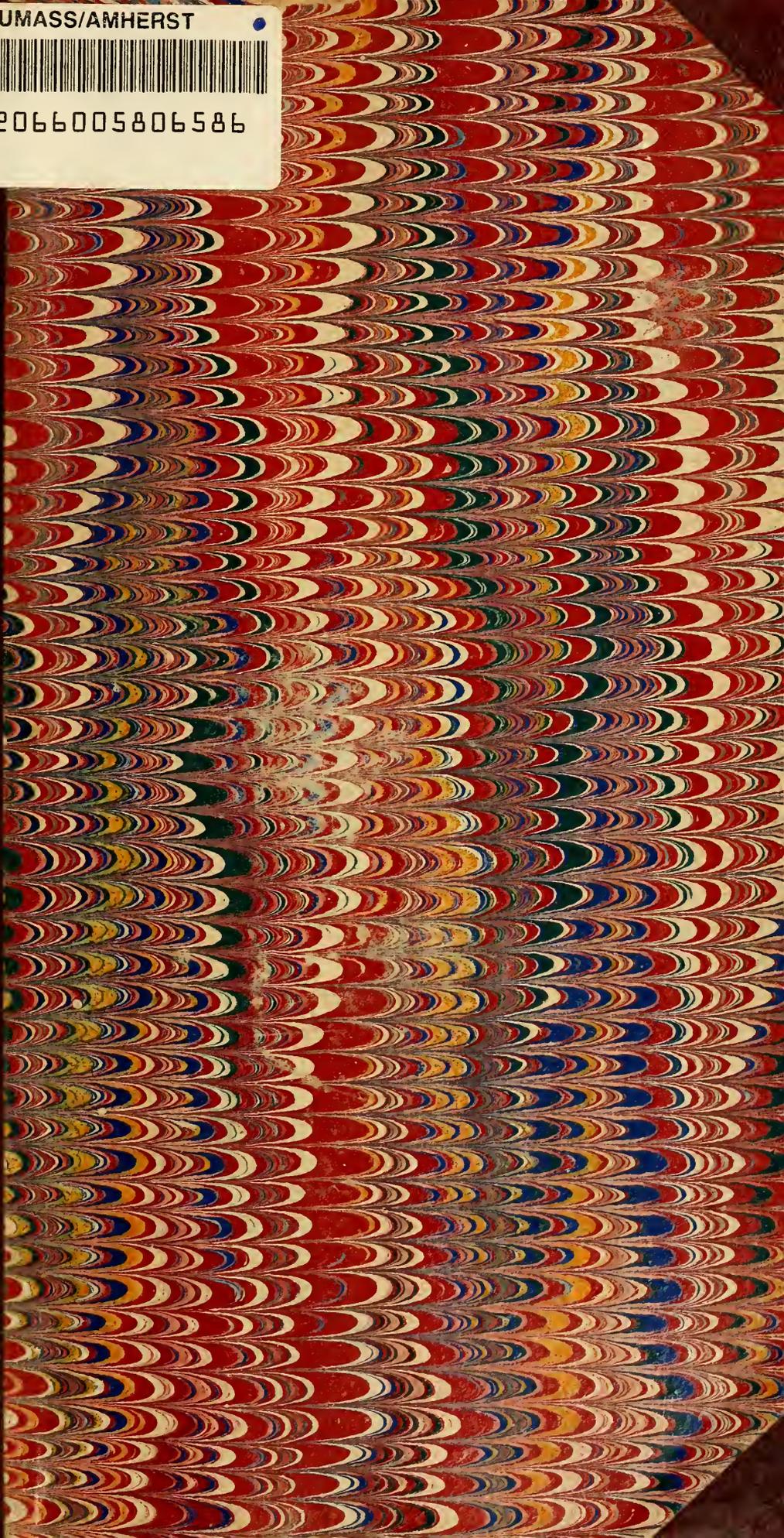


UMASS/AMHERST



312066005806586



LIBRARY

OF THE



MASSACHUSETTS
AGRICULTURAL
COLLEGE

NO. 5276 DATE 11-1886

SOURCE F. A. Goodrich

(S
74
W6W6
v.3

1861-65

This book may be kept out

TWO WEEKS

only, and is subject to a fine of TWO CENTS a day thereafter. It will be due on the day indicated below.

NOV 25 1895

APR 27 1938

6630.06 W897

1861-65

A. Beaumont

APR 27 1938

THE UNIVERSITY OF CHICAGO
LIBRARY
540 EAST 57TH STREET
CHICAGO, ILL. 60637

TRANSACTIONS

Worcester College

OF THE

WORCESTER NORTH

Agricultural Society,

FOR 1861.

PREPARED BY THE SECRETARY.



FITCHBURG:
PRINTED BY E. GARFIELD.
1862.

630.06

W89m 1861-65

SECRETARY'S REPORT.



IN accordance with the requirements of the Statute law of the Commonwealth, the Ninth Annual Cattle Show and Exhibition of the Worcester North Agricultural Society commenced in Fitchburg, on Tuesday, Sept. 24th, 1861. At one o'clock, P. M., the various committees on articles exhibited in the Hall were organized and attended to the duties assigned them. The Hall presented an unusual appearance, the tables, &c. being arranged differently from what they had ever before been; instead of three rows running through the length of the Hall as heretofore, there were many short rows crossing it, with ample walks between them and on each side of the Hall. This arrangement afforded more table room, and gave general satisfaction.

The show of Fruit, in consequence of its general scarcity and imperfection this year, was not nearly equal in quantity or quality to that of former exhibitions. This deficiency was offset by a display of Vegetables far superior to any ever before presented here; the show of Flowers was brilliant; the Mechanic Arts and Manufactures were much more liberally represented than usual, and Fancy Articles were not deficient in quantity or quality. Bread, Butter, Cheese, Pickles, Honey, Preserves, Wines, &c., were also liberally displayed on the various tables.

The committees discharged their duties promptly and faithfully, and the Hall was open to the public through the evening, and was well filled with our citizens and their friends, the assembly being frequently entertained by the singing of patriotic songs and glees by a volunteer club under the direction of Mr. N. O. Prescott.

The principal show was on Wednesday, the 25th. The Plowing and Spading commenced at nine o'clock, A. M., on the farm of Lyman Nichols, Esq., north of the village, and was witnessed by a large number of interested spectators. An exhibition of Rock Lifting took place on the same farm, immediately after these trials, and was a novel and instructive performance, which excited much discussion and suggested many valuable remarks: Mr. Nichols' farm was naturally an exceedingly stony one, and by the use of a \$225 machine he has already cleared a large portion of it of the stones, including many immense boulders, which are readily lifted by the machine from their beds in the soil and removed from the fields. A smaller and less expensive machine for the same purpose, was exhibited on the Common, and duplicates of it have since been used extensively and successfully in various parts of this town, and in several neighboring towns, greatly improving the appearance of the fields where it is operated; a result, in part, no doubt, of the exhibition and discussions above alluded to.

At half-past ten o'clock the several committees on Stock, Drawing, &c., were organized and the various trials of draught animals commenced immediately, were largely contested and gave general satisfaction. The number of animals exhibited in the various departments

was unusually large, and the quality much better than at any previous show of the Society. An extensive breeder and good judge of cattle, a member of the State Board of Agriculture, who usually attends the Cattle Shows here, stated that the cattle were at least fifteen per cent. better than he had ever before seen exhibited in this place. A much larger proportion than usual of the animals were pure bred blood stock, and high grades from these; showing an increasing interest on the part of the members of the Society in the business of breeding superior animals, and improving our common farm stock.

Mr. A. O. Cummins, of Millbury, presented for exhibition only, not competing for any of our premiums, a beautiful herd of nine high bred, pure blood Short Horns, two bulls, three cows, (one of them imported) and four heifers, all superb animals, owned by himself, A. C. & J. G. Wood, and E. M. Holman, of Millbury. These animals, which were among the best of their class, added much to the excellence of the show in this department, and Mr. Cummins richly merited the thanks of the Society for his energy and liberality in thus placing them on exhibition.

The usual dinner was served by Mr. Day, at the Fitchburg Hotel, at one o'clock, soon after which the Society met in the Lower Hall, where the President, Thomas Billings, Esq., after some appropriate remarks, introduced the Hon. A. H. Bullock, of Worcester, who spoke eloquently of the importance of due attention to the agricultural and mechanical interests of the country, and the important part borne by the old County of Worcester in contributing to the material welfare of the

nation. He was followed by the Hon. John Brooks, of Princeton, an abstract of whose remarks accompanies this report. Appropriate remarks were also made by Hon. Ivers Phillips, of Worcester, Hon. A. G. Hill, of Harvard, J. T. Everett, Esq., of Princeton, and Rev. George Trask, of Fitchburg, after which the awards of the various committees were announced. These exercises were enlivened by several songs from the same glee club who added so much to the interest of the exhibition on the preceding evening.

During the meeting Mr. Everett, of Princeton, offered the following resolutions :

Resolved, That, we congratulate each other and our fellow citizens throughout our State, and the whole country, upon the apparent entire extirpation of that appalling disease, the pleuro-pneumonia, that so suddenly and so fearfully commenced its ravages upon our neat stock, threatening terrible injury, if not total destruction to the great staple interest of the agriculture of the country.

Resolved, That, we gratefully appreciate the services of the State commissioners, Dr. George B. Loring, of Salem; Hon. Amasa Walker, of North Brookfield, and Paoli Lathrope, Esq., of Hadley, in the extirpation of that disease. That, in our judgment, their labors were characterized by wisdom, energy and great perseverance, and were finally crowned with success.

A vote of thanks was tendered to the Hon. John Brooks, of Princeton, for a donation to the Society of ten copies of "Grasses and Forage Plants," by C. L. Flint, Esq., Secretary of the State Board of Agriculture, each accompanied with a beautiful blank diploma.

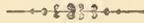
A vote of thanks was also tendered to the gentlemen from Millbury, who exhibited a herd of nine pure blood Short Horn stock.

Upwards of one hundred bound copies of Mr. Secretary Flint's "Agriculture of Massachusetts," for 1860, have been received and distributed by the Secretary among the members and friends of the Society. Also about two hundred and fifty copies of the "Patent Office Report on Agriculture," for 1860, have been distributed, most of which, through the kindness of the Hon. G. F. Bailey, the Representative to Congress from this District, have been sent under his own frank, direct to the recipients.

A small quantity of seeds and plants have been received from the Patent Office, including several varieties of Peas, which have been the subjects of some interesting experiments, and also several varieties of foreign Wheat, with which some of the members of the the Society are now experimenting.

Seven new members have joined the Society during the year, increasing the total number of members who have joined up to the present time to five hundred and fifty-three.

ABSTRACT OF MR. BROOKS' REMARKS.



Mr. Brooks, of Princeton, when called upon, remarked that he was pleased to meet his brother farmers of the Worcester North Agricultural Society, and to be able to express the opinion that the neat stock at the present show was superior to any he had ever seen exhibited at Fitchburg. This to him was exceedingly gratifying, as he was one of those who believed the rearing and feeding of cattle and sheep was one of the best means of renovating and improving our farms. He said that farmers, in his judgment, did not make sufficient outlay of capital upon their lands, but were too desirous of placing their surplus earnings at interest, which they could not afford to do so long as they possessed a rod of land susceptible of improvement. There were very many acres of land in the county that, by an expenditure of fifty dollars upon each acre, would pay annually the interest on this outlay, and give yearly two or three times the former income derived from the same land. He had cleared off brush and stones some thirty acres of old pasture land, within the last thirty years, and was well satisfied with the experiment. In his view it was much better for farmers to expend their earnings in improvements upon their farms, than to place them out at interest, for by placing them at interest they would find that, at the expiration of every twenty years, they had lost a large amount of the capital so placed. As proof of this, Mr. Brooks said that the money loaned was to traders and

speculators, they being the class of persons borrowing much the largest portion of the money loaned upon personal security. Farmers borrow but little except upon mortgage upon their farms.

Mr. Brooks also stated that it was generally conceded that twenty years was about the average duration of trading life; that ninety-five per cent. of all persons entering into trade failed, and that fifty cents on the dollar was a large average dividend to receive from bankrupt estates. If, therefore, traders and speculators are the class of persons that borrow the money, and ninety-five out of every hundred that enter this class fail in the course of twenty years, and settle with their creditors by paying fifty cents on the dollar, it follows that one-half of ninety-five, or forty-seven and one-half per cent. of all the money loaned is lost every twenty years, when, if it had been expended in improvements on the farm, the capital at the end of twenty years would have been unimpaired, and have paid as much or more interest than if it had been loaned out. As evidence of this, Mr. Brooks stated that some thirty years ago he commenced improving some of his land, by removing stones, &c., and in about fifteen years he had cleared about thirty acres, at an average cost of fifty dollars the acre. The land, before improving, did not yield an income of more than the interest on twenty dollars the acre annually. Since the improvement, the same land had given an income equal to the annual interest on two hundred dollars the acre. It was his belief that if farmers would expend more of their surplus funds in improvements

on their farms; rear and feed a larger number of cattle, sheep and swine; cultivate more root crops; expend a larger portion of their produce upon the farm, and rely for profits upon the sale of beef, mutton, pork, butter and cheese, they would by so doing find their manure heaps constantly enlarging, their crops annually increasing, instead of diminishing, as they now do, by the practice of selling the crops off the farm, and placing the proceeds at interest, to be eventually more or less of it lost by bad investments. Many farmers believe themselves growing rich by selling their hay, especially if they purchase and return to the farm as much manure as the hay sold will make, and if they do not, their farms will soon become worthless, or nearly so. The average market price of a ton of good hay in Worcester county, for the last ten years, will not exceed fifteen dollars; a ton of good hay will make more than two tons of solid manure, weighed when recently dropped by the cow or ox, but we will call it two tons. The liquid excretions discharged by an ordinary cow or ox, while consuming one ton of hay, with a suitable supply of water, will be admitted by all who understand the matter, to be equal in value to the solid. Thus four tons of manure is produced by a cow while consuming one ton of hay. Four tons of fresh manure is equal, by measurment, to one and one-quarter cords weighing sixty-four hundred pounds the cord, or fifty pounds the cubic foot, the value of which we will estimate at four dollars the cord, and one ton of good marketable hay we will call worth six dollars the ton, for feeding stock on the

farm. If these premises are correct, the amount will stand:—

DR.	Delivering one ton of hay sold, - - - - -	\$1,50
“	Cash paid for one and one-quarter cords of manure, - - - - -	5,00
“	Carting four tons, or one and one-quarter cords of manure to farm, - - - - -	6,00
“	Value of hay for feeding stock on the farm, - - - - -	6,00
		——\$18,50
CR.	One ton of hay sold, average price, - - - - -	\$15,00
“	Loss to balance, - - - - -	3,50
		——\$18,50

Thus we see, by the practice of selling hay, instead of gaining, as many believe they do, we are loosing at the rate of three dollars and fifty cents for every ton sold.

By improving and beautifying our farms, we add much to our own comfort and happiness, and offer greater inducements to our sons and daughters to spend their lives in rural enjoyments, instead of in the dust and smoke of crowded cities. The farm is man's earthly paradise, and the poet when he would describe, or the painter when he would represent a scene of earthly bliss, places it in some rural retreat, where the air is vocal with song, fragrant with flowers,

“Mild as when Zephyrus on Flora breathes,”

and where God is seen in the beauty and grandeur of his works.

OFFICERS OF THE SOCIETY FOR 1861.

THOMAS BILLINGS, of Lunenburg, *President.*

MOSES M. GAGE, of Fitchburg, }
EZRA KENDALL, of Sterling, } *Vice Presidents.*

W. G. WYMAN, of Fitchburg, *Secretary.*

T. C. CALDWELL, of Fitchburg, *Treasurer.*

OHIO WHITNEY, JR., of Ashburnham, }

JOEL HAYWARD, of Ashby, }

S. W. A. STEVENS, of South Gardner, }

C. C. FIELD, of Leominster, }

WM. B. HOSMER, of Leominster, }

CYRUS KILBURN, of Lunenburg, }

DANIEL PUTNAM, of Lunenburg, }

JOHN BROOKS, JR., of Princeton, }

HENRY BOYLES, of Princeton, }

J. T. EVERETT, of Princeton, }

N. B. REED, of Princeton, }

ANAN STOCKWELL, of Royalston, }

M. T. GARDNER, of Shirley, }

JAMES O. PARKER, of Shirley, }

J. M. SAWYER, of Sterling, }

WARREN SIMONDS, of Templeton, }

DANIEL C. MILES, of Westminster, }

BENJ. WYMAN, of Westminster, }

A. F. ADAMS, of Fitchburg, }

T. R. BOUTELLE, of Fitchburg, }

L. H. BRADFORD, of Fitchburg, }

JABEZ FISHER, of Fitchburg, }

ABEL MARSHALL, of Fitchburg, }

J. A. MARSHALL, of Fitchburg, }

JOEL PAGE, of Fitchburg, }

J. P. PUTNAM, of Fitchburg, }

JOSEPH SMITH, of Fitchburg, }

EDWIN UPTON, of Fitchburg, }

JOSEPH UPTON, of Fitchburg, }

I. B. WOODWARD, of Fitchburg, }

Trustees.

