ADDRESS

DELIVERED BEFORE THE

AQUIDNECK AGRICULTURAL SOCIETY,

AT THEIR ANNUAL EXHIBITION.

1853,

BY

THOMAS R. HAZARD,

Of Portsmouth, R. I.

PUBLISHED FOR THE SOCIETY
BY
CRANSTON & NORMAN,
NEWPORT, R. I.

EXCHANGE.
MAR 28 '11

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SECRETARY'S OFFICE, 9th month, 14th, 1853.

At a meeting of the Aquidneck Agricultural Society, held Monday, the 12th inst., it was voted unanimously, That the thanks of this Society are due to Thomas R. Hazard, Esq., for his able and appropriate address, delivered before them on the 8th inst. And that Messrs. Joshua Coggeshall and Nathaniel Greene be, and they are hereby appointed a Committee to present a copy of this vote, and request a copy of the address for publication.

With respect, &c.

JOSEPH C. DENNIS, Sec'y.

THOMAS R. HAZARD, Esq.,

Portsmouth, R. I.

ADDRESS.

HAVING, perhaps without sufficient reflection, been induced to promise your Committee of Arrangements, that, in case they should fail in procuring the services of some more competent person to address you on this occasion, that I would endeavor to sketch out in writing a few hints and suggestions for your consideration; and having learned that the efforts of your Committee to procure the services of such an individual, has not been attended with success, I am compelled, most reluctantly, to attempt to execute a task that I feel I am by no means qualified to discharge, either to my own or to your satisfaction. What I shall suggest will, doubtlessly, sound very homely and *unscientific* in the ears of many, and will, in fact, partake more of the character of a plain farmer's *chimney corner* talk, than that of the usual learned discourse that is expected on such occasions as this.

Owing to the more free circulation of papers devoted to the subject, or from other causes, a new impulse has been given to agriculture in this part of the State, within the last few years. This augurs well for the community. There is no State in this Union in which the signs of the times indicate, so emphatically, the necessity of strengthening its conservative basis—a farming population—as in this. The time may be nearer at hand than is suspected by many, when Rhode Island will be forced to turn with beseeching look to the tillers of her land, irrespective of party;

to shield her cherished institutions from the crafty approaches of the emissaries of a foreign despot, led on to the accomplishment of their unhallowed designs by lucre-loving, power-seeking Catalines, born and nurtured on American soil. I trust that hereafter, instead of beholding the sons of farmers, of this vicinity, deserting the plough and congregating in the workshops, and tape-shops, and candy-shops of our cities and towns, that they will more generally apply their energies to the advancement of that most pleasing, healthful and honorable of all employments—the cultivation and improvement of the earth.

Whilst I would by no means discourage the adoption of any or of all the theories that are advanced at the present day in relation to agriculture, I would, at the same time, recommend that farmers should not be too hasty in deciding on their respective merits, but that as a general rule, they should first test them by actual experiment on a small scale and, in the language of Paul, “Prove all things, and hold fast that which is good.” *Head* work and *hand* work are both essential to the prosperity of the farmer, but then they should always work in couples and learn of each other. The capital of the farmer who works only with his head will be very like to be soon exhausted, whilst that of him who works only with his hands will be but little productive.

We have most of us heard of the old farmer who, when on his death bed, was asked by his sons to reveal to them the secret of his unusual success in farming, whose answer was contained in two words only, twice repeated. “Feed high—feed high.” And let me ask, is there a person now present who can refer to a single instance within his knowledge where an industrious, prudent farmer, who practiced this advice, was ever compelled to emigrate to the new countries, or to seek his fortune in California, for the reason that he could not make a comfortable living at home? Feed your stock high, and feed your land high, and in the end it will be sure to pay. We have here no rich alluvials like the the bottom lands of Mississippi *now are*, and like those of the

Mohawk *once were*—and then deemed to be so inexhaustible that farmers were wont to remove their barns instead of their manure heaps ; but now, after following the stripping system for scarce a century, their barns are left empty,—their soil, rich as it formerly was, has become worn and exhausted. It used to be a saying of the late Elisha R. Potter, that strong minded son of Rhode Island, of the genuine stamp, that New England was designed by nature for the sheep pasture of the United States. It is true that such is the character of its soil by nature, but the industry and intelligence of its farmers may yet convert it into a garden, in spite of every obstacle. Whatever may be the case in other lands, our crops in Rhode Island are mainly the product of manure, not of the soil. But some may ask how are we to obtain this manure ? I answer, that every farmer whose land is already in good tilth, has it on his own premises, and if he follows the system of agriculture that should be adhered to by all of us, who do not live in localities where manure can be readily and cheaply obtained, he has it in his power not only to keep his farm from deteriorating without expending a dollar in the purchase of manure, but even cause it to annually improve in productiveness. And how, some may ask, is this to be accomplished ? I answer, by “feeding high.” Feed all your crops on your land—instead of selling grain, hay, straw, &c., sell beef, pork, mutton, lamb, wool, butter, cheese, poultry, eggs, &c., &c. But some will say, by following this system our crops will not turn us more than two-thirds in market we now get for them ! Well, what and if they do not in market ? if, in the end, they will turn to a greater amount on your own farm, and besides save a great deal of trouble. A large amount of labor may thus be saved—a difficult article now to be procured. No carting of heavy materials to market—no drawing of heavy manure for miles and miles, and for months and months—you may dispense with half your team, and half your blacksmith and wheelwright bills.

