AN ADDRESS

DELIVERED BEFORE

THE HAMPSHIRE, FRANKLIN, AND HAMPDEN AGRICULTURAL SOCIETY,

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BY FESTUS FOSTER.

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ADDRESS.

The Lord, who formed the earth, formed it to be inhabited. What were its original soil and climate, and what its animal and vegetable productions, it may now be difficult to determine. Thus much we know, that the whole and every part were such, that infinite wisdom and benevolence surveyed them with delight, and pronounced them good.

In such a world as this were our primeval incestors placed, and the employment assigned them was to till the ground and eat of its fruits. Had our race continued innocent and undefiled, agriculture must have been a pleasant recreation, rather than a toil. We might then have seen those products of the field, which now cost us much labor, growing spontaneously or with little care; our trees not infested with the canker work and the caterpillar, our wheat not choked by tares, nor our pastures and meadows over-run with briars and thistles. So harmless might have been the beasts and reptiles, that the figurative language of prophecy would have been literally true, and we might have seen "the wolf dwell with the lamb, and the leopard lie down with the kid, the calf and the young lion and the fatling together." We might have seen our children, not only safely sporting with the lion, the leopard, and the wolf, but "playing on the hole of the asp, and putting their hands on the den of the cockatrice, and there be nothing to hurt or destroy in all the earth."
But the earth has suffered a sad reverse. The loss of innocence was followed by the loss of paradise. The ground has been cursed for man's sake, and doomed to bring forth thorns and thistles, and man himself to earn his bread by the sweat of his brow. From that sad hour to the present time, agriculture has required our utmost labor and ingenuity. Useless and noxious weeds spring up spontaneously, and flourish in all their pomp and luxuriance, while every plant adapted to our sustenance or pleasure, must be nurtured by our care. In our own fertile and happy land, how few plants are the native products of the soil? With the exception of your Indian corn, your whole farms are stocked with vegetables of other climes. Before these could take root, immense forests were to be removed; and before they could flourish, they must be enclosed from grazing beasts, or the beasts themselves exterminated. All this effected, your constant labor and care are requisite to defend the tender plant from weeds, insects, and reptiles, and to mel-
low the earth that it may expand its roots and grow to maturity.

In rearing animals, your task is not less difficult. Those which are fitted to be useful, either for food, labor, or clothing, and which you would, therefore, domesticate, are gra- minivorous, and must be restrained from access to such vegetables as you wish to preserve. They are mostly of foreign origin, and unable to subsist in this climate without your care. You must therefore provide for them food and shelter, during the inclement winter, and protect them from beasts of prey. The hawk watches for your poultry by day and the fox by night. The wolf in your sheep-cot, gives ocular demonstration that Samson was not more valiant among the Philistines, nor ever wielded a jaw-bone with better success.

There is another event recorded in sacred history, which had an effect upon the whole surface of the earth, and pro-
bably a deleterious effect upon agriculture. I refer to the universal deluge. When the inspired historian tells us of "the waters under the earth," and that in the days of Noah "these fountains of the great deep were broken up," and the billows rolled over the land; and at the same time "the windows of heaven opened," and the rain let down in torrents until the whole earth was inundated, there must have been such a convulsion of nature as to alter the surface of the earth, piling up mountains here, and making excavations there, if indeed the earth itself was not racked to its centre, and torn to fragments. Some philosophers have supposed that such was the fact; and that the earth was thrown from its original position in the heavens so as to incline its axis to the plain of its orbit. On this theory they account for the longevity of the antideluvians, to whom there could have been no variation of seasons, and maintain that "seed time and harvest, cold and heat, summer and winter," commenced after the deluge, when the promise was made, that they should never cease. Some change in the soil or climate, not less than that contended for in the above theory, must have taken place, as an adequate cause for at once reducing human life to one tenth part of its original length. A change, so unpropitious to animal life, could hardly be otherwise than detrimental to the growth of vegetables. Besides; after the labor and experience of more than sixteen centuries, all was lost. Not a record, nor vestige left; but Noah and his sons had to commence their labors and experiments anew, in a new world. Add to these considerations, the shortness of human life, so that but little time is left us to be active and useful, after we have arrived to years of discretion and gained a competent knowledge of agriculture, before we feel our constitution begin to decline, and with a palsied hand and tottering step quit the field of labor, and by our firesides wait our coming dissolution.
There is another cause which has been most detrimental to the interests of agriculture; the baneful effects of which have been felt in every age. A great part of the bone and sinew of every nation has been drawn from the field to the camp. War, needless and unjust war, has left one country untilled, to spread ruin and desolation over another. Had the lives and treasures, wasted in war, been employed in cultivating the soil, and opening roads and canals from one section of country to another, who has imagination to conceive what must have been the present state of the world? Who will venture to estimate the increased wealth and population of the different nations—the facilities of communication—the ease and plenty which would every where abound—and the advances which would have been made in all the arts, sciences, comforts, and elegancies of life?