JABEZ FISHER, of Fitchburg, *Member of the State Board
of Agriculture.*

The annual meeting for the choice of Officers, &c., is held on the first Wednesday in December, each year.

REPORTS OF COMMITTEES.



PLOWING—DOUBLE TEAMS.

The Committee on plowing with double teams report, that only three entries were made to compete for the four premiums offered by the Society.

The team of Mr. Sewell G. Mirrick, of Princeton, consisted of four three-years-old steers, driven by himself, and his son nineteen years old held the plow. Their work was done in one hour and four minutes.

Mr. Joel Page, of Fitchburg, did his work with two horses and one pair of three-years-old steers, driven by his son thirteen years old, Mr. Page holding the plow himself, in thirty-five minutes.

Mr. J. Edwin Merriam, of Princeton, plowed with one pair of Oxen five years old, and one pair of steers two years old. He held the plow himself. The team was driven by his brother, John Merriam, and the work was done in one hour and four minutes.

Double Michigan swivel plows from the manufactory of Messrs. Nourse, Mason & Co., of Worcester, were used by all the competitors, and the work was well done. In awarding the premiums the Committee have endeavored to consider all the elements that constitute good practical farm plowing, such as time, manner of

driving, holding the plow, and especially the quality of the work when done. We were particularly well pleased with the manner of driving all the teams. It was done quietly, the whip was used but little except to guide the teams; it appeared as it should, like home every day work. The land was somewhat difficult to plow; it was on a steep side-hill, uneven, and in some spots there were cobble stones. It was a good piece of land to try the skill of the plowman, and the strength and discipline of the teams.

It will be noticed that Mr. Page did his work much quicker than either of the other competitors, which is owing to the fact of his using two horses, while each of the others used oxen; and this fact also makes it more difficult to decide who is justly entitled to the first premium, than it would have been if all the competitors had used teams alike; but after taking into consideration all the circumstances that fell under the observation of your Committee, we have awarded the Society's premiums, as follows:

1st, to Sewell G. Mirrick, of Princeton,	\$7,00
2d, to Joel Page, of Fitchburg,	5,00
3d, to J. Edwin Merriam, of Princeton,	3,00

As there is no competition for the fourth premium of \$1,00 offered by the Society, the Committee recommend it to be paid as a gratuity to Master Warren B. Page, thirteen years old, who drove his father's horse and ox team so well.

The plowing was done on the farm of Lyman Nichols, Esq., and your Committee were requested by the Trustees of the Society to examine the working of one of "Bolles' Patent Rock-lifters," which was

exhibited on the same farm by Mr. Lyman N. Fairbanks, the farmer of Mr. Nichols. The machine was entered for exhibition, but not for premium. It was worked by Mr. Nichols' team of four beautiful oxen and four men. Rocks weighing from one to four tons are taken from their beds in the ground, raised and carried from the field with great rapidity and ease. It seemed to us to be a very useful machine. It cost \$225,00, and Mr. Nichols paid for the exclusive right to use it in the town of Fitchburg \$40,00, making a sum larger than every farmer who has rocks on his farm can afford to pay, but it appeared to the Committee that one or two of them could be used in almost every town to great advantage. The machine may be used to advantage for pulling stumps or raising any kind of heavy weights.

All of which is respectfully submitted by your Committee.

IVERS PHILLIPS, *Chairman.*

PLOWING—SINGLE TEAMS.

Your Committee on plowing with single teams submit the following report.

There were six entries, and but three competitors. Two of the young men that entered have enlisted in the army, a better business than plowing at this particular time, and one was not on the ground.

We were unanimous in awarding the premiums as follows :

1st, to Edwin A. Goodrich, of Fitchburg,	\$7,00
2d, to Joel Page, of Fitchburg,	5,00

The 3d and 4th premiums were not awarded.

There were two entries of steers by minors. They did the work well, and we were unanimous in awarding the premiums as follows :

1st, to Alfred Marshall, of Fitchburg, a small but smart boy,	\$6,00
2d, to Herbert D. Goodrich, of Fitchburg,	4,00

Both did their work well, but your Committee took expense into consideration and awarded the first premium to the single team.

JOHN BROOKS, JR., *Chairman.*

PLOWING—HORSE AND MULE TEAMS.

The Committee on plowing with horse and mule teams, have attended to that duty and report as follows :

There were five teams entered for premiums, and competed for the same, and although the work was not done as well as we might wish to see, still, under the circumstances of the case, it was well done, and your Committee make the following awards :

1st, to Walter Whitney, of Fitchburg,	\$7,00
2d, to Joseph Cushing, of Fitchburg,	5,00
3d, to Liberty Wellington, of Ashby,	3,00
4th, to Mandell G. Everett, of Princeton,	1,00

All of which is respectfully submitted for the Committee.

ISAAC B. WOODWARD, *Chairman.*

SPADING.

There were five persons who entered their names in season, but only three appeared on the ground. They drew their lots and contended for the premiums. The time occupied in spading one hundred square feet of sward land, not less than nine inches in depth, varied from seventeen to thirty-four minutes. Two of the persons did their work very finely, pulverizing the soil and preparing it well for the seed. With the other person there was too much haste, a want of depth, and the soil was not sufficiently pulverized to prepare it for the seed; and as he was competing for the first premium only, he having drawn the second premium last year, we were unable to award but two premiums out of five which were offered, and the Committee unanimously award the following premiums :

1st, to George A. Fry, of Fitchburg,	\$5,00
2d, to James Heslam, of Fitchburg,	4,00
For the Committee.	

D. H. MERRIAM, *Chairman.*

STALLIONS.

The Committee on stallions report that they have awarded the premiums offered as follows :

SEVEN-YEAR-OLDS.

1st, to J. A. Harwood, of Littleton, for his stallion, Fred Boyden,	\$10,00
--	---------

His horse Roebuck was excluded from consideration by the Committee, not having any stock present, as required by the rules of the Society.

THREE-YEAR-OLDS.

1st, to Wm. L. Brown, of Lunenburg, for his Hambletonian Tippoo,	\$4,00
2d, to Geo. W. Towne, of Westminster,	2,00

TWO-YEAR-OLDS.

1st, to John M. Forristall, of Winchendon, for his Patchen colt,	\$4,00
---	--------

JAMES O. PARKER, *Chairman.*

MARES AND COLTS.

Your Committee on mares and colts have attended to the duties assigned them. They found that of mares fourteen, and colts twelve, were entered for exhibition. Many were well worthy of the attention and consideration of your Committee. We feel a degree of pride in being a Committee on the most noble and important of the animal family, and we are of the opinion that a few hints in relation to the breeding and *rearing of the Horse*, might be profitable to some at least who engage in this enterprise. Every one who would grow a good crop of grain, will in the first place see that he obtains the best of seed; secondly, he selects the best piece of ground he has on his farm, well adapted to the kind of grain he wishes to raise, and when the proper time in the season

arrives he attends to it, and spares no pains in preparing his ground and sowing his seed, and then with proper care and the blessing of a kind Providence, he expects in autumn to reap a bountiful harvest; and the same care should be taken if he wishes to raise a good horse. He should pay much attention to select the best of blood in both the sire and the dam, but how little attention is paid to this by a large portion of those who raise horses, and by some who profess to have a taste for a good horse, but his taste effects his brain but little and his pocket less. If he owns a good mare which has noble blood and a proud spirit, he prides himself in driving her because she is the best there is in his town, and in this manner he uses her until she is wind-broken or spavined, in fine, has all the qualities of a broken-down horse, and in fact becomes unfit for any other purpose. He then comes to the conclusion that she is just fit to raise him a nice *colt*, and he looks for a horse and succeeds in finding a good one, and secures his service, for which a fair price is paid, and he is expecting to get something very fine from his once good mare, but now worthless for any other purpose, as he thinks, but to make a good breeder in her old age. You will often see him with a long face and sour look after the foaling, and he finds he has nothing more than an ordinary colt by the side of his old lame mare, and you will often hear him find fault because the stock of the horse is so poor.

Never, until those who raise horses learn to practice a different course than the one we have described, will there be that improvement in our stock of horses that we ought to make. And now let us begin with our

noble young, healthy and sound mares, to raise stock, and in a few years you will find a very different exhibition of mares and colts than we have had in years that are past; and if the colt is well cared for, giving him, the first and second winter, a plenty of good hay and a little oat-meal each day, with good yard room, where he can get that exercise which his nature demands, and you will see our country filled with a most noble set of horses.

A few words more and we will relieve your patience.

Now to all our friends who would raise a good horse. Do try and not make the thing any worse. If you have a young mare that is all right and kind, match her with the best blooded horse your can find, and you will raise a better colt by far than your neighbor, and then you will feel proud and get pay for your labor.

We have awarded the following premiums :

BREEDING MARES.

1st, to Levi Kendall, of Fitchburg,	\$6,00
2d, to John Wilker, of Ashburnham,	4,00

We would recommend a gratuity of \$3,00 to Jonathan P. Davis, of Ashby, for his mare and colts.

SUCKING COLTS.

1st, to Levi Kendall, of Fitchburg,	\$3,00
2d, to John Wilker,	2,00
3d, to W. A. Mandell, of Lunenburg,	1,00

All of which is respectfully submitted.

WARREN SIMONDS, *Chairman.*

DRAGHT HORSES AND MULES.

The Committee award the following premiums :

DOUBLE TEAMS.

1st, to Walter Whitney, of Fitchburg,	\$6,00
2d, to James P. Putnam, of Fitchburg,	4,00

SINGLE TEAMS.

1st, to Rodney Fuller, of Dracut,	5,00
2d, to Jabez Fisher, of Fitchburg,	3,00

FAMILY HORSES.

1st, to Joel Heywood, of Ashby,	5,00
2d, to J. Edwin Merriam, of Princeton,	3,00

HARRINGTON SIBLEY, *for the Committee.*

COLTS.

The Committee on colts make the following awards :

THREE-YEARS-OLD GELDINGS.

1st, to Adonijah Barnes, of Westminster,	\$4,00
2d, to James R. Davis, of Fitchburg,	2,00

TWO-YEARS-OLD GELDINGS.

1st, to Daniel C. Miles, of Westminster,	4,00
2d, to Jabez Fisher, of Fitchburg,	2,00

TWO-YEARS-OLD FILLIES.

1st, to R. G. Chesmore, of Westminster,	4,00
2d, to J. T. Dunsmore, of Lunenburg,	2,00

ONE-YEAR-OLD GELDINGS.

1st, to Ohio Whitney, of Ashburnham,	4,00
--------------------------------------	------

ONE-YEAR-OLD FILLIES.

2d, to Asa W. Holden, of Shirley,	2,00
-----------------------------------	------

Reported for the Committee by

GILMAN DAY.

BULLS.

The Committee on bulls have attended to their duty, and submit the following report:

They found on examination, a number of bulls entered on the books, that were not entered in the pens; others in the pens not on the book, and some entered for exhibition; others for sale.

They award the following premiums and gratuities:

BLOOD STOCK.

1st, S. H. Sprague, of Westminster, for his Devon bull,	\$5,00
A gratuity to John Brooks, Jr., of Princeton, for his Devon bull,	3,00
Also a gratuity to same, for his Devon bull calf, six months old,	2,00
Both entered too late for premiums.	
1st, to Joel Page, of Fitchburg, for his Alderny bull,	5,00

GRADE STOCK.

1st, to N. B. Reed, of Princeton, for his three-years-old bull,	5,00
2d, to Joseph Upton, of Fitchburg, for his four-years-old bull,	3,00
3d, to Nathaniel Holden, of Shirley, for his Ayrshire bull calf, six months old,	2,00
A gratuity to J. Wilker, of Ashburnham, for bull calf, six months old,	2,00
A gratuity to Oliver Wellington, of Phillipston, for his seven-eighths Durham bull, entered too late for premium,	4,00

The Committee also award to A. C. & J. G. Wood, of Millbury, for their very large, fine Durham bull, and also for their very nice Durham bull calf, eleven months old, on exhibition only, a very favorable notice.

Also to A. O. Cummins, of Millbury, for his seven-eighths Durham bull calf, six months old, on exhibition, a favorable notice.

All of which is respectfully submitted.

JOEL PAGE, *Chairman.*

A. O. CUMMINS' STATEMENT.

In offering my Short Horn cattle for exhibition, perhaps it may not be deemed amiss to offer a few suggestions on breeding and selecting Short Horns; also to give my views of their excellency.

As the whole subject of breeding is one of vast range, and one on which there is some diversity of opinion, I will only touch on such points as are universally acknowledged by breeders.

First, in selecting animals, choose those of fair size, having all the fineness of offal consistent with *stamina* and constitution, united with fullness of carcass and ripeness of points, so that you will have the most substance within the smallest space. Have them of noted blood, i. e., descended through a long succession of noted animals, as the *Duchesses* or the celebrated *Princess* tribe of Short Horns. Likewise, they should resemble their ancestry, denoting a fixedness of their good qualities, which becomes more fixed through each

generation which it passes, denoting that they, in turn, will transmit the same to their progeny. Also, having descended through milking stock, we reasonably expect deep milkers in our cows. As to color, that is governed by fancy or fashion. Provided it be white or red, or a *mixture* of the two—let them have a clean, flesh-colored nose, without spot or blemish, also a light ring around the eyes. And be on your guard against looseness, flabbiness, flat ribs, and a general tendency to run into offal; for with those qualities you get great consumers, bad handlers with poor constitutions, and a general tendency to detereoration.

Keep your calves growing, from the time they are dropped until fully matured, never allowing a week to pass without a corresponding growth of your young animal, and were I to present *my own* views, I would say give new milk in liberal quantities for three months at least, then gradually change to skimmed milk, with shorts or oats, and if in winter, a few sliced carrots daily; always recollecting that without a good start with your calves, you seldom get *superior* animals. Also, the practice of putting young heifers at breeding is injurious. No heifer should be allowed to produce before she is two and one-half years old, no matter if she be large and thrifty.

As to their excellency, we claim for them great aptitude to take on flesh, making a greater per cent. of beef than any other breed, and that of an excellent quality, in proof of which we would cite *Berry* in *Youatt*. He says, "Mr. Mason of Chilton had a cow, the depth of whose fat from rump to hips, in perpendicular position, was not less than twelve inches, and

shoulder score at least nine inches thick." "Also, Mr. Collins' 'white heifer that travelled' was estimated at four years old to weigh 1820 lbs." "R. Collings' steers, two years old, 882 lbs. Mr. Nesham's steer, two years and one month, 1050 lbs. Mr. Arrowsmith's twin heifers, two years old, 812 lbs. each. Mr. Nesham's steer, three and a half years old, 1618½ lbs. Major Budd's steer, three years old, on grass and roots only, meat 1344 lbs." And to the above Mr. Allen, editor of the *American Short Horn Herd Book*, adds the weights of a few American Short Horns. "An ox and a cow, bred by E. P. Prentice, Esq., N. Y., and slaughtered in Feb. 1846. Ox five years old; live weight 2546 lbs., dead weight 2074 lbs. Cow five years old; live weight 1520 lbs., dead weight—carcass 950 lbs., loose tallow 100 lbs., hide 75 lbs., total 1125 lbs. J. M. Sherwood, Esq., of Auburn, N. Y., breeder of *Jessie*, had a barren heifer, which weighed alive over 2000 lbs., dead weight 1500 lbs. A. B. Allen, then of Buffalo, N. Y., bred a heifer got by a thorough-bred Short Horn bull out of a common cow, (half blood,) which was milked up to being slaughtered, and fed on hay and grass until a short time before killing; weight of carcass 814 lbs., loose tallow 112 lbs., hide 92 lbs., total 1018 lbs." And Mr. Sumner, of Woodstock, Ct., now has a grade ox, weighing over 4000 lbs. Also, the large steer killed in Worcester last year by Mr. Peaslee, is but another proof of our position.

And to prove their milking qualities we have but to consult history to find that the Short Horn cow stands at the head in England. Mr. *Berry* says that "some of Mr. Bats' *Duchess* cows, and the *Princess* tribe

of Sir Henry Vane Tempest, gave the following quantities, "Yellow Rose at three years old, 36 qts. per diem; at four years, 38 qts. do. Red Daisy, 32 qts. per day; Magdalena, upwards of 32 qts.; Wildair, 32 qts.; Western Lady, 28 qts.; Venus, sixteen years old, 26 qts.; Alfrede, 24 qts.; Adela, (first calf,) 24 qts.; Yarm, 24 qts.; Moss Rose, (always fat,) 16 qts.;" and Mr. *Berry* adds that "these cows are steady milkers, possessing great inclination to fatten."