What is manure ? It is not necessarily *muck* as some seem to

think it must be to give it value. A bushel of corn, passed through the body of an animal and supplied to the land, may furnish manure sufficient to produce another bushel and something over. If it is not so, it would seem that the soil of the world would, in time, be entirely worn out—by little and little, it would all go into the ocean. Both plants and animals doubtlessly derive a large portion of their nourishment from the atmosphere. The poison of the one is the food of the other. Now, what I want to suggest is, that some of our farmers should institute a system of experiments by which they may ascertain to a certainty which is the best system to pursue—whether to sell off their crops and buy manure, or to feed out their crops and not to buy manure? Try the experiment methodically on a small scale—they will then be convinced which is best.

There used to be a good old farmer and a *good old man*, too, who formerly lived near Worden's Pond in Narragansett, who used to say that he was aware that he knew but little, but what he did know, he knew *sartain*. Now I want that us farmers should know what we do know about the principles of agriculture, *sartain*. Theory teaches many good things, and I would have no man to despise it; but yet there is nothing like experience to teach *sartainties*. Now I propose to you a theory, viz: That if crops of grain or vegetable food, after being passed through the body of any animal, be *all* returned to the same soil on which it grew, that the land, so far from being deteriorated by its production, will actually be additionally fertilized. To establish the truth or fallacy of this theory, let some judicious farmer select, say an acre of land, already in good tilth, and experiment upon it after such a fashion as his own judgment may dictate, or after the following method: Commence with spreading the acre of land well over with manure, say eight or ten cords of barnyard. Some prefer doing this in the Fall, some in the Spring. You will probably find it to be most effective if spread in the Fall, especially if put on pretty late in the season, notwithstanding

ing theories to the contrary, particularly if the soil has a clay foundation. In the Spring plough the land pretty deep, that is, about twice the depth land skimmers generally do. Harrow it most thoroughly with a long-toothed, heavy harrow, such as not less than four oxen should draw, if the harrow be of ordinary dimensions. A thorough harrowing will save half the expense and time in hoeing. If the land be dry and lumpy, roll it—if not, simply bush it. Put in the corn with a planting machine, say three feet between the rows, and a little less distance in the rows—three or four grains in a hill, besides one or two extra for the birds and worms. When these processes are all completed the crop is more than half raised. As soon as the corn is up so that the rows can be distinctly seen, cultivate it out from two to four times in a row according to the nature of the soil and the amount of weeds and grass. Do not delay to do this early. “A stitch in time saves nine.” Weed the hills with a hoe, but do not waste time by meddling with the earth in the middle of the rows. Repeat the process of cultivating and hoeing once or twice more in the same manner; the more the ground is stirred, if every day, the better the plants will grow. Never draw any dirt around the hill after the first and second hoeing, and then but very little. Some farmers are fond of drawing all the dirt from the middle of the rows and heaping it up about the stalks of the corn, just as its roots have gone in quest of nourishment abroad. This is a capital method to make corn stalks as big as bean poles, and beautiful long cobs with here and there a grain on their butt end. A better way still to insure such a result, is to put all the manure in the hill, especially if the land itself be poor, in which case the plants shoot ahead wonderfully in the early part of the season, and looks beautifully. Like the prodigal son, it feasts luxuriously in its youth, on the heap of manure at its roots; but alas, in its riper age, when nourishment is needed to form the ear, the manure is exhausted; it has all gone into a useless stalk. Instead of putting themselves forth in search of material to trans-

mute into grain, the roots are drawn up in a gordian knot, and cling like the hand of a drowning man to the handful of exhausted manure.