Agriculture has been left to struggle with the ignorance, as well as to suffer from the wickedness of man. It had to crawl into existence under every disadvantage. The qualities of plants and the means of propagating or destroying them, as they were found useful or noxious, were lessons to be learned without an instructor. The like ignorance prevailed respecting animals. What species were proper to domesticate, how they could be supported, and to what uses they could be applied, were inquiries which could be solved only by experiment. When we turn to the implements of husbandry, similar, if not greater difficulties present themselves. Vast forests are to be annihilated, the firm soil loosened that your seeds may send out their slender roots, and heavy burdens removed from the field to places of safety. What implements are necessary to effect all this, and how and where are they to be procured? Who knows the properties of iron? In what mountain is the ore concealed? Who can did it up, separate the metal from the dross, and without tools or patterns, fashion tools for the farmers use? Ages on ages must have rolled away, before
men could have acquired such a knowledge and such implements of husbandry as now seem necessary to a bare subsistence. Their food and raiment must have been scanty and of the coarsest kind; their implements few and of the rudest form. What little science there was in the world, was applied to other purposes than the cultivation of the earth. The attention of princes was directed to objects of pleasure and aggrandizement, to their courtiers and their concubines—their wars and their conquests, while the poor unlettered peasant was left to grope his way in the dark, unaided, unpitied. Artisans, if such there were, applied their skill to the manufacture of swords instead of ploughshares—of spears instead of pruning-hooks. The cultivation of the earth was left to the lowest and most debased of the people, who were alike destitute of skill, energy, and a laudable ambition. It was an employment in which none could expect to rise to distinction, and in which the ambitious and enterprising never engaged. It was accounted a mean and degraded occupation, and treated with neglect and contempt. Up to the present hour, Europe is divided into two great classes, denominated the gentlemen and the peasantry, or the laboring class, and those who are above labor. And so deeply rooted was this distinction, that our ancestors brought it with them to this country. Perhaps it may be within the recollection of some who now hear me, that a distinction was once made in our universities between the sons of our yeomanry, and the sons of our American gentlemen! O, "tell it not in Gath, publish it not in the streets of Askelon."

I might mention other causes with which agriculture has had to contend; such as the unequal distribution of land, the consequent custom of renting it to tenants, and the tithes, tribute, and taxes which have oppressed and disheartened the cultivator in every age. In most of the governments of Europe, the title to the soil is founded on conquest. The
subjugated country was parcelled out among the military chieftains of an invading army, and its inhabitants reduced to a state of vassalage. The policy of these great landholders, who were to be the future lords, barons, and noblemen of the realm, has been to retain their estates in their own families, and rent them to the laboring poor. Hence the distinction of landlord and tenant has become universal. Where the landed property is in the hands of a few, and the great mass of the people poor and dependent, the rich landlord will impose on his tenants rents and exactions to the full extent of their strength. The humble laborer has nothing, and can acquire nothing. He has neither skill, nor leisure, nor means, nor motives, to make any experiments or improvements. A bare subsistence is all he can expect, and this is the goal of his highest ambition. The lords of the soil, instead of planning, directing, and superintending improvements on their estates, are off on excursions of gallantry, or at court basking in the sunshine of royalty, or at the banquet revelling in luxury. The extravagance and dissipation of the landlord, and the poverty and depression of the tenants, have caused "the land to mourn."

I have glanced at the past, that by comparing the present state of agriculture with its low and degraded state in former times, you may perceive how much has already been done under every disadvantage—that a beginning has been made—that many impediments have been removed—that stronger inducements are furnished—and that, like St. Paul, you have only to "thank God and take courage," to perfect what is wanting.

The general principles, necessary to be observed by the agriculturist, are few and simple. It is an established law of nature that death sustains life. Some species of animals are supported by the death of others, and some by the destruction of vegetables. Animals, which have been found most useful to man, are wholly of the latter kind. The first
attention of the farmer, therefore, must be directed to the production of such vegetables as contribute to the support of man and such animals as he has selected for his use. In the production of vegetables, the same law of nature prevails—death is necessary to life. You must, therefore, seek that dark, loamy soil, which has been formed by the decay of vegetables for a series of years, and as you exhaust it by repeated crops, add either animal or vegetable decomposition, and like the fabled Phenix, one crop will arise from the ashes of another. Excepting a few tender and delicate plants, manures are most efficacious when applied in a state of fermentation. They communicate a slight degree of warmth and action to the adjacent soil, salutary and even necessary to vegetation. Any animal or vegetable substances, compacted in a mass and imbibing a moderate degree of moisture, will soon pass into a state of fermentation, by which they are decomposed, and fitted to produce another crop. Hence every farmer may manufacture compost to almost any extent. The value of manure is different on different soils. It is productive on all, and on some indispensable. Land, once brought into a state of high cultivation, by returning the proceeds of its crops, will not degenerate. Sterile lands, and such as have been exhausted or neglected, may be made productive in a few years by compost and the plough.