And to come down to our own day, the instances are common of Short Horn cows giving from 16 to 24 qts. per day, making 2 lbs. and over of butter. The cow *Cora*, owned by Daniel Tainter, Esq., of Worcester, on a trial in 1859, made 18 lbs. of butter in one week and 27 lbs. in ten days. Also her calf, *Evelina*, owned by Messrs. A. C. & J. G. Wood, of Millbury, gave when two years old, in the month of Jan., (without grain or meal,) 16 qts. per day. Also the family of cows owned by Mr. Wells Lathrop, of So. Hadley Falls, and called "Yaricoes," are samples of milking Short Horns, and last, though not least, *Lady Sale*, 5th, bred by J. M. Sherwood, Esq., of Auburn, N. Y., and owned by myself, made 10½ lbs. of butter in one week, when two years old, running in a common pasture. Other cases, too numerous to mention, might be cited, were it necessary to show the milking tendencies of the Short Horn cow, but we deem it unnecessary, as a fair trial has always satisfied an unprejudiced mind of her excellency.

JOEL PAGE'S STATEMENT.

JERSEYS.

The Jersey bull, Comet, which I offer for a premium, was bred by Jonathan Forbush, of Bolton. It was dropped March 26th, 1859, got by imported bull Santi Anna, dam Cloe, gr. dam imported cow Dolly, Cloe got by Lyman's full-blood Jersey bull.

In offering this bull for one of the premiums on Blood Stock, I deem it proper to express my opinion of the value of the Jersey Stock for milk. I think that while they are good feeders, no more expensive to keep than our common stock, the cows of this breed, or high grades from it, give nearly as much milk as our best native cows, while the milk itself is of a superior quality, exceedingly rich, affording more butter from a given quantity of milk than that of any other cows I have ever seen. The cream is easily churned, the butter comes quickly, is free from buttermilk, very fine grained, solid, of a rich color, of the best flavor, and commands the highest price in market.

I have one cow, now seven years old, only half-blood Jersey, the milk of which was kept separate from all others last year, about three months, and set for the cream to rise; then churned by simply stirring it by hand. The butter came at one time in six minutes, and at no time was it over eight minutes in coming. There was much less than the usual quantity of buttermilk, and the butter was entirely satisfactory.

NATHAN CASWELL'S STATEMENT.

DEVONS.

Having been requested by the Secretary of the Worcester North Agricultural Society to give a statement of my views of the Devon breed of cattle, of which I offered several animals for premium, others for exhibition only, I most cheerfully comply, so far as my experience, which is rather limited, goes. Having been engaged for the last twenty years in raising stock to some extent, I have turned my attention to examining the merits of the different breeds to the claim of being the best, and came to the conclusion that each breed, under certain circumstances, had that claim, and that breed was best for a man which was best adapted to his circumstances, and the use to which he wished to put it. If a man wishes a breed from which he can procure the largest quantity of milk, the Ayrshire is undoubtedly the best for that purpose. If he wishes to obtain the richest milk for the making of butter, without regard to cost of keeping, the Jersey is the best for that. If he wishes a breed of large and quick growth, combining good qualities both for cows and oxen, the Durham is the best, provided he has rich pasture in summer and the best of keeping in winter, to sustain that growth. If he has a large quantity of meadow hay, straw and corn fodder, which he wishes to convert into manure to enrich his farm, and have his stock of cattle remain in a healthy and thriving condition, the Devon is the best for that purpose. My experience has principally been with the breed called Native, and have found animals possessed of the very best qualities, and my greatest

objection to them is in breeding; no dependence whatever can be placed in their transmitting any of those qualities. My farm producing a considerable quantity of meadow hay, I was satisfied that the Devons were the best for me, and have given them a trial, and thus far my expectations have not been disappointed.— Their tough and hardy constitutions enable them to subsist during our long and cold winters on the poorest fodder, and retain their flesh, while I have found the grade Durhams to grow poor on the same keeping.

In many parts of New England, the rough and rocky nature of the soil renders the use of oxen necessary. Their tough constitution, quick and active motion, docility, similarity and uniformity in size, form and color, render the Devons for this use unsurpassed. It is no uncommon thing for a man raising steers of the Native breed, to spend days and travel many miles to find an animal to match one he has, while in twenty steers of the same age there will seldom be any trouble in finding ten matched pairs of the Devon. As to their milking qualities, I have not had experience enough to form a decided opinion. The present season is the first that the heifers of my Devon stock came in. They compare very favorably, both as to quantity and quality of milk, with my heifers of the same age selected from my best Native cows.

MILCH KINE.

The Committee on Milch Kine award the following premiums:

HERDS OF COWS.

1st, to Abel F. Adams, of Fitchburg, for herd
of four cows, \$10,00

There were no competitors for the second and third premiums.

MILK COWS.

1st, to N. B. Reed, of Princeton, \$5,00
2d, to Gardner Merriam, of Leominster, 4,00
3d, to A. S. Dole, of Fitchburg, 3,00

HEIFERS—THREE-YEARS-OLD.

1st, to N. B. Reed, of Princeton, 5,00
2d, to I. B. Woodward, of Fitchburg, 4,00
3d, to Geo. M. Gregory, of Princeton, 3,00

HEIFERS—TWO-YEARS-OLD.

1st, to David B. Dole, minor, of Fitchburg, 5,00
2d, to Geo. M. Gregory, of Princeton, 4,00
3d, to Abel F. Adams, of Fitchburg, 3,00

The Committee noticed with much favor some very fine Durham Stock on exhibition, from Millbury, presented by Mr. A. O. Cummins; also one three-years-old Dutch heifer, presented by Mr. J. M. Sawtell, of Fitchburg; also one two-years-old, presented by Dr. Thos. Palmer, of Fitchburg, said to be a *full blood Jersey*.

SOLON CARTER, *Chairman*.

ABEL F. ADAMS' STATEMENT.

To the Committee on Milch Cows and Heifers :

Gentlemen : I offer for premium a herd of four cows, which I have owned and kept agreeable to the rules of the Society the past season. During the trial in June they were kept in a herd of twelve cows, and in September, in a herd of fifteen cows. They have had no meal or grain during the summer, and no extra feed more than my other cows. In September they were fed with green corn, night and morning, and were allowed to feed a short time each morning in the mowing lot.

The Roan cow is three-fourths Durham ; is six years old ; calved about April 10th ; had a heifer calf which is at the Show to answer for herself. At the trial in June, she gave in the six days, 200 lbs. of milk, an average of $33\frac{1}{3}$ lbs. per day. At the trial in September, she gave in the six days, 142 lbs. of milk, an average of $23\frac{2}{3}$ lbs. per day, and is expected to come in again early in March.

The largest red cow is seven-eighths Durham ; is seven years old ; calved May 7th ; calf sold at two weeks old for \$5,00, to raise. At the trial in June she gave 231 lbs. milk, an average of $38\frac{1}{2}$ lbs. per day. At the trial in September, she gave 176 lbs. milk, an average of $29\frac{1}{3}$ lbs. per day.

The smallest red cow came from Vermont, when a heifer ; supposed to be Native ; is seven years old ; she calved June 9th ; heifer calf ; raised by myself. For the six days commencing June 17th, she gave 249 lbs. milk, an average of $41\frac{1}{2}$ lbs. per day. At the trial in

September, she gave 151 lbs. milk, an average of $25\frac{1}{6}$ lbs. per day.

The spotted cow is part Durham; is eight years old; she calved July 21st. The calf was a heifer, and at five weeks and one day old was killed, and dressed 124 lbs. At the trial in September, she gave 185 lbs. milk, an average of $30\frac{5}{6}$ lbs. per day.

The cows are all gentle, quiet and orderly.

The milk heifer is two years and eight months old; calved September 6th. I purchased her in Shelburn, in April last. She is part Durham,

N. B. REED'S STATEMENT.

I offer for premium one cow; age seven years; breed mixed; calved March 14th, 1861. Her daily weight of milk for the first six days in June was 43 lbs.; for the first six days in September, 32 lbs.

One Devon heifer; one-half blood; age three years. Her daily weight of milk for the six days in June, was $32\frac{1}{2}$ lbs.; for the six days in September, was 29 lbs. She calved March 22d, 1861.

One heifer; age three years; breed mixed; calved March 4th. Her daily weight of milk for the six days in June, was 33 lbs.; for the six days in September, 28 lbs.

The above trials were made, commencing the first Monday in June, and the corresponding days in Sept.

The above were kept in pasture feed, with corn fodder once a day, in September.

DAVID B. DOLE'S STATEMENT.

The milch heifer which I enter for premium was two years old last January; her breed is Devon and Native, in uncertain proportions; she dropped her first calf March 27th, 1861. She gave in six days, commencing July 1st, 122 lbs. of milk, averaging $20\frac{1}{3}$ lbs. per day; in the first six days of September, 117 lbs. of milk, averaging $19\frac{1}{2}$ pounds per day. She was kept in a pasture with four other cows, and from the first of September, she had such green fodder as the farm could furnish.

 HEIFERS.

The Committee on Heifers make the following awards:

TWO-YEARS-OLD.

1st, Joel Page, of Fitchburg,	\$4,00
2d, Nathan Caswell, of Fitchburg,	3,00
3d, A. F. Adams, of Fitchburg,	2,00
Gratuity, Jacob Haskell, of Fitchburg,	2,00

YEARLINGS.

1st, N. B. Reed, of Princeton,	3,00
2d, H. M. Caswell, of Fitchburg,	2,00
3d, George Davis, a minor, of Fitchburg,	1,00
Gratuity, Eugene Miles, of Fitchburg,	1,00
Gratuity, Nathan Caswell, of Fitchburg, on a pen of four yearlings,	1,00
Gratuity, S. H. Sprague, of Westminster, on a pen of three yearlings,	1,00

CALVES.

1st, A. F. Adams, of Fitchburg,	\$3,00
2d, Samuel Burnap, of Fitchburg,	2,00
3d, John Brooks, Jr., of Princeton,	1,00
Gratuity, S. H. Sprague, of Westminster, one calf, raised by hand,	1,00
Respectfully submitted.	

D. C. MILES, *Chairman.*

 WORKING OXEN.

The Committee on Working Oxen highly appreciate the honor conferred upon them, in being called to examine and report upon the power and training of the noble ox. It is common for writers to speak of the patient ox, but whether that arises from the fact that the most patient man of whom we have any account, had five hundred yoke, the Committee are not informed. The Committee think that the race of working oxen has been very much improved since the time that Elijah was called to be a Prophet, for the record says he was plowing with twelve yoke of oxen. Now if his oxen were as powerful and well trained as those we were called to examine, his plow must have been made of some material unknown to the Committee, or he might have had occasion to haul up for repairs before his land was finished.

A new feature was introduced this year with regard to loading the carts. In previous years the heavy and light cattle have drawn the same load; this year it was decided that each pair should draw thirty-three

per cent. more than their live weight. Of the propriety of this change the Society can judge. Eleven pairs of oxen were entered upon the records, but only nine pairs appeared upon the ground. They were a very fine lot; not a poor ox among them.

The Committee award the premiums, as follows:

1st, to Charles K. Sawyer, of Fitchburg, for his oxen, seven years old, and weighing 3300 lbs.,	\$6,00
2d, to Edwin A. Goodridge, of Fitchburg, for his oxen, six years old, and weighing 3115 lbs.,	5,00
3d, to Josiah Page, of Westminster, for his Devon oxen, four years old, weighing 2725 lbs., and driven by his son,	4,00
4th, to Isaac B. Woodward, of Fitchburg, for his grade Durham oxen, four years old, weighing 2928 lbs.,	3,00
5th, to Abel Marshall, of Fitchburg, for his oxen, seven years old, and weighing 3170 lbs.; and Loriston Stockwell, of Fitchburg, for his oxen, four years old, weighing 2475 lbs., each one-half,	2,00

Joel Page, of Fitchburg, exhibited a fine pair of cattle, seven years old, weighing 3200 lbs., that would have been entitled to the fourth premium, had they not received a like premium at a former show.

The Committee were much pleased to observe that most of the teamsters did their work with a very slight use of the whip.

For the Committee.

ABEL F. ADAMS, *Chairman.*

STEERS—TWO AND THREE YEARS OLD.

The Committee on Two and Three Years-old Steers submit their report. Of three-year-old steers there were three pairs entered for premium. We make awards as follows :

THREE-YEARS-OLD.

1st, to S. G. Mirrick, of Princeton,	\$5,00
2d, to Alfred A. Marshall, of Fitchburg,	4,00
3d, to Daniel S. Eaton, of Fitchburg,	3,00

TWO-YEARS-OLD.

There were seven pairs of two-years-old steers offered for premium.

1st, to J. Edwin Merriam, of Princeton,	\$4,00
2d, to Israel Everett, of Princeton,	3,00
3d, to N. B. Reed, of Princeton,	2,00

TRAINED STEERS.

1st, to Master Henry A. Estabrook, of Ashby,	4,00
2d, to J. Edwin Merriam, of Princeton,	3,00

In concluding their report, the Committee would say that they have been guided in their distribution of awards ; first, by the size, form and adaptation to labor of the animals offered for their inspection ; second, to the perfection in matching the color, strength and disposition of each pair ; third, the training which evinced the subjection of the animals to the will of their masters. And in this connection, the Committee would suggest that strength in labor, or skill in exercise, induced by harsh blows and harsher language, is not so deserving as the same labor and skill which is rendered in obedience to kind words and gentle

treatment. That this mode of training is attainable was proved by those of Mr. Merriam, which obeyed like spaniels every word and motion; and the steers of Master Estabrook, a lad of clever —— displayed such docility and promptness in their evolutions as is rarely shown by the *oxen* of more experienced drivers. And with all deference, the Committee would suggest to the farmers of Worcester North, that *they* exhibit the graces of patience, gentleness and decision in training their sons, and then present to said sons a *likely* pair of steers on which to exercise the same virtue. This will afford the two-fold benefit of having an opportunity to practice their precept, and an incentive in the reward for doing it well, and also an inducement to take more interest and pleasure in the labors of the farm.

JOEL HAYWARD, *Chairman.*

YEARLING STEERS AND STEER CALVES.

Your Committee on yearling steers and steer calves have awarded the following premiums :

1st, to Daniel Miles, of Westminster, for the best pair of yearling steers,	\$3,00
2d, to S. H. Sprague, of Westminster,	2,00

J. M. HARRIS, *Chairman.*

FAT CATTLE.

The Committee on fat cattle make the following report:

There were presented for our inspection fifteen fat oxen, one three-years-old steer, and seven cows. The cattle offered for premium this year were superior to any exhibition of fat cattle that have ever been offered for premium since the organization of the Society, (1851,) and your Committee regret that we have not more premiums at our disposal, where there are so many excellent cattle that are highly deserving.

After a thorough examination of the comparative merits of the several competitors, we unanimously award the following premiums, viz :

OXEN.

1st, to Ephraim Turner, of Phillipston, for his speckled ox, six yrs. old, weight 1795 lbs.,	\$8,00
2d, to Nathaniel Holden, of Shirley, for his best ox, nine years old,	5,00
3d, to Ephraim Turner, of Phillipston, for his single ox, weight 2195 lbs., eight years old,	3,00

THREE-YEARS-OLD STEERS.

1st, to Ephraim Turner, of Phillipston, for his three-years-old steer,	6,00
--	------

COWS.

1st, to Sewell G. Mirrick, of Princeton, for his best grade Durham cow, ten years old, weight 1225 lbs.,	6,00
2d, to Sewell G. Mirrick, of Princeton, for his small grade Durham cow,	3,00
3d, to Joseph Hagar, of Westminster,	2,00

We also recommend a gratuity of \$3,00 to Joel Page, of Fitchburg, for his large fat cow, which would have taken the first premium had her owner complied with the rules of the Society in getting her weighed.

We also recommend a gratuity of \$2,00 to Benj. Safford, for his fat cow, that has given milk every day since she calved, some two years since.

We refer with pleasure to a pair of very fine oxen offered by Josiah Sheldon, weight 4045 lbs., and to two pairs of very large fat oxen, weighing about 4000 lbs. a pair, presented by Daniel Works. But we had no premiums at our disposal for them. We would make mention, also, of a very fine pair of four-years-old cattle, offered by Ohio Whitney, and a fine pair four-years-old, by E. E. Boyden.

Respectfully submitted.