But to return from this digression. As soon as the grain is glazed in the Fall, say about the 10th of the ninth month, (nick-named September by heathens of old,) cut up the corn by the ground, as it is called, and put it in *small* shocks, as fast as it is cut, never letting it wilt in the least; if you do the grain will shrink. Shake the shocks well down on the ground where the corn grew, that the butt ends of the stalks may penetrate a little into the earth. Never on any account shock it on greensward, if you do it will be sure to mould. As a means of keeping the shocks up, take at proper distances, two hills of corn in opposite rows, bend them over and twist their tops together so that they will form an arch; set up the corn, as you cut, on each side of the arch. It will both furnish support and ventillation. Occasionally, from day to day, cast your eye over the field, and if you see that any of the shocks have fallen down, leave all other concerns except *meeting* and milking, and put them up at once, taking care to set the fallen shocks against others that are leaning, which will keep them up, and by this time the stalks will have become sufficiently seasoned to bear the shocks to be doubled without causing injury. By a little care in this respect both corn and fodder will be preserved from damage by the weather. In about one month, *not longer*, from the time the corn is cut up, cart it together, but no faster than it can be husked and the fodder stacked. Do not let the fodder lie longer than is absolutely necessary. It should be thrown on the stack every few hours; this will preserve its sweetness, and this is, also, much the readiest and cheapest way to secure it. Besides this, the value of the fodder, over and above what it would be worth if put up after the mussing, helter-skelter fashion of some land tormenters, will more than pay the whole cost of harvesting. Corn fodder should never be put in large stacks. One load in each is a sufficient quantity;

and by all means ventilate it with a pole in the middle. If convenient, put a little brush under each stack. By adhering to this method, a lot of fodder will be secured equal to the best of hay. I have had as many as ninety such stacks put up in one season, and I do not think that there were ten fork-fulls of it wasted in feeding; from the top to the bottom, it was all good. When husked, the corn should be suffered to lie upon the ground one or two weeks before being cribbed. If occasionally stirred with a rake after rain, there is no danger of its taking damage. Corn cut up by the ground I have found to make sweeter meal than that which has been topped and left to stand late in the field, and the fodder is worth double. Besides this, by following the first method, harvest is got out of the way before the weather gets cold, and the boys may be packed off to school of a morning, instead of being sent to blow their fingers over a frosty corn heap. By using a peg the difference of expense in husking the corn that is cut up by the ground and shocked, is scarcely perceptible from that which is topped and left to stand later in the field. But without the use of a husking-peg the difference is greatly in favor of the latter.

Well, now that the crop is harvested, and the fodder all secured, turn to the account that you have kept and reckon the amount of labor that you have expended, team work and all, and if your land is free and good, you will probably find it to amount to about twenty-five cents per bushel, *not more*. Mind that you keep an exact account of every hour and charge for board and lodging of hands in the bargain. This will be about the cost of your corn, independent of rent and manure; mind you *independent of manure*—there is the rub. That is what makes Indian corn so expensive a crop to raise with us—the *cost of manure*; and this expense I want to see dispensed with, and I think that it may be to advantage.

Now that we have found what the acre of corn has cost us, let us ascertain what it will net us if fed out on the farm. To ascertain

it by one experiment, purchase, or prize at a fair value a few hogs. Shut them up on a few loads of earth, taken from the field where the corn grew, from back furrows or elsewhere as is most convenient. Feed the whole crop of corn to these hogs and then sell them, or prize them again,—the difference will show the net value of the corn, independent of the manure it makes. Be careful in selecting your hogs, otherwise the experiment may totally fail on this account. There are two breeds of the animal in the world—the one appears to have been destined by nature for the production of bacon, the other, of bristles. A gentleman of my acquaintance, celebrated for many scientific attainments—Z. Allen, of Providence—was, a few years since, presented with a pig, brought by a ship from round the Horn, which was represented to be of a *remarkable* breed. Mr. Allen caused the hog to be well fed and cared for during the space of a twelvemonth, at about which time his friend, R. J. Arnold, having engaged in a little amateur farming, happened to mention to Mr. Allen that he was desirous of completing his fancy stock by the addition of an imported swine. The latter gentleman at once kindly volunteered to accommodate his friend with his South Sea specimen, which he assured Mr. Arnold possessed qualities of the most extraordinary character. Fearful that his friend from motives of delicacy might decline availing himself of his offer, Mr. Allen, shortly after dispatched his swineship to Mr. Arnold's farming establishment, accompanied with a polite note saying that he would leave the fixing of its price to his friend's own generosity, after he had sufficiently tested the properties of his prize. “*Remarkable*,” after being carefully weighed and ensconced in comfortable quarters, was most luxuriously fed and cared for. In taking an account of stock at the end of the year, in order to ascertain the profits of the farm, the hog was again placed on the balance and was found to have increased in weight precisely two pounds, which Mr. Arnold, in comparing notes with its former possessor, was gratified to learn was just double what had been