Where different and opposite soils lie contiguous, much benefit may be derived by admixture. A sandy or gravelly soil may be greatly improved by a covering of loam, mud, or clay. On the contrary, cold, wet, muddy land will be greatly meliorated by a coat of sand or gravel. A soil warm and dry, especially if sloping, may be made highly productive by irrigation. If accompanied by an occasional top dressing of barn manure, the farmer will be well repaid. In a mountainous region, like some parts of the territory within the limits of your society, where precipitous streams abound,
and whole farms lie on a declivity, I am persuaded great advantages might be derived from this use of water. A few days labor would add some tons of fine hay to your annual income. To the agriculturist this must be considered a staple article. It is the support of your animals, and the means of enriching your arable lands, and gathering from thence a golden harvest.

Upon the culture of plants, I have time to say but a word, and that is, treat them not with neglect. They require your friendly visits, and the repeated application of the hoe. The garden will demand your daily attention. This may be a pleasant resort, when you have borne the heat and burden of the day, and the evening tide invites to meditation. There you may breathe the fragrant air, succor the young plants emerging from the earth, and watch their progress through all their changing forms.

The cultivation of trees is a subject to which, I think, I may with great propriety invite your attention. Not only would I recommend to every farmer, an orchard of choice fruit, well fenced, and well pruned, but a thrifty wood lot, in which no grazing animal should feed, and from which fuel and timber should be cut with care. We ought to live not only for ourselves, but for our children, and for posterity. Situated in a region where much fuel is absolutely necessary to a comfortable existence, where coal mines are not to be found, and where the demand for lumber is increasing with the wealth and population of the country, our forests already thinned or made bare,—there is great reason to apprehend that in the next and succeeding generations, the scarcity of fuel and lumber will diminish your population—that the expenses will absorb a great portion of the income of your fertile and well cultivated farms, and your splendid villages and temples fall to decay. The time seems to have arrived when, instead of enlarging our fields, we must better improve them; instead of making strip and
waste in our woodlands, we must cut sparingly; instead of feeding or cutting down the underwood and shoots, we must carefully preserve them. Greater economy must be adopted in cooking our food and warming our houses. The all-devouring chimnies of our ancestors must give place to the stove and the furnace. Our houses must be made a better defence against the cold, and their materials must be taken from the earth rather than the forest.

There is one species of trees entitled to your particular regard. It is the sugar maple. This flourishes on almost any soil, yields to none in cleanliness and beauty, is excellent for fuel, and furnishes sugar little inferior to that of the cane. One hundred of these extended on the margin of your fields, or set in the form of an orchard, would afford an ample supply of sugar and molasses for half a century or more, and when they began to decay, reward you with fifty or an hundred cords of the best fire-wood. The expenses of transplanting them will be but trifling, their injury to the land, if any, inconsiderable, and a few years will give to them great beauty and value.

The value of the locusts and of the mulberry deserve particular notice, but they are believed to be duly appreciated by your Society.

In the management of your various animals, having selected the best bloods, you have only to provide for them warm, dry, and commodious shelters, and deal out to them sweet and wholesome fodder, and pure, clean water. Neatness and cleanliness in this department will contribute much to the health, growth, and corpulence of your stock. A slattern in the house is not more disgusting and unprofitable, than a sloven in the barn. In the treatment of those patient and docile animals which perform your labor, let me crave your mercy. Neither suffer them to moan with hunger or thirst, nor to be loaded or driven beyond their strength. A mild and generous usage will secure their attachment, excite
their courage and resolution, and dispose them to volunteer their most vigorous efforts in your service. Your interest, as well as the dictates of humanity, require that you abstain from all cruelty and abuse, and that your dominion over them be tempered with lenity and kindness.