J. T. EVERETT, *Chairman.*

S H E E P .

The Committee on sheep make the following awards:

FLOCKS.

1st, James McIntire, of Fitchburg, for his flock of seven sheep,	\$4,00
2d, to J. T. Dunsmore, of Lunenburg, for his flock of five sheep, with one buck,	2,00

COSSETS.

1st, to David Lowe, for his cosset,	2,00
2d, to James McIntire, for his cosset,	1,00
3d, Levi Jackson, of Westminster, for his buck,	,50

And we recommend a gratuity of 50 cts. to Loriston Stockwell, of Fitchburg, for his cosset.

AARON WOOD, *Chairman.*

POULTRY.

The Committee on poultry make the following awards :

FOWLS.

1st, to Wm. A. Carleton, of Fitchburg, for six dung-hill fowls,	\$3,00
2d, to Frank Wilder, of Fitchburg, for six dung-hill fowls,	2,00
3d, to James McIntire, of Fitchburg, for six dung-hill fowls,	1,00
Gratuity, to Edwin Munroe, of Fitchburg, for bantams,	,50

TURKEYS.

1st, to Levi Jackson, of Westminster, for six turkeys,	3,00
2d, to J. T. Dunsmore, of Lunenburg, for six turkeys,	2,00
3d, to Allen B. Wood, of Westminster, for six turkeys,	1,00
Gratuity, to Alfred A. Marshall, of Fitchburg, for six turkeys,	,50

GEESE.

1st, to Frederick A. Holden, of Fitchburg, for six geese,	2,00
2d, to Reuben G. Chesmore, of Westminster, for geese,	1,00

DUCKS.

1st, to Edwin Munroe, of Fitchburg, for ducks,	2,00
2d, to Jeremiah Andrews, of Fitchburg, for ducks,	1,00
Gratuity, to Charles H. Whitney, for rabbits,	,25
Gratuity, to Helen F. Lowe, for Guinea pigs,	,25

For the Committee.

L. H. BRADFORD, *Chairman.*

SWINE.

The Committee on swine have attended to their duty, and submit the following report:

The number of swine entered for examination, though not unusually large, was so excellent in kind that the Committee had great difficulty in deciding their relative claims to precedence, and were so equally divided as to the respective merits of some of the best specimens, that the decision was long held in almost equal balance. The following premiums were finally awarded:

BOARS MORE THAN ONE YEAR OLD.

1st, to John P. Sabin, of Fitchburg,	\$4,00
Gratuity, to Wm. P. Smith, of Fitchburg, on his boar, entered too late for premium,	2,00

BOARS LESS THAN ONE YEAR OLD.

1st, to Thomas Damon, of Westminster,	3,00
2d, to Charles Davis, of Fitchburg,	2,00
Gratuity, to B. F. Proctor, of Fitchburg, on his boar, entered too late for premium,	1,00

FAT HOGS MORE THAN ONE YEAR OLD.

1st, to E. M. Dickinson, of Fitchburg,	4,00
--	------

FAT PIGS LESS THAN EIGHT MONTHS OLD.

1st, to E. Caldwell, of Fitchburg,	3,00
2d, to Isaac B. Woodward, of Fitchburg,	2,00
3d, to Isaac B. Woodward, of Fitchburg,	1,00

BREEDING SOWS.

1st, to Charles Davis, of Fitchburg,	3,00
2d, to Isaac B. Woodward, of Fitchburg,	2,00
3d, to Charles Davis, of Fitchburg,	1,00

Gratuity, to John P. Sabin, of Fitchburg,	\$1,00
Gratuity, to Daniel S. Eaton, of Fitchburg,	1,00

WEANED PIGS.

1st, to Judge T. Dunsmore, of Lunenburg,	3,00
2d, to Asa Sawyer, of Fitchburg,	2,00
For the Committee,	

J. W. MANSUR, *Chairman.*

APPLES, PEACHES, PLUMS AND QUINCES.

The Committee on apples, peaches, plums and quinces, make the following awards:

APPLES.

For the best collection,	
1st, to A. Whitney, of Ashburnham,	\$4,00
For twelve varieties, five specimens each,	
1st, to G. P. Gibson, of Leominster, <i>Harris on Insects.</i>	
For six varieties of five specimens each,	
1st, to L. Burrage, of Leominster,	2,00
2d, to Benjamin Safford, of Fitchburg,	1,50
3d, to J. W. Smith, of Fitchburg,	1,00
Gratuity, to Nathan Caswell, of Fitchburg,	1,00
Gratuity, to James McIntire, of Fitchburg,	,75
For three varieties of ten specimens each,	
1st, to M. M. Gage, of Fitchburg,	1,50
2d, to J. Fisher, of Fitchburg,	1,00
3d, to C. H. Green, of Fitchburg,	,50

GRATUITIES.

E. D. Works, of Fitchburg,	,75
Wm. A. Mandell, of Lunenburg,	,50
Thomas Billings, of Lunenburg,	,50
C. C. Field, of Leominster,	,50
J. M. Frost, of Fitchburg,	,50
T. R. Boutelle, of Fitchburg,	,50
Tyler Gibbs, of Fitchburg,	,50
A. B. Caswell, of Fitchburg,	,25
William H. Wetherbee, of Shirley,	,50

For the best exhibition of any one variety,

1st, to L. Kendall, of Fitchburg,	1,50
2d, to A. B. Caswell, of Fitchburg,	1,00

PEACHES.

For the best plate,

2d, to W. Heywood, of Fitchburg,	1,00
3d, to D. H. Merriam, of Fitchburg,	,50
Gratuity, to Ira Holt, of Fitchburg,	,25

QUINCES.

For the best plates,

1st, to Ira Holt, of Fitchburg,	1,00
2d, to Daniel S. Eaton, of Fitchburg,	,50
Gratuity, to Nathan Caswell, of Fitchburg,	,25

For the Committee,

EPHRAIM GRAHAM, *Chairman.*

PEARS AND GRAPES.

The Committee make the following awards:

PEARS.

For the best and largest exhibition of named varieties of three specimens each,

1st, to Alvah Crocker, of Fitchburg, \$4,00

2d, to B. Snow, Jr., of Fitchburg, *Harris on Insects.*

For six varieties of five specimens each,

1st, to Walter Heywood, of Fitchburg, 2,00

2d, to Leonard Burrage, of Leominster, 1,50

For the best exhibition of any one variety,

1st, to Thomas R. Boutelle of Fitchburg, 1,50

2d, to Ivers Phillips, of Worcester, 1,00

GRATUITIES.

Jabez Fisher, of Fitchburg, 1,00

G. P. Gibson, of Leominster, ,50

C. C. Field, of Leominster, 1,00

George Jewett, of Fitchburg, ,50

John L. Joslin, of Fitchburg, ,50

Jacob Haskell, of Fitchburg, ,50

Charles B. Sawyer, of Fitchburg, ,50

H. A. Goodrich, of Fitchburg, ,50

E. W. Manning, of Fitchburg, ,50

GRAPES.

For the best display of foreign grapes,

1st, to Levi Heywood, of Gardner, 3,00

2d, to Walter Heywood, of Fitchburg, 2,00

For the best display of native grapes,

1st, to Geo. E. Towne, of Fitchburg, *Harris on Insects.*

2d, to Seth Heywood, of Gardner, 2,00

3d, to Charles A. Emory, of Fitchburg, 1,00

GRATUITIES.

Jabez Fisher, of Fitchburg,	\$1,00
D. H. Merriam, of Fitchburg,	1,00
E. M. Dickinson, of Fitchburg,	,50
Alvah Crocker, of Fitchburg,	,50
George P. Gibson, of Leominster,	,50
W. G. Wyman, of Fitchburg,	,50
Samuel Burnap, of Fitchburg,	,50

HENRY F. COGGSHALL, *Chairman.*

ASSORTED FRUITS AND FLOWERS.

The Committee on assorted fruits and flowers award the premiums as follows :

FRUITS.

2d, to Miss Sophia F. Gage, of Fitchburg,	\$0,50
No display of named plants.	

FLOWERS.

For the best display of cut flowers,	
1st, to Mrs. Gordis D. Harris, of Fitchburg,	1,00
2d, to Mrs. Sophia F. Gage, of Fitchburg,	,50

GRATUITIES.

Miss Ellen A. Younglove, of Fitchburg,	,37
Mrs. J. M. Whitney, of Fitchburg,	,50
Miss Abby Green, of Fitchburg,	,25
Mrs. C. A. Emory, of Fitchburg,	,25
Mrs. E. M. Howe, of Sterling,	,50
Mrs. J. F. D. Garfield, of Fitchburg,	,25

CYRUS KILBURN, *Chairman.*

VEGETABLES.

The Committee on vegetables make the following awards:

KITCHEN VEGETABLES.

1st, Wm. H. Wetherbee, of Shirley, \$10,00

POTATOES.

1st, to L. Stockwell, of Fitchburg, thirty varieties, 2,00
 2d, to W. G. Wyman, of Fitchburg, fourteen varieties, 1,00
 3d, to George P. Gibson, of Leominster, four varieties, ,50

MARROW SQUASHES.

1st, to Henry Cushing, of Fitchburg, 1,00
 2d, to Thomas R. Boutelle, of Fitchburg, ,50

HUBBARD SQUASHES.

1st, to Washington Nichols, of Gardner, 1,00
 2d, to Walter Heywood, of Fitchburg, ,50

PUMPKINS.

1st, to Addison Hubbard, of Fitchburg, ,75
 2d, to Alonzo P. Goodridge, of Fitchburg, ,50

CABBAGES.

1st, to Walter Heywood, of Fitchburg, ,75
 2d, to Alvah Crocker, of Fitchburg, ,50

CELERY.

1st, to Alvah Crocker, of Fitchburg, ,75

ONIONS.

1st, to Henry Cushing, of Fitchburg, ,75
 2d, to Benjamin Safford, of Fitchburg, ,50

VEGETABLES:

47

TURNIP BEETS.

1st, to David Battles, of Fitchburg,	,75
2d, to Walter Heywood, of Fitchburg,	,50

ENGLISH TURNIPS.

1st, to Walter Heywood, of Fitchburg,	,50
2d, to Thos. S. Eaton, of Fitchburg,	,25

TOMATOES.

1st, to Adonijah Barnes, of Westminster,	,50
2d, to W. G. Wyman, of Fitchburg,	,25

FIELD BEANS.

1st, to David Battles, of Fitchburg,	,50
2d, to Abel Marshall, of Fitchburg,	,25

FIELD CORN.

1st, to Loriston Stockwell, of Fitchburg,	1,00
2d, to Henry Cushing, of Fitchburg,	,75
3d, to Jacob Haskell, of Fitchburg,	,50

GRATUITIES.

Nathan Caswell, of Fitchburg, potatoes,	,50
Abel Marshall, of Fitchburg, potatoes,	,50
George Miles, of Westminster, potatoes,	,25
John Q. Wright, of Fitchburg, potatoes,	,25
J. T. Dunsmore, of Lunenburg, potatoes,	,25
E. W. Spaulding, of Fitchburg, potatoes,	,25
David Battles, of Fitchburg, potatoes,	,25
J. W. Forbush, of Westminster, potatoes,	,25
Thomas S. Eaton, of Fitchburg, potatoes,	,25
Samuel Burnap, of Fitchburg, potatoes,	,25
Jabez Fisher, of Fitchburg, tomatoes,	,25
Benjamin Safford, of Fitchburg, tomatoes,	,25

George F. Burnap, of Fitchburg, tomatoes,	,25
Jesse Cooke, of Fitchburg, tomatoes,	,25
Seth Heywood, of Gardner, Hubbard squash,	,50
Hubbard B. Fuller, of Fitchburg, Hubbard squash,	,25
Thomas Palmer, of Fitchburg, squashes,	,25
Mrs. Wm. Steele, of Fitchburg, squashes,	,25
Joseph Farnsworth, cranberries,	,25
Liberty Wellington, of Ashby, cranberries,	,25
Gardner Merriam, of Leominster, pumpkins,	,25
D. C. Whitcomb, of Fitchburg, English turnips,	,25
Samuel A. White, of Lunenburg English turnips,	,25
Charles H. Greene, of Fitchburg, English turnips,	,25
Alvah Crocker, of Fitchburg, turnip beets,	,25
Jacob Haskell, of Fitchburg, seed corn,	,25
Alvah Crocker, of Fitchburg, carrots and parsnips,	,25
H. B. Fuller, of Fitchburg, ruta bagas,	,25
Addison Hubbard, of Fitchburg, summer squashes,	,25
Loriston Stockwell, of Fitchburg, citron,	,25
Jesse Cooke, of Fitchburg, egg plants,	,25
Alfred A. Marshall, of Fitchburg, watermelons,	,50
Abel Marshall, of Fitchburg, watermelons,	,25
H. B. Fuller, of Fitchburg, seed peas,	,50

For the Committee,

L. H. BRADFORD.

BREAD, BUTTER, CHEESE, &c.

The Committee on bread, butter, cheese, pickles and honey, make the following awards :

FINE WHEAT BREAD.

1st, to Miss Emily P. Twitchell, of Fitchburg,	\$2,00
2d, to Mrs. J. T. Farwell, of Fitchburg,	1,00
3d, to Miss Louise D. Wetherbee, of Fitchburg,	,50

UNBOLTED WHEAT BREAD.

1st, to Miss Lizzie H. Haskell, of Fitchburg,	1,00
---	------

RYE AND INDIAN BREAD.

1st, to Miss Alice Wellington, of Ashby,	1,50
2d, to Mrs. Cyrus Kilburn, of Lunenburg,	1,00
3d, to Mrs. J. T. Farwell, of Fitchburg,	,50

LUMP BUTTER.

1st, to Mrs. Levi Kendall, of Fitchburg,	4,00
2d, to Nathan Caswell, of Fitchburg,	3,00
3d, to R. G. Chesmore, of Westminster,	2,00
4th, to George Miles, of Westminster,	1,50
5th, to Jackson Burr, of Ashby,	1,00

TUB BUTTER.

1st, to Thomas S. Eaton, of Fitchburg,	3,00
2d, to Leonidas Alger, of Fitchburg,	2,00

CHEESE.

2d, to George Miles, of Westminster,	1,50
3d, to David Laws, of Westminster,	1,00

PICKLES.

1st, to Mrs. Levi Kendall, of Fitchburg,	,75
2d, to Miss Abbie Green,	,50
3d, to Mrs. E. Bacon, of Westminster,	,25

HONEY.

1st, to James <i>McIntire</i> , of Fitchburg,	\$2,00
2d, to Gardner <i>Merriam</i> , of Leominster,	1,00
3d, to <i>Mrs. Mary Miles</i> , of Westminster,	,50

We would also recommend the following gratuities: To *Mrs. Harriet T. Burnap*, of Fitchburg, for some nice raspberry jelly, 50 cents; *Mrs. Lizzie M. White*, of Fitchburg, for one bottle of quince jelly, two years old, 50 cents, and one bottle of strawberry tomato preserve, 50 cents.

For the Committee,

PORTER PIPER.

FANCY ARTICLES.

The Committee on fancy articles make the following awards to residents of Fitchburg:

Miss Abby E. Downe, worsted work,	\$0,37
Miss <i>Mary E. Harding</i> , wrought tidy,	,25
<i>Mrs. L. B. Barrett</i> , paintings, &c.,	1,00
<i>Mrs. James R. Hamilton</i> , picture,	,75
Miss Helen F. Lowe, pictures,	,25
Miss A. E. C. White, pencil drawings,	,50
Miss Cynthia M. Page, crayon drawings,	,33
Miss <i>Mary M. Cutting</i> , raised worsted work,	,25
David B. Dole, pictures,	,12
Miss Emma F. Poole, trimmings,	,12
Miss Abbie L. Sawyer,	,20
<i>Mrs. F. F. Farrar</i> ,	,15

Miss Julia A. Hirsch, bonnet,	,75
Miss Emily A. Sawtell, wrought work,	,50
Miss Ellen A. Younglove,	,50
Mrs. Fred. H. Davis, wrought work,	,12
Mrs. Fannie A. Aldrich, crochet,	,50
Mrs. Abbie J. Leonard,	,25
Miss Lizzie M. Cochrane, pictures,	1,00
Geo. P. Tilden, pictures,	,75
Miss Mary E. Lowe, picture,	,37
Miss Lucy E. Brown, pictures,	,25
Miss Ellen L. Smith,	,50
Miss Kate B. Adams, picture,	,25
Chas. H. Rockwood, picture,	,10
Miss Emily Gardner, wrought work,	,75
Miss Anna M. Wallace, picture,	,12
Miss Julia A. Newton, infant crochet sack,	,50
Mrs. Lizzie M. White,	,75
Miss Jennie L. Whitney, picture,	,37
Miss Abbie L. Joslin,	,35
Frank Whitcomb, crochet work,	,50
Miss Sarah Whitney,	,25
Miss Fannie E. Lowe,	,25
Miss Abbie L. Lowe,	,30
Miss Anna Dickinson, worsted,	,25
Mrs. G. A. Torrey, crochet work,	,50
Mrs. D. A. Corey,	,25
Miss Abby Ellis,	,35
Mrs. S. C. Brigham, hair work,	,50
Miss Ellen C. Hawkins, picture,	,25
Mrs. George Bowker, picture, shells and insects,	,75
R. Brooks, cone baskets,	,25
Mrs. Calvin Tolman, hose and skirts,	,40

Mrs. Nathan Upham, skirt,	,30
Miss Lucy W. Damon, wax flowers,	,50
Miss Lizzie L. Goodnow, infant sack,	,35
Miss Mary S. Townsend, raised worsted work,	,50
Miss Adaline A. Spencer, worsted, of Ashby,	,25
Miss Martha L. Felch, of Natick, silk embroideries,	,25
Miss E. M. Raymond, of Westminster, quilt,	,10
Mrs. Martha Stevens, of South Gardner,	,20
Mrs. A. McLaughlin, of Lunenburg, embroideries,	1,50
Mrs. Sarah E. Heald, of Ashburnham, cone basket,	,50
Mrs. Louisa H. Flagg, of Westminster, wroug't skirt,	,50
Miss Marietta S. Allen, of Ashburnham,	,25
For the Committee,	

W. A. MANDELL, *Chairman.*

MECHANICS AND MANUFACTURES.