its increase during the twelvemonth preceding the day that the rare quadruped came into his possession. Now, notwithstanding the many attainments of these two gifted gentlemen, I could never discover from their manner of relating the incident, that it had ever occurred to either of them, that in the prosecution of their experiments, they had both been misled by looking after wrong results—seeking for pork where nature intended bristles only should be produced: the animal, in all probability, having found its way to this country, by the way of the South Seas, from Siberia, or the northern parts of Russia, where a peculiar breed is kept in those inhospitable regions solely for the production of bristles. Both Mr. Allen and Mr. Arnold inform me that the creature seemed to divide time in about two equal portions, one of which it devoted to eating, the other to squealing; and it is possible that the last mentioned musical propensity grew out of the promptings of instinct and was meant to indicate to the care-takers of the Siberian exile that it was high time he was shaved.

Feed the fodder out and keep the manure separate from all other, taking care that there is enough soil put under the latter to save all the urine, and litter them with the refuse stalks. Then ascertain what the keeping of the cattle has been worth to you, whilst consuming the acre of fodder. And now for a second year's experiment on the same acre of land. If it be heavy clay land, plough it up in the fall, if not, in the spring, and let the plough run a little deeper than the year before, so that it will bring the old manure to the surface. In the spring harrow the ground once over, and spread all the manure, made from the corn crop, evenly over the surface—sow it with oats and plough them lightly in, and lay down well with plenty of hay seed, finished off by rolling, which will press all the old corn stubbs and small stones in the ground and out of the way of the scythe. Rolling also helps to make the hay seed take. When the oats are fit for the scythe, cut them and put them up, and feed them in the straw to cattle or sheep, shut up so that the manure may be kept apart

from all other, with sufficient sand or earth beneath it to save liquids, which is far the most valuable part. In the spring spread the manure made from the oat crop evenly over the surface of the same land again—always remembering that the finer manure is pulverized, the more nourishment it will afford to the growing crop, just as less weight of meal will fatten a hog than of unground corn. Then proceed in the same manner with two years crops of hay as with the corn and oat crops, after which another corn crop may be taken from the land, and so in rotation as before. A few years experience will enable a judicious farmer to ascertain by such a course of experiments, rigidly pursued, whether his land will grow better or worse under this system of treatment, and whether it is more or less profitable than it is to sell off his crops and to purchase manure. If he finds that his land is the most profitable when its crops are returned to it after being fed out, and that it rather improves than deteriorates under this system, he will doubtlessly continue to pursue it and find it a far less troublesome method of farming than to sell his vegetable and grain crops and buy and cart manure, especially if he lives in a part of the country distant from large towns or sea-weed shores, and where manure cannot be readily obtained. My own belief is that experiments would show results much in favor of the system of feeding out crops, especially in parts of the country where there is a market for fresh provisions, poultry, eggs, wool, &c., and should this prove to be true, the farmer may pursue the system with safety, as a general rule, without subjecting himself to the inconvenience of confining his experiment to given portions of his farm, as in the long run every part would receive its fair proportion of the manure derived from crops, even though it should not be always expended on the exact spot where they grew. Farmers might then plant as much as they choose to, secure in the knowledge that so long as the crops were returned to the soil it would continue to improve rather than to wear out. My impression is that in most neighborhoods in Rhode Island, the ma-

nure made from a bushel of corn, carefully saved, is worth not less than twenty-five cents, and *that* from a ton of oats or hay, not less than from six to seven dollars. A ton of straw would probably be of nearly the same value as a ton of hay for manure, for the reason that more of the substance of the hay goes to the nourishment of the animal. If some farmers who seem to value straw lightly would spread a ton of it over an acre of moist meadow they might be astonished at the result, and find at mowing time that it had been transformed into nearly the same quantity of good hay, besides leaving the soil better than it was before. By actual experiment a ton of ribbonweed when thoroughly dried is found to weigh but about two hundred pounds. Independent of the salt it contains, there is no good reason to suppose that the dry ribbon weed is worth *more* pound for pound as manure than the *straw* weed. If it is not, then if we analyze the seaweed and find what salts it contains and add them to the straw we have the same value in manure in about two hundred pounds of the latter, as we have in the two thousand pounds of ribbonweed, the remaining eighteen hundred pounds being merely fresh water, which perhaps had occupied the labor of a man and team nearly a day in dragging home from the shore. I wish that farmers would think of these things and experiment upon them. A large team, kept constantly on the road, will of itself in time impoverish a small farm, unless it is replenished with manure from elsewhere. Six oxen will consume in twelve months at least an amount of food equal to thirty tons of hay. One half of this will be lost on the road if the team is kept there one third of the time, only at six dollars per ton this would show a loss of manure from the farm to the value of ninety dollars in twelve months. And so with driving cattle off the farm to water, on which particular occasions, as all farmers know, cattle drop a very undue portion of manure when compared with the time. An old horse, if left to stand day after day, the year about, round the corner of the tavern or the grog shop, as I have sometimes seen, will,

in that period, carry from the farm some ten or twelve dollars worth of manure. Think of these things, farmers, and do not send six oxen to town with an empty cart, or the same number to work in mending the road when a pair or two less would answer equally well, and save manure if nothing else.

