it in due season and store it in perfect security. Thus he labors with satisfaction, and saves himself the whole fruit of his labor. The other, starting with no purpose for a full crop, labors less, and with less satisfaction; allows his fences to fall, and cattle to trespass; gathers not in due season, or not at all. Thus the labor he has performed, is wasted away, little by little, till in the end, he derives scarcely anything from it.

The ambition for broad acres leads to poor farming, even with men of energy. I scarcely ever knew a mammoth farm to sustain itself; much less to return a profit upon the outlay. I have more than once known a man to spend a respectable fortune upon one; fail and leave it; and then some man of more modest aims, get a small fraction of the ground, and make a good living upon it. Mammoth farms are like tools or weapons, which are too heavy to be handled. Ere long they are thrown aside, at a great loss.

The successful application of *steam power*, to farm work is a *desideratum* -- especially a Steam Plow. It is not enough, that a machine operated by steam, will really plow. To be successful, it must, all things considered, plow *better* than can be done with animal power. It must do all the work as well, and *cheaper*; or more *rapidly*, so as to get through more perfectly *in season*; or in some way afford an advantage over plowing with animals, else it is no success. I have never seen a machine intended for a Steam Plow. Much praise, and admiration, are bestowed upon some of them; and they may be, for aught I know, already successful; but I have not perceived the demonstration of it. I have thought a good deal, in an abstract way, about a Steam Plow. That one which shall be so contrived as to apply the larger proportion of its power to the cutting and turning the soil, and the smallest, to the moving itself over the field, will be the best one. A very small stationary engine would draw a large gang of plows through the ground from a short distance to itself; but when it is not stationary, but has to move along like a horse, dragging the plows after it, it must have additional power to carry itself; and the difficulty grows by what is intended to overcome it; for what adds power also adds size, and weight to the machine, thus increasing again, the demand for power.

Suppose you should construct the machine so as to cut a succession of short furrows, say a rod in length, transversely to the course the machine is locomoting, something like the shuttle in weaving. In such case the whole machine would move North only the width of a furrow, while in length, the furrow would be a rod from East to West. In such case, a very large proportion of the power, would be applied to the actual plowing. But in this, too, there would be a difficulty, which would be the getting of the plow *into*, and *out of*, the ground, at the ends of all these short furrows.

I believe, however, ingenious men will, if they have not already, overcome the difficulty I have suggested. But there is still another, about which I am less sanguine. It is the supply of *fuel*, and especially of *water*, to make steam. Such supply is clearly practicable, but can the expense of it be borne? Steamboats live upon the water, and find their fuel at stated places. Steam mills, and other stationary steam machinery, have their stationary supplies of fuel and water. Railroad locomotives have their regular wood and water station. But the steam plow is less fortunate. It does not live upon the water; and if it be once at a water station, it will work away from it, and when it gets away can not return, without leaving its work, at a great expense of its time and strength. It will occur that a wagon and horse team might be employed to supply it with fuel and water; but this, too, is expensive; and the question recurs, "can the expense be borne?" When this is added to all other expenses, will not the plowing cost more than in the old way?

It is to be hoped that the steam plow will be finally successful, and if it shall be, "*thorough cultivation*" -- putting the soil to the top of its capacity -- producing the largest crop possible from a given quantity of ground -- will be most favorable to it. Doing a large amount of work upon a small quantity of ground, it will be, as nearly as possible, stationary while working, and as free as possible from locomotion; thus expending its strength as much as possible upon its work, and as little as possible in travelling. Our thanks, and something more substantial than thanks, are due to every man engaged in the effort to produce a successful steam plow. Even the unsuccessful will bring something to light, which, in the hands of others, will contribute to the final success. I have not pointed out difficulties, in order to discourage, but in order that being seen, they may be the more readily overcome.

The world is agreed that *labor* is the source from which human wants are mainly supplied. There is no dispute upon this point. From this point, however, men immediately diverge. Much disputation is maintained as to the best way of applying and controlling the labor element. By some it is assumed that labor is available only in connection with capital -- that nobody labors, unless somebody else, owning capital, somehow, by the use of that capital, induces him to do it. Having assumed this, they proceed to consider whether it is best that capital shall *hire* laborers, and thus induce them to work by their own consent; or *buy* them, and drive them to it without their consent. Having proceeded so far they naturally conclude that all laborers are necessarily either *hired* laborers, or *slaves*. They further assume that whoever is once a *hired* laborer, is fatally fixed in that condition for life; and thence

again that his condition is as bad as, or worse than that of a slave. This is the "*mud-sill*" theory.