The Committee award the following premiums and gratuities :

Daniel Stratton, of Worcester, for clothes wringer,	\$0,50
Daniel Lowe, of Fitchburg, for ox yoke bows, and axe helves, of excellent workmanship,	1,00
Mrs. L. E. Gibbs, of Fitchburg, for carpet,	,50
Mrs. Nancy M. Wood, of Fitchburg, for rug,	,50
J. C. Moulton, of Fitchburg, for fine specimens of life-like photographs,	2,00
South Royalston Manufacturing Company, for ten pieces kerseymere, of excellent quality,	10,00

A. Burkingshaw, of Pepperell, for a case of pocket cutlery, of a style and finish that would do cr�dit to the best foreign manufacturers,	\$4,00
Joseph Baldwin, 2d, of Fitchburg, for two specimens of plows,	1,00
Mrs. Ruth Trask, of Fitchburg, for bed quilt,	,50
George Wheelock, of Fitchburg, for specimens of bronze castings, of superior quality,	2,00
John S. Donnahoe, of Gardner, for frames carved in walnut, which exhibited much skill,	2,50
Mrs. J. A. Lerow, of Fitchburg, for stair carpet, of very neat pattern,	1,00
George H. Kellogg, of Fitchburg, for fine specimens of printing,	1,00

Messrs. S. & A. M. Sawyer, of Fitchburg, exhibited samples of their celebrated projectiles, which attracted much attention. As they did not enter for a premium we have awarded none; but we would express the wish that when this death-dealing missel shall have exploded in the heart of Rebellion, (as we believe it is destined to do,) may they receive from a grateful country a premium that we have not the power to award.

Mrs. Liberty Wellington, of Ashby, for blankets,	1,00
Joseph Pierce, 2d, of Fitchburg, for calf-skins,	1,00
Mrs. A. B. Wood, of Westminster, for rug,	,50
Master George E. Garfield, of Spencer, for wire chain,	,50
Mrs. John Prichard, of Fitchburg, for bed quilt,	,50

Brown & Haines, of Leominster, for piano, of excellent tone and finish,	\$7,00
Mrs. R. M. Huntly, of Fitchburg, for two rugs,	,50
Loring Joslyn, of Fitchburg, for clothes wringer,	,50
S. G. Frost, of Fitchburg, for two harnesses, exhibiting excellent workmanship,	3,00
S. G. Frost, of Fitchburg, for collars and saddles,	1,00
Ira Carlton & Co., of Fitchburg, for specimens of their celebrated flour,	1,00
Thomas Palmer, of Fitchburg, for specimens of dentistry, unsurpassed in beauty even by nature,	3,00
Henry A. Goodrich, for hats, caps, and furs,	2,00
Miss M. M. Lovewell, of Fitchburg, for rug,	,50
E. M. Dickinson, of Fitchburg, for samples of shoes,	3,00
Mrs. Betsy Merriam, of Fitchburg, for three pairs hose,	,50
Lawrin Pratt, of Fitchburg, for extensive specimens of confectionery, which the Committee, after several tests, pronounced excellent,	1,00
Enoch Page, of Fitchburg, for spring bed,	1,00
L. Patch & Co., of Fitchburg, for cooking stove and furniture—a very neat pattern, which appeared to contain all the improvements, both for convenience and economy,	1,00
Mrs. I. B. Woodward, of Fitchburg, for lot of woolen yarn,	,50
Miss Clara Bruce, of Fitchburg, for woolen socks,	,25
Mrs. E. W. Manning, of Fitchburg, for quilt,	,50
Mrs. Charles B. Smith, of Fitchburg, for rug,	,50

W. K. Lewis & Brothers, for condensed coffee and milk—an excellent article, put up in sealed cans, appears to possess the fine flavor of the best <i>home made</i> ,	\$2,00
Mrs. Joseph Smith, for carpet,	,50
Miss E. L. Smith, for carpet of extra quality,	1,00
H. W. Page, of Fitchburg, for winnowing machine, which exhibited many good qualities,	1,00
A. D. Weymouth, of Fitchburg, for specimens of wood-turning,	1,00
Susie A. Green, for wrought skirt—very pretty pattern and neatly done,	,50
Tyler Younglove, of Fitchburg, for rules and board measures,	1,00
Mrs. Adams Butler, of Fitchburg, for hose,	,25
Mrs. L. H. Flagg, of Fitchburg, for wrought work,	,50
E. P. Munroe, of Fitchburg, for door lock and egg beater,	1,00
Miss L. A. Dana, for skirt,	,50
E. Buttrick, of Fitchburg, for clothing of fine quality and excellent workmanship,	2,00
Mrs. Gale, of Lunenburg, for quilt,	,50
Mrs. J. T. Dunsmore, for hose and mittens, just such as every soldier would rejoice to receive,	,75
John Danby, of Fitchburg, for substantial specimens of harness leather,	1,00
A. Brown, of Worcester, for stump and rock extractor, a very convenient article for farmers and stone workers, and well worthy of their attention,	2,00

C. Fessenden, of Fitchburg, for carriages, \$5,00

In justice to *Mr.* Fessenden we would say that the carriages that he exhibited were *not* intended for exhibition; it was at the earnest request of the Society that he consented to enter them for a premium. Your Committee was so well satisfied with the style and finish, and all, in fact, that constitutes a good carriage in his *regular* manufacture, that we felt it our duty to make the above award.

S. Wesson & Co., of Worcester, for clothes wringer, \$1,00

W. F. White, of Fitchburg, for buggy wagon, which exhibited throughout a taste and skill rarely attained, 5,00

W. F. White, of Fitchburg, for Shirley wagon, 3,00

Dr. A. Hitchcock, of Fitchburg, for a horse skeleton, prepared by himself at considerable expense, and which must prove of great value in the treatment of that noble animal. Your Committee felt themselves not over just in awarding 5,00

William Wetherbee, of Shirley, for brooms, gratuity, ,50

Mrs. A. H. Fay, of Fitchburg, for rug, ,50

S. Wallis, of Fitchburg, for fine specimens of knit goods, the sight of which would almost warm a person, gratuity, 2,00

Mrs. C. L. Tenney, of Fitchburg, for rug, gratuity, ,50

Jacob Byron, of Ashburnham, for frame, carved on black walnut, which exhibited rare skill, gratuity, 2,50

Mrs. Abercrombie, for quilt, gratuity, ,50
 John P. Adriance, of Worcester, for mowing
 machine. This machine appears to be just
 what is wanted—simple in construction,
 and effectual in operation, light and of easy
 draught, and possessing sufficient strength,
 capable of performing a vast amount of
 labor, and at a moderate expense, we
 award a gratuity, \$3,00

A case of goods from Messrs. Whitman & Miles attracted much attention. We did not award a premium, as they did not enter for it; still we were of the opinion that they would draw a premium from the *country at large*, and they are fairly entitled to it.

There was many other articles on exhibition which testified to the skill and ingenuity, to the industry and enterprise, of the *busy hands and heads* in this vicinity, to which we might refer. But we will close with this request; that as the prosperity of a people depends very much upon their industry and mechanical skill, and while the fertile plains of the west produces the bread for the country, let us demonstrate the fact that a fertile brain and busy hands can produce its equivalent in innumerable forms, which shall prove both to ourselves and our country a blessing.

CHARLES BURLEIGH, *Chairman.*

ORCHARDS AND VINEYARDS.

The Committee on orchards and vineyards make the following awards :

1st, to Jabez Fisher, of Fitchburg, on Native grapes,	\$10,00
2d, to Wm. G. Wyman, of Fitchburg,	5,00
For the Committee,	

T. R. BOUTELLE, *Chairman.*

JABEZ FISHER'S STATEMENT.

The "Plantation of Native Grapes" to which I have invited your attention, consists of fifty-two vines in a single row. The vines were grown by layering in 1856, and set in their present location in the spring of 1857. The exposure is a gentle slope to the south and east, with shelter on the north and west. The soil is a strong loam resting on a clayey substratum. Water having been found to stand within two and one-half feet of the surface occasionally during the year, especially in spring and autumn, a drain was laid previously to planting the vines, directly underneath where they now are, three feet deep. Tile was used for the bottom, and small stones were filled in above to within eighteen inches of the surface. Upon these a layer of horn waste was spread, and loam filled in to the top. The ground was not trenched nor otherwise specially prepared, only as it had been left after the cultivation of ordinary crops. The variety was

the "Concord," and the vines were set six feet apart. In 1857 they were allowed to grow at random, and in the fall were pruned, as they had been at the time of planting, to two or three eyes. In 1858 a single cane from each vine was trained to a stake, and at the autumn pruning cut back to about two feet.

In the spring of 1859 a trellis was erected of posts and wire. The posts were chestnut, two by two, set two and one-half feet in the ground and rather more than five feet out, at the distance of ten feet apart. At each end, a post, three by five, was set in a foot and braced. Upon these posts four strands of No. 12 iron wire were stretched, the lowest eighteen to twenty inches from the ground, and the others at distances of fifteen inches. The strength of one man with a little skill is sufficient to stretch the wires, in warm weather. At each end the wires pass through holes in the posts, and are secured by driving the bent end into the wood, assisted by a staple made of the same wire. The wires are fastened to the other posts by staples driven into one side of them. The posts were entirely covered with coal or gas tar, and a coat of the same was applied to the wire, but I now prefer a asphaltum, or paraffine varnish for the latter.

The mode of training adopted was, to carry up a single cane to the top of the trellis and allow four arms to grow from each side, to be secured to the four wires. These laterals were twisted around the wires as they grew, and required no tying. In the autumn the wood was cut back according to the strength of the vines, leaving the trellis two-thirds full of bearing wood. A few clusters of fruit grew this season on most of the vines.

In 1860 a fine crop of grapes was produced, which in consequence of the backward and moist season, had not arrived at maturity at the first of October. At that time, during two or three successive nights, the thermometer marked a temperature of thirty degrees, and the berries and leaves were frozen through.— A few days subsequent to this date, a warm rain caused all the leaves to drop, leaving upon the trellis a most beautiful show of purple clusters, many of which weighed three-fourths of a pound each. The fruit was worthless for the table, but made a very fine jelly. The wood was only partially mature, and gave poor promise of wintering well. The vines could not be laid down, in consequence of the manner of training, and were left at the mercy of the elements. On the 8th of February last, the mercury descended to twenty-two degrees below zero, having gone down fifty-eight degrees in twelve hours. A considerable portion of the wood itself was killed at this time, and as vegetation commenced in spring, it was found that with only two or three exceptions, every bud, both primary and secondary, were dead. The snow, at the time of this extreme cold, was two feet deep, covering the lower wire of the trellis, and as a consequence the lower laterals or arms of each vine. This portion of all the vines was found to be uninjured, and is this season giving a crop of fruit, the clusters being considerably smaller than usual, consequent, as I suppose, on the immature condition of the wood when vegetation ceased in 1860. As soon as the foliage had become developed the past spring, each vine was cut away just above the lower arms, and six canes were trained

perpendicularly, a foot assunder, to the top of the trellis. The wood is now, (Sept. 25th,) in quite an advanced state of maturity, and the fruit is well colored, promising to be ripe in another week of favorable weather.

My mode of pruning is as follows: As soon as the shoots in spring have advanced so as to show the clusters of buds, I pinch each one at one joint beyond the first cluster, unless the second is of good size, in which case both are left, but never more than two. All superfluous shoots and buds are rubbed off. As growth progresses, I pinch a second, third, and sometimes a fourth time, according to the luxuriance of the vines, after which everything is left to grow at random. After the fall of the leaf everything is cut away, except those buds which are wanted for the next season's fruiting.

The ground has been fairly fed for crops of vegetables, &c., but has received nothing especially for the vines, except the horn waste before mentioned. The growth has been uniformly too luxuriant, and the canes too long jointed. This tendency I hope to overcome by withholding stimulating manures, and shall apply only those of the opposite character.

W. G. WYMAN'S STATEMENT.

To the Committee on Orchards and Vineyards:

Gentlemen: The "Plantation of Native Grapes," which I offer for a premium, consists of forty-seven vines, viz: twenty-nine Concord, six Diana, four Isabella, three Seedling, two Catawba, one Rebecca, one Hartford Prolific, one Delaware. They were set as follows, viz: In the spring of 1857 one Concord, from which all the Concord plants were obtained by layers, two Diana, two Catawba, three Isabella and three Seedling; in 1858 two Concord; in 1859 two Diana, three Concord and one Isabella; in 1860 eleven Concord, two Diana, one Rebecca, one Hartford Prolific, and in 1861 twelve Concord and one Delaware.—Twenty-seven are in two rows twelve feet apart, on the south side of a high tight board fence, in my vegetable garden. The plants are twelve feet apart in the rows. Between the rows an under-drain was laid, varying from two and one-half to three and one-half feet deep; trenches were dug for the vines about twenty inches to two feet deep and three feet wide, and filled with brush at the bottom, (mostly old wild grape vines,) covered with bones, waste leather, old woolen clothes, turf and good soil; the vines set in the soil, without other manure, and subsequently manured with ground bone, super-phosphate of lime or ashes, each year until the present, most of them not being manured at all this year, except as they get the benefit of the manure in the garden across a border of six feet. Twenty are in one row, ten to twelve feet apart, on the west and north sides of my fruit

garden, east and south of a heavy wall; the land by them was underdrained from three to four and one-half feet deep, and the plants set in nearly the same way, except that for a part of them, the soil having been made deep and rich previously, they were set without any additional preparation. I prune in the fall, cutting back nearly to the ground the first two years, and then training them to the trellis, which is of wire, until they fill it. I always lay the vines upon the ground for winter, covering the more tender ones slightly with earth, and have never had one, that was so protected, injured, after it had become established in the soil. I do not like to have other plants grow near the grapes, within at least six feet, and endeavor to keep the soil free from weeds, and mellow on the surface, stirring it frequently through the entire season. After the grapes have set, I thin them and pinch in the ends of the vines frequently for several weeks.

In 1860 fifteen of the vines bore freely, the fruit being of good size and form, both bunch and berry, but on account of an early frost, did not ripen perfectly, with the exception of the Seedling, which were very early, and were gathered before the frost, which occurred about the first of October. The present season the crop has been abundant on all of these vines, and nearly all the others set previous to this year commenced bearing fruit, and the fruit has ripened perfectly, without protection, even on the Catawba vines.

I obtain new plants mostly by layering. When pruning in the fall, I save such vines near the ground as are suitable for the purpose, and after they have

started in the spring I bury them slightly in the soil, after having first cut them a little more than half off between the eyes; each eye then usually produces a good plant for the next year's setting. I have however this year raised several hundred plants from cuttings saved at the fall pruning, buried in the ground over winter and planted in the spring, but they are not so strong or good as layers.

GRAIN.

The Committee on grain make the following awards :

CORN.

1st, to Joseph Goodrich, of Lunenburg,	\$10,00
2d, to Benj. Safford, of Fitchburg,	7,00

WHEAT.

1st, to Joseph Goodrich, of Lunenburg,	8,00
Gratuity, to W. G. Wyman, of Fitchburg,	2,00

WHITE BEANS.

2d, Samuel A. White, of Lunenburg,	1,00
------------------------------------	------

COBBAGE.