Farmers should be careful not to squander much manure on leechy or spongy soils; if they do the greater part of it will be lost. I remember now more than thirty years since, walking over a field in South Kingston, along with the late Thomas G. Hazard, long diseased, who was perhaps the best farmer of his day in Rhode Island, and a thorough bred gentleman of the old school. He was grand ancestor to the present I. Alfred Hazard, and a host of others of the same self-willed, self-thinking race, of whom it is said, that there never yet assembled a legislature in Rhode Island, that did not reckon among its members at least one ugly customer of the name. The field I allude to, lies a little to the east of Peacedale, and contains some ten or twelve acres. As we walked along the old man paused, and striking his cane on the ground, said, "Waste no manure here, cousin Tom. This is spongy soil. I have have marked that land ever since. I have seen it covered again and again with manure, inches thick. It lies contiguous to large woolen mills that afford quantities of the best of manure, and enough has been spread on the lot within my memory, if sold, to have purchased a good farm. But yet, the soil is no better now than it was on the day that the old man condemned it in my hearing. It was Thomas G. Hazard who first used sea weed in Rhode Island for manure. He then lived a little south of the compact part of the town of Newport. I have heard him say that land was a free agent, and that it recognized the step of the farmer who treated it well, and would yield its produce to such a one under the same circumstances, when it would withhold it from a dishonest land-skinner, who habitually treated it ill and robbed it. I have thought myself that there might be something in the old man's theory worthy of reflection. Thomas G. Hazard

used to take an honest pride in the goodness of his land, and in his latter years was one day boasting to the late Nichols Hazard of Newport, of the quantity of stock a certain lot he possessed would keep. "Why," said Nichols, "that number of cattle uncle, would eat all the feed off of such a lot in one day." True, Coz, replied the old man, but then let me tell you that whilst after this the cattle were lying down to rest the grass would all grow up again.

Some farmers seem to have a great spite against weeds, more especially after they get well grown, and have imbibed the richest portion of their land. Having compassionately spared them in their infancy, they now make war on the "pocky things," and set their boys to throw them all into the road. This, perhaps, is done of a morning previous to despatching the team to the beach after a load of another description of weeds that grow in the sea, and which, when brought home, after nearly a day's toil of man and team, will not probably nearly compensate for the manure just thrown into the road in the shape of fat, richly seeded weeds, considered valueless merely for the reason, seemingly, that they have been produced at home. Such farmers do not seem to reflect that just in proportion that weeds, or any other crop, exhausts the soil just in the same proportion it enriches it if returned again. Besides this, if well cured there is scarce a weed that does not make excellent food for stock, especially for sheep. Providence has created nothing in vain—every thing has its use. If every farmer was careful to cut all the weeds that grow about his walls and yards and preserve them for winter, and then occasionally give them to his stock, the health and lives of many valuable animals would probably be preserved thereby. Some farmers take pains to pull up their corn stubbs with the dung embraced by the roots, and tip them in some bog hole or in the road. Some take up the refuse corn tops in the spring from the ground on which they had been foddered, and burn them up or put them in some cart path or road. Some serve their potato

vines in the same way, and even some their refuse onions. I have no hints to offer for the consideration of such farmers as these. *They are past all hope.*

I have been trying to think of some article that will not make manure, but I cannot at present think of any, unless it be an icicle, and I believe that I may be at fault even here. The late David Buffum, a good farmer and a close observer, used to say that "*rain was the manure of poor land.*" In fact, I believe that everything may be made into manure. Glass bottles are a first rate manure. Glass contains from 20 to 40 per cent. of pot-ash—a most powerful manure. A barrel of ground glass would probably be worth a ton of sea weed applied to the soil. Ground granite rock is a capital manure for clay soils. Some farmers carefully pick up all the shells, bones, old boots, rags, hats, &c., &c., that accumulate in their back yards, and tuck them into some corner and there suffer them to remain, an unsightly ill-savored heap of rubbish. My practice has ever been to plough such rubbish *under* the soil, where most of it soon rots into good manure. Wool is a most powerful manure, and consequently all old woolen garments, hats, &c. Feathers, I consider to be worth as much, pound for pound, as the best of guano, so is hair of all kinds—even old leather will turn into *hide* again if buried in the soil. Shells are an excellent manure, mark where they lay thick in the soil you will always find it rich, even though they were placed there by the Indians a century ago. Bones are a most enriching manure, especially if ground or pounded. No farmer should ever throw them from his land. I always spread what accumulates on my farm with the manure. I plough them in. When my land is laid down with oats and grass seed, I generally pass over the field with hoe in hand to smooth the corners, &c., and when I see a bone above ground I dig a hole and bury it just beneath the surface—that spot will not wear out soon, depend upon it. It is a trifle to be sure, but then it is so much saved and **nothiug** lost, and that is the side of the fence to keep on in order