To carry into effect the objects of your association, and give to your occupation all the improvements of which it is susceptible, will require the unremitting energies of your mind, as well as much vigorous bodily effort. Agriculture, like all arts and sciences, is progressive, and must never be suffered to rest, or retrograde. Your observations must be made with accuracy, and your researches pursued with ardor. Placed in a country containing a great variety of soil, in a climate mild and healthful, under a government which can impose no burdens on you without your consent, owners of the land you occupy, furnished with the most approved implements, and having for your guide the experience of former ages, and the means of making new experiments under the most favorable circumstances, it would be strange, "passing strange," if you made no advances. I have said, that heretofore, the sciences held no fellowship with agriculture. A better day has began to dawn upon that long neglected occupation. Men of genius and learning have devoted their talents to lighten the burdens of the laborer, and give success to his efforts. As the powers of nature begin to be developed, and its laws are better understood, difficulties diminish and experiments succeed. The sciences have already done much to aid your cause, and may be expected to do still more. A new era has commenced, in no longer confining science to the cell of the monk, and the chamber of the philosopher, but in communicating it to the world at large, and applying it to useful and practical purposes. The discoveries of the geologist, and the experiments of the chemist are spread before you, through the agency of the press. Much mutual benefit may also be ex-
pected from your Society and similar associations. They emphatically mark the spirit of the age, as distinct from that of any former period. Other nations have had their festivals and their fairs. The Olympic games of Greece, and the gladiatorial exhibitions of Rome characterize the age and ruling passion of each of those great empires, which in succession gave law to the world. But when, or where has public attention been excited and directed to the interest of agriculture and the mechanic arts? When have men of wealth, and science, and influence, taken such a deep interest in the welfare of the laboring part of the community? When was information upon these subjects so widely diffused and so eagerly sought? These signs of the times indicate that a better state of things is to be expected—that causes are in operation which, if continued, will effect a mighty revolution. The united efforts of the great mass of intelligence cannot be fruitless. By repeated experiments and careful observations, from year to year, something will be gained. Whatever discoveries or improvements are made by one, will become the property of all, and never be lost.

Agriculture and manufactures are not insulated interests. They are intimately connected with other arts and occupations, with the sciences, and the laws and policy of our own country and of foreign nations. The prosperity of the agriculturist depends not merely upon the quantity and quality of his produce, but upon the readiness, certainty, facility, and advantage with which he can vend the surplus, or exchange it for such articles as he may need. The same doctrine is true in its application to the manufacturer. It is in vain that he produces the best wares, unless they can find a market; and the easier and cheaper they can be conveyed, the greater will be his profit. Whatever, therefore, tends to furnish a sure and steady market, or to diminish the expenses and risk of transportation, or to reduce the price of articles to be received in exchange, is to the far-
mer and manufacturer a direct and positive benefit. In this view the construction of rail roads and canals through an extensive inland country, and improving the navigation of rivers, opening a free trade with such nations as will purchase our produce and manufactures, or in exchange, supply us with such articles as we may want, prohibiting or imposing duties on such importations as come in direct competition with the produce of our farms and the wares of our work-shops,—are subjects, in which the interest of the farmer and the mechanic are deeply involved. A regard to your interest, therefore, requires that your views be extended beyond the cultivation of the soil and the increase of your flocks. Your voice must be heard, and your influence felt in our state and national legislatures. The opinion of sound, intelligent, and practical farmers, is entitled to great consideration; and I am happy to say, that the time has come when gentlemen of every profession are disposed to treat it with respect. By continuing to merit the esteem of your fellow-citizens, you will not fail to receive it; and so far as legislative aid can advance your interests, you may expect the co-operation of a wise and patriotic legislature.

In times like the present, of general depression in every branch of industry, you must expect to participate with your fellow-citizens. Economy, at all times commendable, now becomes an imperious duty. If the products of your labor can find no market abroad, let them, at least, supply your wants at home. To effect this, I place great reliance on the industry and ingenuity of your virtuous wives and daughters. They will curtail your shop bills by furnishing many articles of apparel of their own manufacture. Like the good wife described by Solomon, they "will seek wool and flax, and work willingly with their hands. They will lay their hands to the spindle, and their right hands hold of the distaff; their candle goeth not out by night." Such merchandize is better than that brought from afar—such industry is above rubies.
You will not deem me to have surpassed the province assigned me, when I recommend to you the exercise of that influence and authority, which are vested in an employer over those in his service, in suppressing all lewdness, profanity, intemperance, lying, gaming, pilfering, and whatever is opposed to good morals, and a decent and orderly behavior. Your interest, your self-respect, and your duty to your domestics and to your country, demand this at your hands. When a large portion of our population shall become as debased and degraded as the great mass of the people in the eastern hemisphere, our elections will be a farce, and our political edifice will fall and bury us in its ruins. He, therefore, who attempts to reclaim some who begin to go astray, to prevent the fall of others, and to inspire all with a due sense of the value of character, and to elevate them to a decent standing in society, performs the best of charities to the individuals, and is a public benefactor.

While we regard the moral deportment and welfare of others, may we not neglect our own. While we till the ground from which we were taken, and to which we must return, let our treasures be deposited in that "better country," where flows "the river of life," where stands "the tree of life," and where "the light of the sun and of the moon" will be extinguished, in the brighter splendor of God's eternal day.