Gratuity, to Henry Cushing, of Fitchburg,	1,00
---	------

HERDS GRASS SEED.

1st, Geo. Kendall, of Ashby,	2,00
2d, Samuel Heywood, of Ashby,	1,00

For the Committee,

H. A. BLOOD, *Chairman.*

EXPERIMENTS.

W. G. WYMAN'S STATEMENT.

Being requested by last year's Committee on Experiments to notice and publish the condition of my field this year, I offer the following statement of the continuation in 1861 with grass, of my experiment commenced in 1860 with wheat, on the effects of different kinds of fertilizers, as compared with none. The division of the field into lots, and the numbers of them, are the same as in 1860.

The weight of clover hay and rowen, when thoroughly dried, on an average rod is as follows:

No. 1,—hay, 41 lbs.; rowen, 21 lbs.; total, 62 lbs.	Rate per acre, 4 tons and 1920 lbs.
“ 2 “ 37 “ “ 12 “ “ 49 “ “ “ 3 “ “ 1840 “	
“ 3 “ 33 “ “ 21 “ “ 54 “ “ “ 4 “ “ 640 “	
“ 4 “ 28 “ “ 8 “ “ 36 “ “ “ 2 “ “ 1760 “	

At \$10,00 per ton for the hay and rowen, the value of the fertilizers for the present crop, per acre, is as follows:

Stable manure on No. 1, \$20,80 for 2 tons and 160 lbs. increase.
Ground bone “ “ 2, 10,40 “ 1 “ “ 80 “ “
Superphosphate “ “ 3, 14,40 “ 1 “ “ 880 “ “

As compared with no manure on No. 4.

By comparing this with last year's statement, published on the seventy-eighth page of the Report for 1860, it will be seen that the value of the fertilizers for the two crops,—wheat in 1860, at \$1,25 per bushel, and hay in 1861, at \$10,00 per ton,—is as follows:

Stable manure, \$25,80 pr. acre; cost, \$18,00; net gain, \$7,80 pr. acre.
Ground bone, 12,07 “ “ 7,50 “ 4,57 “
Superphosphate, 17,73 “ “ 6,25 “ 11,48 “

The wheat stuble and young clover was mowed and taken off in Sept. 1860. The clover was mowed July 13th, and the rowen Sept. 9th, 1861.

EXPERIMENTS WITH MANURES,

IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE BOARD OF AGRICULTURE FOR A THREE YEAR'S COURSE.

PROGRESS IN 1861.

ALBERT STRATTON'S STATEMENT.

Statement of the progress of the forty-five rods of land on which I made the different applications of manure last year to a corn crop. This year plowed once, the 18th of May, seven inches deep, harrowed well; sowed one bushel of oats on the five lots, or six and two-fifths quarts on each lot, harrowed and brushed in the seed, oats and grass; harvested Aug. 17th with hand cradle; put in stooks one week; threshed and weighed as follows:

No. 1—	oats,	54	pounds;	straw,	115	pounds.
“ 2	“	52	“	“	106	“
“ 3	“	50	“	“	104	“
“ 4	“	52½	“	“	105	“
“ 5	“	44	“	“	91	“

ALBERT STRATTON.

North Leominster, Nov. 4, 1861.

ISAAC B. WOODWARD'S STATEMENT.

To the Secretary of the Worcester North Agricultural Society :

SIR: Last year I furnished you with a statement of my experiment on the use of manures, and the result, as far as an almost total failure of the crop seemed to require. I will now state the result of the experiment as effecting the crop of wheat this year. The lot, it will be remembered, was divided into five equal parts, each containing four square rods. The piece was plowed twice the first week in May, 1861; the first time seven inches, and the second time six inches deep, and sown with wheat. The crop was harvested on the 16th of August, and the several lots yielded as follows :

Lot.	Weight of Wheat.	Weight of Straw.
1	32 lbs., 14 oz.	46 lbs., 7 oz.
2	27 " 10 "	39 " 6 "
3	30 " 14 "	44 " 11 "
4	29 " 14 "	39 " 9 "
5	23 " 6 "	31 " 12 "

It will be seen that the crop of No. 2, where the manure was plowed in six inches deep, is less than that of the other manured lots. This is partly owing, I think, to the fact that about one rod of it was badly injured by worms. The weather was as follows :

	First Third.	Second Third.	Last Third.
May,	wet	dry	wet
June,	wet	dry	dry
July,	dry	dry	moist
August,	moist	dry	dry
September,	moist	dry	dry

Respectfully submitted.

ISAAC B. WOODWARD.

November, 1861.

W. G. WYMAN'S STATEMENT.

A statement of the continuation in 1861 of my experiment commenced in 1860, on the proper depth of applying manures, in accordance with the requirements of the Board of Agriculture.

The size of the field, one acre and thirty-two square rods; the division into lots of thirty-two rods each, and the numbers of the lots, the same as in 1860.

The field was plowed once, about six to seven inches deep, May 1st and 2d; harrowed once; sowed May 3d with two and one-fourth bushels of Scotch Fife wheat, one-half bushel each of Herds-grass and Red-top seed, and fifteen lbs. clover; harrowed again and brushed. The grain was cradled and got into the barn without stooking, Aug. 12th to 16th; threshed by hand and weighed Oct. 4th and 5th. The grain louse, aphides, almost covered the heads of wheat on the whole field before ripening, and caused the kernel to be very much shrivelled. The weevil, or wheat midge, also was found in all parts of the field, which eat out the centre of the kernel to a considerable extent, destroying it so that the shell of it would blow away with the chaff in winnowing. The injurious effects of these insects appeared to be pretty evenly distributed through the several lots, so that when examined, as it frequently was by myself and others, we could not see that any one lot was more seriously effected than another.

The wheat and straw weighed as follows :

No. 1—wheat	203	pounds;	straw	466	pounds.
“ 2	“ 170	“	“ 403	“	
“ 3	“ 192	“	“ 449	“	
“ 4	“ 183	“	“ 503	“	
“ 5	“ 62	“	“ 255	“	
“ 6	“ 163	“	“ 446	“	

The weather during the season of growth was as follows :

	First Third.	Middle Third.	Last Third.	Total.
May,	Wet. 2.417 in. rain	Dry. 0.430 in. rain	Moist. 0.861 in. rain	3.708 in.
June,	Wet. 1.778 in. do	Dry. 0.788 in. do	Very dry. no do	2.566 in.
July,	Wet. 2.256 in. do	Moist. 1.848 in. do	Dry. 1.854 in. do	5.958 in.
August,	Dry. 1.330 in. do	Moist. 2.680 in. do	Dry. 0.168 in. do	4.178 in.

Total amount of rain that fell during the four months, 16.410 in.

W. G. WYMAN.

Fitchburg, Nov., 1861.

TREASURER'S REPORT.

TREASURER, DR.

1860.			
Dec'r 4.	To balance, as per last year's settlement,		\$4340,89
1861.			
April 6.	" cash rec'd as dividend of Bank of Commerce,		35,00
" "	" " " " " " " " Washington Bank,		30,00
" "	" " " " " " " " Safety Fund Bank,		15,00
" "	" " " " " " " " North Bank,		9,00
Sep. 25.	" " " for admissions to Town Hall,		239,42
Oct. 9.	" " " as dividend of Bank of Commerce,		30,00
" "	" " " " " " " " Washington Bank,		30,00
" "	" " " " " " " " Safety Fund Bank,		15,00
" 10.	" " " " " " " " North Bank,		9,00
" 18.	" " " of Commonwealth for bounty,		600,00
Nov. 30.	" " " for interest on money loaned,		94,09
Dec. 2.	" " " " membership,		45,00
			<hr/>
			\$5,492,40
Dec. 4.	To balance on settlement,	\$4,510,64	
	Increase the last year,	\$169,75	

THOMAS C. CALDWELL, *Treasurer.*

The undersigned have examined the above account and find it correct.

JABEZ FISHER, }
 ABEL F. ADAMS, } *Com. on Finance.*

TREASURER'S REPORT.

TREASURER, CR.

1860.				
Dec. 11.	By cash paid	Shepley & Wallace, for stationery, &c.,	\$7,69	
" 13.	" " "	J. J. Piper, for advertising,	4,00	
1861.				
Jan'y 2.	" " "	for publications for gratuities,	18,72	
" 19.	" " "	E. Garfield, for printing Report, &c.,	132,30	
" 26.	" " "	Fitchburg Post Office, for postage,	15,52	
April 3.	" " "	S. A. Wheeler & Co., for stone for trial of draught horses,	1,00	
May 8.	" " "	B. F. Proctor, for pins and wedges for cattle pens,	3,18	
June 14.	" " "	W. G. Wyman, for Express freight,	1,01	
Oct. 2.	" " "	E. E. Farrar, services at Town Hall, three days,	4,50	
" "	" " "	Fitchburg Post Office, for postage,	7,41	
" "	" " "	D. Stearns, for recording premiums,	1,50	
" "	" " "	for freight on A. O. Cummings & Co's cattle, from Worcester,	10,00	
" "	" " "	J. L. Joslin, for weighing cattle, Sept. 25th,	,50	
" 9.	" " "	J. F. Stiles, for repairing batons,	1,87	
" 10.	" " "	Abel Marshall, for setting and removing cattle pens,	18,00	
" 14.	" " "	Fitchburg Hotel bill, Sept. 25th,	21,00	
" "	" " "	D. F. McIntire, for boards,	3,53	
" 19.	" " "	Tyler Younglove, for services, &c., at Town Hall,	19,39	
" 23.	" " "	S. A. Wheeler & Co., for eighty-five stone blocks,	11,05	
" 25.	" " "	Edwin A. Goodrich, for preparing for plowing and drawing,	8,00	
" 28.	" " "	Litch & Sawtell, for screws and nails,	,92	
" 29.	" " "	William G. Wyman, for services as Secretary,	25,00	
Nov. 2.	" " "	Litch & Sawtell, for padlock,	,33	
" 15.	" " "	W. H. Lowe, for moving piano,	1,00	
" 28.	" " "	R. Wallace & Co., for blank cards,	1,66	
" 29.	" " "	E. Garfield, for printing, &c.,	18,12	
" 30.	" " "	J. J. Piper, advertising annual meeting,	1,00	
" "	" " "	W. G. Wyman, for tacks, pins, &c., for premiums awarded Sept. 25th, and Nov. 8th,	643,31	
Dec. 4.	" balance carried to new account,		4,510,64	

 \$5,492,40

ANALYSIS OF PREMIUMS AND GRATUITIES AWARDED.

Amount awarded for Plowing at the Exhibition,	-	\$54,00
“ “ “ Spading “ “ “	- -	7,00
“ “ “ Neat Stock,	- -	194,00
“ “ “ Horses,	- -	87,00
“ “ “ Sheep,	- -	10,00
“ “ “ Swine,	- -	35,50
“ “ “ Poultry,	- -	19,50
“ “ “ Grain,	- -	33,38
“ “ “ Root Crops,	- -	10,26
“ “ “ Fruits,	- -	51,63
“ “ “ Flowers,	- -	3,62
“ “ “ Butter and Cheese,	- -	17,50
“ “ “ Bread,	- -	7,50

Premiums and gratuities were paid to two-hundred and fifty-five different persons, and the amounts distributed as follows :

Fitchburg,	-	\$390,96
Princeton,	- -	71,00
Westminster,	- -	48,35
Lunenburg,	- -	33,75
Ashby,	- -	21,50
Ashburnham,	- -	18,00
Phillipston,	- -	17,00
Leominster,	- -	11,00
Littleton,	- -	10,00
Royalston,	- -	10,00
Shirley,	- -	8,00
Dracut,	- -	5,00
Winchendon,	- -	4,00
Pepperell,	- -	2,00
Gardner,	- -	1,25
Worcester,	- -	,75
Spencer,	- -	,50
Natick,	- -	,25

1861.	Amount of premiums offered, - -	1079,25
	Amount of premiums and gratuities awarded,	685,86
	Amount of premiums and gratuities paid, -	643,31
	Amount of permanent fund, - -	4710,64

LIFE MEMBERS.

In the following list, the Post-Office address, when it differs from the *residence*, is given in italics, after the name, abbreviated when the residence forms a part of the Post-Office address, as *So. G.* for South Gardner, *S. Vill.* for Shirley Village. The * indicates that the person is dead; *r* indicates that the person has removed, but that the present residence is unknown; the figures indicate the number of members in each town. If errors occur, or if the residence or Post-Office address of members is changed, a favor will be conferred by notifying the Secretary of the fact.

ASHBY.

- Andrews, Artemas F.
- Burnap, Israel H.*
- Burr, John
- Burr, Joseph*
- Burr, Levi
- Damon, Samuel R.
- Davis, John
- Davis, Jonathan P.
- Foster, Jesse
- Foster, Joseph
- Gates, Howard
- Gates, Paul
- Gibson, Samuel P.
- Hapgood, William G.
- Hayward, Joel
- Hayward, John
- Hayward, Paul
- Hayward, Samuel
- Hodgman, Luther
- Hubbard, Augustus
- Hubbard, George B.
- Johnson, William
- Kendall, George
- Kendall, James O. *r*
- Lawrence, David
- Patch, Jonas

- Proctor, D. A.
- Smith, Levi
- Spencer, Hobart
- Wallis, Benjamin
- Wellington, Liberty
- Wellington, Luke
- Wright, Charles H.
- Wright, Francis W.

34

ASHBURNHAM.

- Barrell, Nahum
- Brown, C. H.
- Conn, John A.
- Cummings, John L.
- Davis, John C.
- Eaton, N. L.
- Ellis, Daniels, Jr.
- Foster, Jerome W.
- Green, Hosea
- Houston, Horace W.
- Howard, George
- Howe, Addison
- Howe, Perley
- Hubbard, George B.
- Jones, Gilman *r*
- Lane, Elias
- Marble, Warren

Maynard, Antipas
 Merritt, Simeon
 Miller, Alfred
 Russell, Ward
 Samson, George G.
 Ward, Alvin
 Ward, Isaac D.
 Ward, Stephen
 Whitmore, Alfred
 Whitmore, Enoch*
 Whitney, Amos
 Whitney, Merrick
 Whitney, Ohio
 Whitney, Ohio, Jr.
 Whitney & Russell
 Wilker, John
 Wilker, Joseph W.
 Willard, John*
 Willard, Merrick
 Winchester, Charles
 Winchester, George C.
 Woodward, John G.

BALTIMORE, MD.

Kenney, Henry F.

BOSTON.

Farwell, Lyman
 Haskins, F. W.
 Lucas, Edmund G.
 Simonds, Alvan

BURLINGTON, VT.

Catlin, H. W.

CAMDEN, N. Y.

Foskett, Joel

CHICAGO, ILL.

Hill, Horatio

CLAPPVILLE.

Denny, R. S.

DETROIT, MICH.

Frost, Milton

DRACUT.

Fuller, Rodney

EAST HAMPTON.

Hubbard, Eli A.

FITCHBURG.

Ackley, N. F. *r*
 Adams, Abel F.
 American Rattan Company
 Arnold, William E.
 Atherton, Shepard F.
 Bailey, E. F.
 Bailey, G. F.
 Baldwin, Joseph, 2d
 Battles, David
 Beaman, Aaron F. *r*
 Benjamin, Levi*
 Billings, Charles J.
 Blood, H. A.
 Boutelle, David
 Boutelle, N. S.
 Boutelle, T. R.
 Boutelle, Mrs. T. R.
 Bradford, Lewis H.
 Bradford, Mrs. L. H.
 Brewer, Henry*
 Brigham, Charles
 Brown, Jacob, 2d
 Brown, James D.
 Brown, J. S.
 Bullock, Laban,
 Burnap, Edwin S.
 Burnap, Samuel
 Buttrick, Francis, Jr.
 Caldwell, Enoch
 Caldwell, Thomas C.
 Carleton, Ira & Co.
 Carpenter, Daniel M.
 Caswell, Hosea M.
 Caswell, Nathan
 Caswell, S. Melville
 Childs, S. Austin
 Clifford, Martin
 Clifford, William J.*
 Coggshall, Henry F.
 Comee, William W.
 Cotting, William W.
 Cowdin, Natt
 Crehore, Warren A.