to prosper. Never waste if it is but a pin. Better give a dollar than waste a penny—you will prosper better. It has been my custom to mingle round turnip seed with hay seed and to sow it with my oats, for late feed for sheep, (also with my corn at second hoeing.) After the crop of oats is removed, they frequently grow well. On one occasion, in passing over my oat stubble I observed a huge turnip, some four or five times as large as its fellows. I had the curiosity to look for the cause, and found that its tap root was inserted in the eye hole of a creature's skull that lay buried beneath. Ground bones and wood ashes are probably two of the most valuable manures known, and have never been fully appreciated as yet by our farmers. The dead bone will make its living fellow—the ashes of a tree will grow the tree again. I want our farmers to think of these things.

I think that every farmer should have barn room enough to hold all his hay—and stable and shed room enough to hold all his stock. I am about satisfied that twenty tons of hay, put under cover immediately after it is mowed, is worth about as much *for fodder* as one third more that quantity put in stacks. Besides this, I think that it can be more cheaply done. When a load of hay is once in the mow, the work is done;—when it is put in stacks it is but the beginning of the end: hours are spent in topping—in raking—in cutting—in hanging—in fencing—and frequently, in topping again. Besides this, it wastes in every way—on the top, on the sides, on the bottom. A stack of four or five tons will wear away half a ton per annum, by the mere action of the weather, and damage nearly as much more within the surface. All this may be remedied by putting it at once in the barn. Besides, if it is fed on the ground its flavor evaporates, or it blows away—sometimes clean out of the field, in spite of the hungry creatures that follow it in full chase: away it goes; rolling and rolling over snow-banks and walls until it reaches a bramble bush, or tumbles into the ocean, whilst the half-starved animal, from whose jaws it has escaped, stands staring in amaze-

ment at its astonishing speed. If you move the stack to the barn, the hay is greatly injured by the handling—especially if the weather be dry and windy; and it is two chances to one that something will occur to prevent all of its removal on the same day, when on the next morning you may find the stack bottom buried in a snow-bank, or saturated to the ground with an avalanche of rain water.

Let farmers observe closely, and they will find that on most farms, at least, the first cost, even of putting hay into a barn, is less than to stack it out—especially if they have their carts and waggons properly rigged. I do not doubt but that I made a clean saving of labor to the amount of ten dollars, the past season, by placing on my waggon body a rough platform, by means of which a large load could safely be conveyed to the barn without the aid of stakes, and be much more readily put on and off, than where those incumberances are in the way. When hay is foddered in the barn, nothing need be lost, if the mangers are properly constructed—hay-seed and all, is saved. Not so when foddered on the ground;—then a large portion of the seed or flower that shells is lost. In some parts of Maine, farmers always cease mowing when their barns are filled.

Think of these things, farmers, and build your barns whilst lumber is to be had, and carpenters are yet willing to work.

It is held by some that if you take a strong moist meadow and do not permit it to be fed at all, that one crop of hay can be annually removed therefrom without causing the soil to deteriorate—the after crop of grass being sufficient, through the shelter and nourishment it affords, to keep the land in good heart. I think this theory worthy of being tested by actual experiment, and am myself trying, on a small scale, its reliability. Three years since, in 1851, I sowed with oats and grass-seed, a field containing about seven and two-thirds acres of land, that had been previously planted with corn and potatoes, and well manured. I harvested seven stacks of oats from this field, which I estimated

to contain eighteen tons. The next year was a poor season (1852,) for grass—my other lots yielded far lighter crops than usual. The lot not fed, however, cut thirteen large loads, which I estimated to contain from eighteen to twenty tons. The same course has since been adhered to in not feeding the after growth; and this season (1853,) the crop was immense—the largest, I think, that I ever saw taken from the same quantity of land. One-third of the crop, (as nearly as I could estimate by loads,) filled a little field barn, sixteen by fourteen, and thirteen feet posts, well stowed, to the peak. I called on your Committee to get them to look at this grass, whilst it lay in swarthe, and regretted very much that they could not make it convenient to call and see it. The lot was cut down by Daniel and Elisha Allen—two reliable young men, one or both of whom may be now present, and if so can give information, as regards the probable quantity, to any whose curiosity may prompt them to inquire. I do not, myself, think that the whole lot *averaged* less than three tons to the acre, although a small portion of it, from some cause, turned rather light. I do not, however, consider that the theory is fairly tested as yet, by any means, by my experiment. Like results for ten successive years might prove it true.