But another class of reasoners hold the opinion that there is no *such* relation between capital and labor, as assumed; and that there is no such thing as a freeman being fatally fixed for life, in the condition of a hired laborer, that both these assumptions are false, and all inferences from them groundless. They hold that labor is prior to, and independent of, capital; that, in fact, capital is the fruit of labor, and could never have existed if labor had not *first* existed -- that labor can exist without capital, but that capital could never have existed without labor. Hence they hold that labor is the superior -- greatly the superior -- of capital.

They do not deny that there is, and probably always will be, *a* relation between labor and capital. The error, as they hold, is in assuming that the *whole* labor of the world exists within that relation. A few men own capital; and that few avoid labor themselves, and with their capital, hire, or buy, another few to labor for them. A large majority belong to neither class -- neither work for others, nor have others working for them. Even in all our slave States, except South Carolina, a majority of the whole people of all colors, are neither slaves nor masters. In these Free States, a large majority are neither *hirers* or *hired*. Men, with their families -- wives, sons and daughters -- work for themselves, on their farms, in their houses and in their shops, taking the whole product to themselves, and asking no favors of capital on the one hand, nor of hirelings or slaves on the other. It is not forgotten that a considerable number of persons mingle their own labor with capital; that is, labor with their own hands, and also buy slaves or hire freemen to labor for them; but this is only a *mixed*, and not a *distinct* class. No principle stated is disturbed by the existence of this mixed class. Again, as has already been said, the opponents of the "*mud-sill*" theory insist that there is not, of necessity, any such thing as the free hired laborer being fixed to that condition for life. There is demonstration for saying this. Many independent men, in this assembly, doubtless a few years ago were hired laborers. And their case is almost if not quite the general rule.

The prudent, penniless beginner in the world, labors for wages awhile, saves a surplus with which to buy tools or land, for himself; then labors on his own account another while, and at length hires another new beginner to help him. This, say its advocates, is *free* labor -- the just and generous, and prosperous system, which opens the way for all -- gives hope to all, and energy, and progress, and improvement of condition to all. If any continue through life in the condition of the hired laborer, it is not the fault of the system, but because of either a dependent nature which prefers it, or improvidence, folly, or singular misfortune. I have said this much about the elements of labor generally, as introductory to the consideration of a new phase which that element is in process of assuming. The old general rule was that *educated* people did not perform manual labor. They managed to eat their bread, leaving the toil of producing it to the uneducated. This was not an insupportable evil to the working bees, so long as the class of drones remained very small. But *now*, especially in these free States, nearly all are educated -- quite too

nearly all, to leave the labor of the uneducated, in any wise adequate to the support of the whole. It follows from this that henceforth educated people must labor. Otherwise, education itself would become a positive and intolerable evil. No country can sustain, in idleness, more than a small per centage of its numbers. The great majority must labor at something productive. From these premises the problem springs, "How can *labor* and *education* be the most satisfactory combined?"

By the "*mud-sill*" theory it is assumed that labor and education are incompatible; and any practical combination of them impossible. According to that theory, a blind horse upon a tread-mill, is a perfect illustration of what a laborer should be -- all the better for being blind, that he could not tread out of place, or kick understandingly. According to that theory, the education of laborers, is not only useless, but pernicious, and dangerous. In fact, it is, in some sort, deemed a misfortune that laborers should have heads at all. Those same heads are regarded as explosive materials, only to be safely kept in damp places, as far as possible from that peculiar sort of fire which ignites them. A Yankee who could invent strong *handed* man without a head would receive the everlasting gratitude of the "*mud-sill*" advocates.

But Free Labor says "no!" Free Labor argues that, as the Author of man makes every individual with one head and one pair of hands, it was probably intended that heads and hands should cooperate as friends; and that that particular head, should direct and control that particular pair of hands. As each man has one mouth to be fed, and one pair of hands to furnish food, it was probably intended that that particular pair of hands should feed that particular mouth -- that each head is the natural guardian, director, and protector of the hands and mouth inseparably connected with it; and that being so, every head should be cultivated, and improved, by whatever will add to its capacity for performing its charge. In one word Free Labor insists on universal education.