39

4

- Crocker, Alvah
 Crocker, Ephraim*
 Cross, Daniel
 Cushing, Joseph
 Damon, Albert B.
 Daniels, Thomas E.
 Davis, Alonzo
 Davis, Charles
 Davis, Elnathan
 Davis, Joel
 Day, Leonard
 Dickinson, Elijah M.
 Dole, A. S.
 Dole, S. M.
 Downe, Levi
 Downe, William S.*
 Eaton, Daniel S.
 Eaton, Thomas S.
 Emory, Charles A.
 Emory, Daniel*
 Fairbanks, J. H.
 Farwell, Elijah C.
 Farwell, Samuel
 Farwell, Samuel, 2d
 Fessenden, Charles
 Fisher, Jabez
 Fitchburg, Town of
 Frost, J. Milton
 Frost, S. Gilman
 Frye, George A.
 Fuller, Hubbard B.
 Gage, Moses M.
 Gage, Mrs. M. M.
 Garfield, Elisha
 Garfield, J. F. D.
 Goodnow, Silas H.*
 Goodrich, Edwin A.
 Goodrich, Henry A.
 Goodridge, Alonzo P.
 Gould, William
 Graves, Howard M. r
 Green, Asher
 Green, Mrs. Asher
 Hale, Samuel
 Hardon, J. J.
 Harris, Gordis D.
 Harris, John M.
 Hartwell, Isaac
 Haskell, Jacob
 Hawes, Samuel
 Hayward, Calvin*
 Heywood, Walter
 Hitchcock, Alfred
 Hollis, John W. r
 Hubbard, Addison
 Ide, Charles
 Jewett, George
 Kendell, Levi
 Kimball, Alpheus*
 Kimball, A. P.
 Lane, James B.
 Lane, Mrs. J. B.
 Leathe, William M.
 Litch, Aaron K.
 Livermore, Charles r
 Lowe, Daniel
 Lowe, David
 Lowe, Henry J.
 Lowe, John
 Lowe, Willard H.
 Lyon, Moses G.
 Manning, Abel
 Manning, Elson W.
 Manning, Joseph E.
 Mansur, Joseph W.
 Marshall, Abel
 Marshall, Chederlaomer
 Marshall, Jonas A.
 Marshall, Joseph A.
 McIntire, David F.
 McIntire, James
 Merritt, William S.
 Messenger, Daniel
 Messenger, Horace P.
 Miles, Eugene T.
 Montjoy, George W.
 Moulton, J. C.
 Norcross, Amasa
 Nutting, George F.
 Osborne, Abram
 Page, Hale W.
 Page, Joel
 Palmer, Thomas
 Partridge, Asa
 Perkins, Francis*
 Phillips & Hammond r

Pierce, Joseph
 Piper, John J.
 Pratt, Lawrin
 Prentiss, Benjamin
 Prichard, John
 Pride, William M.
 Proctor, Benjamin F.
 Proctor, John B.
 Proctor, Mrs. J. B.
 Putnam, James P.
 Putnam, Salmon W.
 Rice, Oran S. *r*
 Richardson, J. B. *r*
 Ruggles, Otis T.
 Ruggles, Solmon W.
 Sabin, John P.
 Safford, Benjamin
 Saunders, Charles
 Sawtell, Charles
 Sawtelle, John M.
 Sawyer, Asa
 Sawyer, Charles B.
 Sawyer, Charles K.
 Sawyer, John
 Shattuck, Samuel*
 Sheldon, Francis
 Sheldon, Josiah
 Sheldon, Thomas
 Shepley, Stephen
 Simonds, Abel
 Simonds, Joseph F.
 Smith, Edward
 Smith, John
 Smith, Joseph
 Smith, William P.
 Snow, C. H. B.
 Snow, Benjamin
 Snow, Benj., Jr.
 Snow, Francis H.
 Snow, Peter S.
 Stearns, Varus
 Stickney, George O.
 Stiles, James F.
 Stiles, Mrs. J. F.
 Stockwell, Loriston
 Stone, Norman
 Spaulding, Z. P.*
 Sprague, Leander

Taylor, Stephen
 Tenney, Jonathan L.
 Thurston, Abel
 Thurston, Cyrus
 Tolman, Jacob
 Torrey, Ebenezer
 Torrey, Mrs. E.
 Tuttle, Lewis G.
 Towne, Abial J.*
 Towne, George E.
 Towne, William B.*
 Twichell, John M.
 Upham, Nathan
 Upton, John
 Upon, Mrs. J.
 Upton, Edwin
 Upton, Joseph
 Upton, Thomas
 Upton, Warren C.
 Vose, William H.
 Wallace, Rodney
 Wallace, Waldo
 Ware, T. K.
 Wheeler, Benjamin
 Wheeler, Loring
 Wheeler, Samuel A.
 Whitcomb, Nathan
 White, W. Fred
 Whitman, Jonathan
 Whitney, Walter
 Wilder, Charles W.
 Willis, Henry A.
 Wilkins, Aaron
 Wilson, Timothy S.
 Wood, Charles H.
 Wood, Elliot
 Wood, Moses
 Wood, Mrs. M.
 Wood, Nathaniel
 Woodbury, James M.
 Woodbury, William
 Woodward, Isaac B.
 Works, Benton T.
 Works, Daniel
 Works, Edwin D.
 Wright, Alba C.*
 Wyman, W. G.
 Young, Z. F.

FRAMINGHAM.

Buckminster, William

GARDNER.

Bancroft, Amasa

Brick, A. H., *South G.*

Bush, C. W.

Collester, Thorley

Greenwood, Calvin S., *South G.*

Heywood, Levi

Heywood, Seth

Hill, Edwin

Hill, Henry C.

Hill, John W.

Nichols, Washington

Parker, David

Sawin, John, *South G.*Stevens, S. W. A., *South G.*

Wood, Abel S.

Wood, Asaph, *South G.* 16

GROTON.

Bean, Hazen O.

HARVARD.

Puffer, Josiah, *Still River*

HUBBARDSTON.

May, L. A.

LANCASTER.

Flagg, Charles, *South L.*

LEOMINSTER.

Allen, Joel C.

Boyden, Elliot E.

Brown & Allen

Burrage, Leonard, *North L.*

Carter, James H.

Carter, Solon

Colburn, Charles H.

Cotton, Ward M.

Field, C. C.

Hosmer, William B.

Lowe, P. H. W.

Merriam, C. H.

Merriam, Gardner

Morse, Augustus

Morse, Gardner

Nichols, Edmund H.

Nicholson, Charles

Piper, Porter

Putnam & Phelps, *North L.*

Richardson, Sewall

Stearns, Thomas

Stratton, Albert, *North L.* 22

LITTLETON.

Harwood, J. A.

LOWELL.

Merriam, Albert

LUDLOW, VT.

Albee, Hiram W.

LUNENBURG.

Billings, Thomas

Brown, W. L.

Day, N. C., *North Leominster*

Dinsmore, J. T.

Fairbanks, John

Graham, Ephraim, *Fitchburg*

Goodrich, Joseph

Houghton, Edmund

Johnson, Martin

Kilburn, Cyrus

Mandell, William A.

Pitts, Lemuel

Proctor, Frank M.

Putnam, James

Putnam, Daniel

Ramsdell, John 16

LYNN.

Piper, John W.

MILTON.

Ware, John F.

NEW IPSWICH, N. H.

Gage, George M.

NEW YORK CITY.

Burpee, Solomon P.

Stuart, J. M.

Wood, William B.

PEPPERELL.

Blood, David W.

PERU, VT.

Haynes, James L.

PHILLIPSTON.

Powers, Edward
Turner, Ephraim, *So. Royalston*

PORTLAND, ME.

Stebbins, Horatio

PRINCETON.

Beaman, G. S., *East P.*
Benson, W. W.
Boyles, Henry
Brooks, John
Brooks, John, Jr.
Brown, W. H., *East P.*
Danforth, Nathan *r*
Everett, Israel, *East P.*
Everett, Joshua T., *East P.*
Everett, Mandell G., *East P.*
Gregory, George M.
Houghton, George W.
Merriam, J. Edwin
Mirick, Elisha G*
Mirick, Sewell G.
Nash, Samuel C.*
Reed, Joseph P.
Reed, Nathan B.
Richardson, Sewell
Roper, John
Roper, Wilkes
Skinner, George O.
Skinner, Harlow
Temple, Jonas H.
Watson, Wm. W.*
Whitecomb, Joseph, *East P.*
Whitecomb, W. H., *East P.*
Wilder, Mark, *East P.*

QUINCY.

Rice, John A.

RINDGE, N. H.

Towne, Solomon F.

ROYALSTON.

Bemis, Otis, *South R.*
Clark, Edson
Clark, Timothy
Farrar, S. S., *South R.*
Hale, Silas “

Jones, Aaron, *South R.*

Jones, Silas, Jr. “

Partridge, L. W., *South R.*

Raymond, Joseph

Safford, Roby R., *South R.*

Stockwell, Anan, *South R.* 11

SANFRANCISCO, CAL.

Choate, Thomas B.

SHIRLEY.

Chandler, George
Chandler, John H.
Gardner, Jerome, *S. Vill.*
Gardner, M. T. “
Going, John K. “
Hartwell, Nathaniel
Holden, Nathaniel
Howe, Oliver *r*
Longley, Israel, *S. Vill.*
Page, George
Parker, James O.
Whitney, Thomas
Wetherbee, Wm. H., *S. Vill.* 13

STERLING.

Barron, A. S.
Burpee, Edward
Davidson, Amory
Fitch, Charles B.
Hastings, Rufus
Heywood, Joseph P.
Heywood, Moses B.
Holbrook, Cyrus*
Kendall, Ezra
Kendall, George
Loring, Charles H.
Loring, Maynard
May, John
Nourse, Franklin
Osgood, Samuel
Peck, W. D.
Richardson, Wm. B.
Stephenson, John M.
Sawyer, Jonathan M.
Sawyer, Moses, 2d
Sawyer, Putnam
Sawyer, Wm. Franklin

OFFICERS OF THE SOCIETY FOR 1862.

ELECTED AT THE ANNUAL MEETING, WEDNESDAY, DECEMBER 4, 1861.

L. H. BRADFORD, of Fitchburg, *President*.LEONARD BURRAGE, of Leominster, }
BENJAMIN WYMAN, of Westminster, } *Vice Presidents.*W. G. WYMAN, of Fitchburg, *Secretary*.T. C. CALDWELL, of Fitchburg, *Treasurer*.OHIO WHITNEY, JR., of Ashburnham,
HOBART SPENCER, of Ashby,
S. W. A. STEVENS, of South Gardner,
C. C. FIELD, of Leominster,
WM. B. HOSMER, of Leominster,
THOMAS BILLINGS, of Lunenburg,
CYRUS KILBURN, of Lunenburg,
DANIEL PUTNAM, of Lunenburg,
JOHN BROOKS, JR., of Princeton,
HENRY BOYLES, of Princeton,
N. B. REED, of Princeton,
J. T. EVERETT, of East Princeton,
ANAN STOCKWELL, of So. Royalston,
NATHANIEL HOLDEN, of Shirley,
JAMES O. PARKER, of Shirley,
EZRA KENDALL, of Sterling,
J. M. SAWYER, of Sterling,
WARREN SIMONDS, of Templeton,
DANIEL C. MILES, of Westminster,
JOHN MINOTT, of Westminster,
E. MURDOCK, JR., of Winchendon,
A. F. ADAMS, of Fitchburg,
T. R. BOUTELLE, of Fitchburg,
JABEZ FISHER, of Fitchburg,
M. M. GAGE, of Fitchburg,
LEVI KENDALL, of Fitchburg,
ABEL MARSHALL, of Fitchburg,
JOEL PAGE, of Fitchburg,
J. P. PUTNAM, of Fitchburg,
JOSEPH UPTON, of Fitchburg,
I. B. WOODWARD, of Fitchburg} *Trustees.*JABEZ FISHER, of Fitchburg, *Member of the State Board
of Agriculture.*

COMMITTEES AND PREMIUMS
FOR THE
TENTH ANNUAL EXHIBITION,
TO BE HELD AT FITCHBURG,
On Tuesday and Wednesday, Sept. 30th and Oct. 1st, 1862.

No person will be allowed to become a competitor for any of the Premiums herein offered, unless he shall have made an entry for the same, with the Secretary, within the time prescribed for each class, nor unless he shall also have furnished all required statements relating thereto within the specified time.

For the convenience of those who live at a distance, entries may be made by Mail; and all entries so made must be delivered at some Post Office one day previous to the expiration of the time specified, and must bear proof of having been so delivered either by a Post-mark, or a certificate of registry from the Postmaster.

S T O C K .

All entries for premiums under this head, except poultry, must be made on or before the Friday previous to the exhibition, and all stock must be owned by the person who enters it.

All live stock must have been raised by the person entering the same, or owned by him for at least three months next previously.

Each entry of stock for the pens must specify the breed of the animal, if known, and the age.

Fat cattle, working cattle, draught horses and swine must be weighed on the same scale, in Fitchburg, and will be weighed free of expense. The weight of all other stock will not be required.

BLOOD STOCK.

Committee.—Asaph Wood, of Gardner; Solon Carter, of Leominster; Daniel Works, of Fitchburg; Joel Hayward, of Ashby; Josiah Page, of Westminster.

Authentic pedigrees will be required.

Durham Bulls,	-	-	-	1st premium,	-	\$5,00
				2d premium,	-	3,00
North Devon,	-	-	-	1st premium,	-	5,00
				2d premium,	-	3,00
Ayrshire,	-	-	-	1st premium,	-	5,00
				2d premium,	-	3,00
Alderney,	-	-	-	1st premium,	-	5,00
				2d premium,	-	3,00
Any other breed, pure blood,	-	-	-	1st premium,	-	5,00
				2d premium,	-	3,00

The Committee may award gratuities for superior specimens of cows, heifers or calves, of either of the breeds named.

GRADE OR NATIVE BULLS.

More than two-years-old,	-	-	-	1st premium,	-	\$5,00
				2d premium,	-	3,00
Yearling,	-	-	-	1st premium,	-	4,00
				2d premium,	-	2,00
				3d premium,	-	1,00
Calves,	-	-	-	1st premium,	-	4,00
				2d premium,	-	3,00
				3d premium,	-	2,00

These may be of any breed, more than four months old.

MILCH KINE.

Committee.—T. R. Boutelle, Joseph Upton, Samuel Burnap, of Fitchburg; W. B. Hosmer, of Leominster; Ward Russell, of Ashburnham.

Herd of four Cows or Heifers each,	-	1st premium,	-	\$10,00
		2d premium,	-	7,00
		3d premium,	-	4,00

The person receiving these premiums will not be allowed to compete for any other, with the same animals.

The Committees will regard age, quality and quantity of milk, expense of keeping, &c.

Cows,	-	-	-	1st premium,	-	\$5,00
				2d premium,	-	4,00
				3d premium,	-	3,00
Heifers, three-years-old,	-	-	-	1st premium,	-	5,00
				2d premium,	-	4,00
				3d premium,	-	3,00
Heifers, two-years old,	-	-	-	1st premium,	-	5,00
				2d premium,	-	4,00
				3d premium,	-	3,00

Competitors for premiums on milch cows, and milch heifers, will be required to certify in writing, at the time of entry, to the weight of the milk during the six days commencing with the first Monday in June, and the corresponding six days in September; and to the manner of keeping, and general management. Cows that calve after the first Monday in June, may be tried at another time.

HEIFERS.

Committee.—Ezra Kendall, of Sterling; Samuel Farwell, 2d, of Fitchburg; Henry Boyles, of Princeton; John Hayward, of Ashby; Gardner Merriam, of Leominster.

Intended to be kept for the dairy.

Two-years-old,	-	-	-	1st premium,	-	\$4,00
				2d premium,	-	3,00
				3d premium,	-	2,00
Yearlings,	-	-	-	1st premium,	-	3,00
				2d premium,	-	2,00
				3d premium,	-	1,00
Calves, more than four months old,	-	-	-	1st premium,	-	3,00
				2d premium,	-	2,00
				3d premium,	-	1,00
Calves, more than four months old, raised by hand,	-	-	-	1st premium,	-	3,00
				2d premium,	-	2,00
				3d premium,	-	1,00

WORKING OXEN.

Committee.—Daniel Putnam, of Lunenburg; Howard Gates, of Ashby; Daniel Lowe, William Woodbury, Jr., T. B. Works, of Fitchburg.

Working Oxen,	1st premium,	\$6,00
	2d premium,	5,00
	3d premium,	4,00
	4th premium,	3,00
	5th premium,	2,00

The working oxen will be tried, attached to loads weighing, including the cart, one-third more than themselves.

STEERS MORE THAN ONE YEAR OLD.

Committee.—Loriston Stockwell, of Fitchburg; E. E. Boyden, of Leominster; J. T. Dunsmoor, John Fairbanks, of Lunenburg; Edward Bacon, of Westminster.

Three-years-old,	1st premium,	\$5,00
	2d premium,	4,00
	3d premium,	3,00

The three-years-old steers will be attached to carts, and tried like the oxen, on the same ground; the cart and load to equal the steers in weight.