As a general rule, I think it a good plan to feed rich mowing lands late in the Spring—say until nearly the first of Summer—so as to reduce the crop to one, or to one and a half tons to the acre—especially on our island, where, on most farms, every lot is equally well adapted for mowing or pasturage. Where grass is very large, the quality of the hay is not near as good as where it is less. When fed it seldom lodges, and is more easily cut and made in proportion to its quantity, one time with another, than when it is heavy and lodged. The early feed, too, thus obtained, is of great value to the farmer, as it enables him to get his pastures well started before the heat and drought of Summer commences. It is true that this practice occasionally causes a partial failure of the hay crop, when an early drought sets in—but this is

seldom experienced. From my observation, such a result has not occurred but twice in fourteen years.

Most farmers on this island make too much hay for profit, as I think. More profit is to be made here from green grass than from dried—and much trouble saved. I have, for many years, been in the practice of sowing my oats as early as practicable, and then eating them down close with sheep, until about the 20th or 25th of the fifth month. This gives a good deal of early feed. The plant roots and succors out better—it grows stronger—heads heavier, and seldom lodges—and, on good land, the straw grows as big as is profitable. Besides this, by keeping the growth of the oats down early in the season, the hay-seed gets better rooted and is not so easily choked out by the after growth of the grain; and although the sheep apparently tread it badly, I do not think it is materially injured from that circumstance. It used to be told of an old farmer in Narragansett, that he never in his life raised but one good crop of corn; and that was on an occasion when his sheep broke into his field, after the crop was some inches in height, and eat it close off to the ground. After you laugh at this farmer, then think. I think that Indian corn should be the great staple of Rhode Island; raised not to sell, but to feed. I am clearly of the opinion that it can be raised, independent of husking and rent, for twenty cents per bushel, if fed on the land. And why should it be husked, as a general rule? Why not stack a large proportion of every crop—raised on frames, if necessary, to keep away the rats. In this shape feed it out to beef cattle, to hogs, to sheep—with young cattle to pick up the refuse, and pigs or poultry to follow after all. I have tried this plan on a small scale and have no reason to suppose that it may not be made profitable. If managed rightly, nothing need be lost. Fed in the husk, cattle manage it better than with it off, and the poultry will pick up all that is not thoroughly digested. They also scratch the manure about the land better than it can be beaten with a beetle. I think that almost every farmer

must be convinced, by a little examination that it will pay well to feed corn to sheep, the year round. I understand that some of our sheep farmers—Thomas Buffum, for instance—has sold his lambs this season to slaughter, for four dollars, cash. How much, think you, was he paid per bushel for the corn fed to his ewes? Not less than two dollars, I warrant you. Let some one try the experiment. One bushel and a half of corn will allow a gill of corn per day for a sheep the year round. Now take two lots of sheep, equal in all respects—say ten in each—give each lot the same keeping as to hay and grass. Give one lot, in addition to this, a gill of corn per head, on average, a day, the year through. Does any one doubt that this will add a pound to the weight of each fleece? Well, that is forty-five cents;—seventy-five to the value of each lamb, and fifty cents to its own carcase. Now speak out, shepherds—is this statement overdrawn? Clearly not, but to the contrary. The sheep fed with grain will go beyond these figures, over and above those kept exclusively on hay and grass—and what is the result. Let's see. Forty-five cents fleece, seventy-five for the lamb, fifty cents for increase of carcase. This makes one dollar and seventy cents for one bushel and half of corn, besides expending on the land some thirty or forty cents worth of manure, and adding to the flock some four or five additional twin lambs. Now, this sounds strange to many, I doubt not; but it is, nevertheless, true. Shakespeare has well said, "Truth is strange, stranger than fiction." Think of these things, farmers.