I have so far stated the opposite theories of "*Mud-Sill*" and "Free Labor" without declaring any preference of my own between them. On an occasion like this I ought not to declare any. I suppose, however, I shall not be mistaken, in assuming as a fact, that the people of Wisconsin prefer free labor, with its natural companion, education.

This leads to the further reflection, that no other human occupation opens so wide a field for the profitable and agreeable combination of labor with cultivated thought, as agriculture. I know of nothing so pleasant to the mind, as the discovery of anything which is at once *new* and *valuable* -- nothing which so lightens and sweetens toil, as the hopeful pursuit of such discovery. And how vast, and how varied a field is agriculture, for such discovery. The mind, already trained to thought, in the country school, or higher school, cannot fail to find there an exhaustless source of profitable enjoyment. Every blade of grass is a study; and to produce two, where there was but one, is both a profit and a pleasure. And not grass alone; but soils, seeds, and seasons -- hedges, ditches, and fences, draining, droughts, and irrigation -- plowing, hoeing, and harrowing -- reaping, mowing, and threshing

-- saving crops, pests of crops, diseases of crops, and what will prevent or cure them -- implements, utensils, and machines, their relative merits, and [how] to improve them -- hogs, horses, and cattle -- sheep, goats, and poultry -- trees, shrubs, fruits, plants, and flowers -- the thousand things of which these are specimens -- each a world of study within itself.

In all this, book-learning is available. A capacity, and taste, for reading, gives access to whatever has already been discovered by others. It is the key, or one of the keys, to the already solved problems. And not only so. It gives a relish, and facility, for successfully pursuing the [yet] unsolved ones. The rudiments of science, are available, and highly valuable. Some knowledge of Botany assists in dealing with the vegetable world -- with all growing crops. Chemistry assists in the analysis of soils, selection, and application of manures, and in numerous other ways. The mechanical branches of Natural Philosophy, are ready help in almost everything; but especially in reference to implements and machinery.

The thought recurs that education -- cultivated thought -- can best be combined with agricultural labor, or any labor, on the principle of *thorough* work -- that careless, half performed, slovenly work, makes no place for such combination. And thorough work, again, renders sufficient, the smallest quantity of ground to each man. And this again, conforms to what must occur in a world less inclined to wars, and more devoted to the arts of peace, than heretofore. Population must increase rapidly -- more rapidly than in former times -- and ere long the most valuable of all arts, will be the art of deriving a comfortable subsistence from the smallest area of soil. No community whose every member possesses this art, can ever be the victim of oppression of any of its forms. Such community will be alike independent of crowned-kings, money-kings, and land-kings.

But, according to your programme, the awarding of premiums awaits the closing of this address. Considering the deep interest necessarily pertaining to that performance, it would be no wonder if I am already heard with some impatience. I will detain you but a moment longer. Some of you will be successful, and such will need but little philosophy to take them home in cheerful spirits; others will be disappointed, and will be in a less happy mood. To such, let it be said, "Lay it not too much to heart." Let them adopt the maxim, "Better luck next time;" and then, by renewed exertion, make that better luck for themselves.

And by the successful, and the unsuccessful, let it be remembered, that while occasions like the present, bring their sober and durable benefits, the exultations and mortifications of them, are but temporary; that the victor shall soon be the vanquished, if he relax in his exertion; and that the vanquished this year, may be victor the next, in spite of all competition.

It is said an Eastern monarch once charged his wise men to invent him a sentence, to be ever in view, and which should be true and appropriate in all times and situations. They presented him the words: "*And this, too, shall pass away.*" How

much it expresses! How chastening in the hour of pride! -- how consoling in the depths of affliction! "And this, too, shall pass away." And yet let us hope it is not *quite* true. Let us hope, rather, that by the best cultivation of the physical world, beneath and around us; and the intellectual and moral world within us, we shall secure an individual, social, and political prosperity and happiness, whose course shall be onward and upward, and which, while the earth endures, shall not pass away.