Before the Revolutionary War this island was studded with trees—all the roads were lined with them. War—ruthless war—destroyed them nearly all. There seems, now, to be a disposition gaining ground to replace them. I trust the general sentiment in this thing will strengthen, and that the island roads will soon again be sheltered and shady. Some think that trees are an injury to the land—and no doubt that they are, so far as their roots and denser shade extends. But in all other respects they

are beneficial. Shelter is of itself a good manure for land. And I am inclined to believe that if every lot on this island was completely surrounded with large trees, that so beneficial would be the additional shelter from cold and high winds, that they would impart, that notwithstanding the partial loss of the land they occupied and shaded, the aggregate produce of the whole island would be increased rather than diminished by the circumstance. Above all things, it would be beautiful to have all our roads lined with trees, bushes, and shrubs. I confess that I do not like to see, even briars, cut up from the roadside. It is well enough to keep a good foot-path open, but otherwise I would rather see the briars left for want of something better. They give a rural aspect to the island. They afford an occasional berry for the loitering school-boy, or the *wary traveller*, (as the Middletown "green end" hotel has it in print) and occasionally a sparrow finds a nestling place beneath their shelter, for its young. In some country—I think Spain—it is the custom of the people to plant the seed or stone of the fruit they eat, as they pass along the roads. The consequence is, that their roads are lined with fruit trees. This is a beautiful custom for so wretched a people as the Spaniards undoubtedly are. The custom has grown out of the noble nature of the people—their wretchedness, out of the debasing character of their religion. I have thought what an improvement might be made on this island by the introduction of such a custom here. What quantities of apples, of pears, of cherries, of currants, of gooseberries, of raspberries and blackberries—and here and there, in a sunny nook, of peaches and plums—might be raised without cost, to gladden the hearts of future pedestrians. And why might not farmers, in planting trees in the road, occasionally insert a fruit tree of some kind, and dedicate its product to the public? It would cost him no more than any other tree, and would be equally ornamental and far more productive. Think of this. One mere hint and I have done. Let the birds alone. It is a cruel practice to kill them, and especially savage when they

have young. Besides, it is impolitic;—they do far more good than harm. If they eat occasionally a grain of corn, they swallow thousands of worms that would otherwise destroy a vast deal many more—and besides, a little tobacco water, or tar, will prevent this. If they eat our cherries, they preserve our apples. I have an orchard that I have never known infested with canker worms, although the trees of my neighbors have been often destroyed by them. I have never used any other precaution against their ravages, *than to let the birds alone*. I have never allowed any shooting on my grounds, and the consequence is, that thousands of birds seek shelter there. It is true that they eat my cherries; but they amply repay my family for the theft, in melody, and preserve my apples from the canker worm, besides.—“Get thee gone,” said my uncle Toby, (as he slowly opened the window) to an overgrown fly, that had been buzzing about his nose and tormenting him all dinner time. “Get thee gone, poor devil—why should I hurt thee?—surely, the world is wide enough to contain both thee and me.” And why should we hurt the birds?—the world is surely wide enough to contain both them and us. For my part, I wish there were ten where there is now one. It is astonishing how little attention some *christian* parents pay to teaching their children humanity. Such will drive their horses to death to be in season to hear the first word of the sermon, and at the same time their hopeful son may wantonly shoot a harmless bird before his father’s eyes, and leaves its young to perish with hunger, without receiving a word of reproof. Both humane and cruel acts, even apparently of small moment, I believe, often meet with recompense even in this world. A man once told me that he did not doubt that the life of his child was once spared to him on account of his humanity to a calf—under the following circumstances: He was walking sorrowfully in the streets of Philadelphia, at a time when his infant son was lying, as was thought, at the point of death. A man passed with a cart, in which there lay a calf, tied in a painful position. He asked

the man to stop, and then relieved the calf, when it was borne upon his mind that the humane act, trifling as it was, should be rewarded by the life of his child. He returned to his house, found his child reviving, and it soon recovered. I have heard, too, of a wealthy man in the north of England, who, on a cold winter's day, observed an old, thinly clad woman, pulling dead brush from his hedge. He harshly ordered her to put down what sticks she had gathered, and to go away. In agony of spirit, the poor woman fell upon her knees and fervently prayed that the hard-hearted man might never again know warmth. He immediately began to shiver with cold, and continued to do so in spite of loads of clothing, until he died.

One more and I have done : A boy was once standing near a tree, in the branches of which was a nest of young birds, whose parent was hovering near with food for its young, but was deterred from approaching the nest by the presence of the stranger. The boy, being annoyed by the cries of the hungry brood, vowed to silence their noise, and, climbing the tree, he took the unfledged younglings from their nest, and tearing their tongues from their throats, again replaced them. He grew to manhood, married, and became the father of precisely the same number of children as there were of the young birds he had so ruthlessly tortured, not one of whom ever spoke—they were all deaf and dumb from their birth, and so ever remained. The wretched father ever felt and acknowledged his affliction was a just judgment from Heaven for his dreadful act of cruelty. Boys, yea, and men, too, take warning of this, *and let the birds alone. I have said my say.*

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