Two-years-old,	1st premium,	\$4,00
	2d premium,	3,00
	3d premium,	2,00
Trained, two-years-old,	1st premium,	4,00
	2d premium,	2,00

YEARLING STEERS AND STEER CALVES.

Committee.—F. W. Wright, of Ashby; Charles Hastings, of Lunenburg; Daniel S. Eaton, H. M. Caswell, of Fitchburg; Asa Raymond, of Westminster.

Yearlings,	1st premium,	\$3,00
	2d premium,	2,00
	3d premium,	1,00
Trained Yearlings,	1st premium,	3,00
	2d premium,	2,00

Calves,	-	-	-	1st premium,	-	\$5,00
				2d premium,	-	3,00
				3d premium,	-	1,00
Calves, raised by hand,	-	-	-	1st premium,	-	5,00
				2d premium,	-	3,00
				3d premium,	-	1,00
Trained Calves,	-	-	-	1st premium,	-	3,00
				2d premium,	-	2,00
				3d premium,	-	1,00

FAT CATTLE.

Committee.—Nathaniel Wood, of Fitchburg; Franklin Nourse, of Sterling; John Lowe, of Fitchburg; Levi Burr, of Ashby; Ephraim Graham, of Lunenburg.

The entries of fat cattle must specify the mode of fattening. Committees will regard the expense of feeding.

Oxen,	-	-	-	1st premium,	-	\$8,00
				2d premium,	-	5,00
				3d premium,	-	3,00
Cows,	-	-	-	1st premium,	-	6,00
				2d premium,	-	3,00
				3d premium,	-	2,00
Three-year-old Steers or Heifers,	-	-	-	1st premium,	-	6,00
				2d premium,	-	4,00

SWINE.

Committee.—Amasa Norcross, of Fitchburg; William F. Sawyer, of Sterling; George Miles, of Westminster; C. W. Jaquith, David Lowe, of Fitchburg.

Boars, more than one year old,	-	-	-	1st premium,	-	\$4,00
				2d premium,	-	3,00
Less than one year old,	-	-	-	1st premium,	-	3,00
				2d premium,	-	2,00
Fat Hogs, more than eight months old,	-	-	-	1st premium,	-	4,00
				2d premium,	-	3,00
				3d premium,	-	2,00
Fat Pigs, less than eight months old,	-	-	-	1st premium,	-	3,00
				2d premium,	-	2,00
				3d premium,	-	1,00

Breeding Sows,	-	-	1st premium,	-	\$3,00
			2d premium,	-	2,00
			3d premium,	-	1,00
Weaned Pigs, not less than four,	-	-	1st premium,	-	3,00
			2d premium,	-	2,00
			3d premium,	-	1,00

STALLIONS.

Committee.—John K. Going, of Shirley; Silas Hale, of Royalston; Levi Smith, of Ashby; Wm. M. Pride, W. W. Comee, of Fitchburg.

All persons offering Stallions, five years old and upwards, will be required to exhibit specimens of their stock.

Stallions, five years old and upwards,	-	-	1st premium,	-	\$10,00
			2d premium,	-	6,00
			3d premium,	-	4,00
Four-years-old,	-	-	1st premium,	-	4,00
			2d premium,	-	2,00
Three-years-old,	-	-	1st premium,	-	4,00
			2d premium,	-	2,00
Two-years-old,	-	-	1st premium,	-	4,00
			2d premium,	-	2,00

MARES AND SUCKING COLTS.

The mares must be four years old and upwards, accompanied with their colts.

Breeding mares,	-	-	1st premium,	-	\$6,00
			2d premium,	-	4,00
Colts, less than one year old,	-	-	1st premium,	-	3,00
			2d premium,	-	2,00
			3d premium,	-	1,00

DRAUGHT AND FAMILY HORSES.

Committee.—S. W. A. Stevens, of Gardner; Antipas Maynard, of Ashburnham; S. M. Dole, J. P. Putnam, Leonard Day, of Fitchburg.

Draught horses will be tried, attached to a stone boat, loaded to weigh one-third more than the horses.

The same draught horse cannot receive a premium as a single horse

and also as one of a pair, but a draught horse may compete as a family horse.

These must all be four years old and upwards.

Draught horses, and mules, pairs,	-	1st premium,	-	\$6,00
		2d premium,	-	4,00
Draught horses, single,	-	1st premium,	-	5,00
		2d premium,	-	3,00
Family horses,	-	1st premium,	-	5,00
		2d premium,	-	3,00

COLTS.

Committee.—Joel Merriam, Jr., Allen B. Wood, of Westminster ; Benjamin Wallis, of Ashby ; W. L. Brown, of Lunenburg ; Leander P. Comee, of Fitchburg.

Three-years-old Geldings,	-	1st premium,	-	\$4,00
		2d premium,	-	2,00
Three-years-old Fillies,	-	1st premium,	-	4,00
		2d premium,	-	2,00
Two-years-old Geldings,	-	1st premium,	-	4,00
		2d premium,	-	2,00
Two-years-old Fillies,	-	1st premium,	-	4,00
		2d premium,	-	2,00
Yearling Colts,	-	1st premium,	-	4,00
		2d premium,	-	2,00

SHEEP.

Committee.—Joel Davis, H. P. Messenger, Edward Smith, of Fitchburg ; C. S. Merriam, of Westminster ; Jesse Foster, of Ashby.

Flocks, not less than six, owned by one

person,	-	1st premium,	-	\$4,00
		2d premium,	-	2,00
Cossets,	-	1st premium,	-	2,00
		2d premium,	-	1,00
		3d premium,	-	,50

POULTRY.

Committee.—Henry A. Willis, Natt Cowdin, A. S. Dole, James McIntire, James F. Monroe, of Fitchburg.

Barn-yard Fowls, not less than six,	-	1st premium,	-	\$2,00
		2d premium,	-	1,00

Turkeys, not less than six,	-	-	1st premium,	-	\$2,00
			2d premium,	-	1,00
Geese, not less than six,	-	-	1st premium,	-	2,00
			2d premium,	-	1,00
Ducks, not less than six,	-	-	1st premium,	-	2,00
			2d premium,	-	1,00

PLOWING MATCH.

All entries for plowing must be made on or before the Wednesday previous to the exhibition, and one dollar must be deposited with each entry, to be returned to the competitor if he plows, otherwise forfeited to the Society.

No teams or parts of teams will be allowed to compete for more than one of the premiums on plowing.

DOUBLE TEAMS.

Committee.—John Brooks, Jr., of Princeton; P. H. W. Lowe, of Leominster; George Hayward, of Ashburnham; Levi Downe, of Fitchburg; M. G. Everett, of Princeton.

Double Teams,	-	-	1st premium,	-	\$7,00
			2d premium,	-	5,00
			3d premium,	-	3,00

SINGLE TEAMS.

Committee.—Cyrus Kilburn, of Lunenburg; John G. Woodward, of Ashburnham; David Laws, of Westminster; Paul Gates, of Ashby; Levi Kendall, of Fitchburg.

Single Teams,	-	-	1st premium,	-	\$7,00
			2d premium,	-	5,00
			3d premium,	-	3,00
Minors, with Steers,	-	-	1st premium,	-	6,00
			2d premium,	-	4,00
			3d premium,	-	2,00

HORSE TEAMS.

Committee.—James Putnam, of Lunenburg ; Warren Simonds, of Templeton ; Josiah Puffer, of Harvard ; Chas. H. Loring, of Sterling ; Samuel R. Damon, of Ashby.

Horses or Mule Teams,	-	-	1st premium,	-	\$7,00
			2d premium,	-	5,00
			3d premium,	-	3,00

C R O P S .

All entries for Premiums in this department must be made with the Secretary, on or before June 1st, with the exception of English turnips, which must be entered on or before August 1st. Immediately after these dates the Secretary will transmit to all competitors a copy of the blank form adopted by the Trustees, to correspond with the requirements of the following extract from the Statute Laws of 1859, viz :

Chapt. 232, Sect. 2. “No incorporated Agricultural Society shall award a premium for a field crop, without satisfactory evidence, under oath, presented to its Committee or other officers, that the whole merchantable crop so entered, has been weighed when harvested, if a grass or root crop, and when threshed or husked, if a grain or corn crop.”

These forms must be returned to the Secretary on or before Nov. 10th, with each question concerning the crop answered, and the certificates properly signed.

No person will be allowed to compete for more than one Premium, with a crop raised upon the same field, however large, with the same treatment.

Committees should not encourage the *irregular* entry of *accidental* good crops.

G R A I N .

Committee.—John P. Sabin, A. P. Goodridge, of Fitchburg ; Washington Nichols, of Gardner ; Samuel Hayward, of Ashby ; Hosea Green, of Ashburnham.

The Committee may award gratuities for valuable new varieties of grain.

For the most profitable crops of Corn, Wheat, Rye, Barley and Oats, one acre each ; of Cabbages and Beans one-eighth acre each ; the product of Corn to be not less than 4320 lbs. on the cob. ; that of Wheat, Rye, Barley and Oats not less than 1200 lbs. of grain each.

Corn,	-	-	-	-	1st premium,	-	\$10,00
					2d premium,	-	7,00
					3d premium,	-	4,00
					4th premium,	<i>Grasses and Forage Plants</i>	
Wheat,	-	-	-	-	1st premium,	-	8,00
					2d premium,	-	5,00
					3d premium,	<i>Harris on Insects</i>	
					4th premium,	<i>Grasses and Forage Plants</i>	
Rye,	-	-	-	-	1st premium,	-	3,00
					2d premium,	-	2,00
Barley,	-	-	-	-	1st premium,	-	3,00
					2d premium,	-	2,00
Oats,	-	-	-	-	1st premium,	-	3,00
					2d premium,	-	2,00
White Beans,	-	-	-	-	1st premium,	-	2,00
					2d premium,	-	1,00
Herds-grass Seeds,	-	-	-	-	1st premium,	-	2,00
					2d premium,	<i>Grasses and Forage Plants</i>	
Red Top Seeds,	-	-	-	-	1st premium,	-	2,00
					2d premium,	<i>Grasses and Forage Plants</i>	

The Grass Seed, a half-bushel of each lot, to be exhibited at the show.

Cabbages,	-	-	-	-	1st premium,	-	2,00
					2d premium,	-	1,00

ROOT CROPS.

Committee.—J. M. Sawtell, of Fitchburg ; Henry C. Hill, of Gardner ; N. S. Boutelle, J. M. Harris, Benj. Safford, of Fitchburg.

For the most profitable crops of Potatoes, one-fourth acre each ; of Carrots, Onions, Beets and Turnips, one-eighth acre each.

Potatoes, not less than 3000 lbs.,	-	1st premium,	-	\$4,00
		2d premium,	-	3,00
Carrots, not less than 5500 lbs.,	-	1st premium,	-	4,00
		2d premium,	-	3,00

Onions, not less than 2000 lbs.,	1st premium, <i>Harris on Insects</i>	
	2d premium, -	2,00
Sugar Beets, - -	1st premium, -	2,00
	2d premium, -	1,00
Mangold Wurzels, - -	1st premium, -	2,00
	2d premium, -	1,00
English Turnips, - -	1st premium, <i>Harris on Insects</i>	
	2d premium, -	2,00
Turnips, of any other variety,	1st premium, <i>Harris on Insects</i>	
	2d premium, -	2,00

F A R M S .

Committee.—Thomas Billings, of Lunenburg; A. F. Adams, of Fitchburg; Joseph W. Forbush, of Westminster.

All competitors must make their entries on or before the first day of May. Each farm will be open to the inspection of the Committee during the entire season. A detailed statement of the general management, together with the income and expenses for the year, must be furnished on or before November 10th.

For the best cultivated and managed

Farms, - - -	1st premium, -	\$15,00
	2d premium, -	8,00

G A R D E N S .

Committee.—Alvah Crocker, Oliver Kendall, C. A. Emory, of Fitchburg.

No person having received a premium for a vegetable garden shall be allowed to compete for another with the same land within five years, except for a higher one.

Entries must be made on or before June 1st.

Kitchen Gardens, - -	1st premium, -	\$6,00
	2d premium, <i>Harris on Insects</i>	
	3d premium, -	2,00
Flower Gardens, - -	1st premium, -	2,00
	2d premium, -	1,00

E X P E R I M E N T S .

Committee.—Jabez Fisher, J. A. Marshall, W. G. Wyman, of Fitchburg.

All entries must be made at least one week before commencing the Experiments.

There will be placed at the disposal of the Committee for the best and most reliable Agricultural Experiments, made in 1862, the sum of \$50,00.

E X P E R I M E N T S W I T H M A N U R E S .

Committee.—Jabez Fisher, of Fitchburg ; Thomas Billings, Lemuel Pitts, of Lunenburg.

In accordance with the requirements of the Board of Agriculture, there will be paid for the most thorough, exact and reliable experiments upon the proper depth of applying manures, five premiums, as follows :

1st premium,	-	\$25,00
2d premium,	-	20,00
3d premium,	-	15,00
4th premium,	-	10,00
5th premium,	-	5,00

A circular containing full directions for the performance of these experiments, which are to be continued through a rotation of three years—the premiums to be paid in the fall of 1862—will be supplied to all persons wishing to compete, on application to the Secretary.

T O W N H A L L .

No article intended for the Hall will be entitled to a premium, unless it shall have been deposited by one o'clock, P. M., on Tuesday, from which time the Hall will be occupied by the Committees exclusively, until half-past six o'clock, when it will be opened to the public for the evening. Admission fee, 10 cents ; Season tickets, 25 cents.

All articles must have been grown, manufactured or produced by the person entering the same for premium, and should be plainly marked with the name and residence of the exhibitor, and not by numbers, as heretofore.

A strict compliance with these regulations will be absolutely necessary.

APPLES, PEACHES, PLUMS AND QUINCES.

Committee.—Daniel C. Miles, of Westminster; D. H. Merriam, Norman Stone, Cyrus Thurston, of Fitchburg; J. C. Allen, of Leominster.

APPLES.

For the best and largest exhibitions of named varieties, of three specimens each, - - - - -	1st premium, -	\$1,00
	2d premium, <i>Harris on Insects</i>	
For twelve varieties, of five specimens each,	1st prem. <i>Harris on Insects</i>	
	2d premium, -	2,00
	3d premium, -	1,00
For six varieties of five specimens each,	1st premium, -	2,00
	2d premium, -	1,50
	3d premium, -	1,00
For three varieties of ten specimens each,	1st premium, -	1,50
	2d premium, -	1,00
	3d premium, -	,50
For the best exhibition of any one variety,	1st premium, -	1,50
	2d premium, -	1,00

No person will be allowed to compete for a premium in more than one of the above classes, with the same specimens of fruit.

PEACHES.

For the best collections, - - - ,	<i>Harris on Insects</i>	
For the best dishes or baskets, -	1st premium, -	2,00
	2d premium, -	1,00
	3d premium, -	,50

PREMIUMS.

PLUMS.

For the best collections,	-	-	-	-	\$2,00
For the best plates,	-	-	1st premium,	-	1,00
			2d premium,	-	,50

QUINCES.

For the best dishes or baskets,	-	1st premium,	-	1,00
		2d premium,	-	,50

In addition to the above premiums, there will be placed at the disposal of the Committee for gratuities, \$10,00.

PEARS AND GRAPES.

Committee.—Rodney Wallace, of Fitchburg; C. C. Field, of Leominster; Daniel Putnam, of Lunenburg; S. H. Sprague, of Westminster; Daniel Cross, of Fitchburg.

PEARS.

For the best and largest exhibitions of named varieties, of three specimens each,	-	-	-	1st premium,	-	\$4,00
				2d premium,	<i>Harris on Insects</i>	
For twelve varieties, of five specimens each,				1st premium,	<i>Harris on Insects</i>	
				2d premium,	-	2,00
				3d premium,	-	1,00
For six varieties, of five specimens each,				1st premium,	-	2,00
				2d premium,	-	1,50
				3d premium,	-	1,00
For three varieties of ten specimens each,				1st premium,	-	1,50
				2d premium,	-	1,00
				3d premium,	-	,50
For the best exhibitions of any one variety,				1st premium,	-	1,50
				2d premium,	-	1,00

No person will be allowed to compete for a premium in more than one of the above classes, with the same specimens of fruit.

GRAPES.

For the best displays of Foreign Grapes,	1st premium,	-	\$3,00
	2d premium,	-	2,00
	3d premium,	-	1,00
For the best displays of Native Grapes,	1st premium,	<i>Harris on Insects</i>	
	2d premium,	-	2,00
	3d premium,	-	1,00

In addition to the above premiums, there will be placed at the disposal of the Committee for gratuities, \$10,00.

ASSORTED FRUITS AND FLOWERS.

Committee.—C. H. B. Snow, of Fitchburg; Mrs. M. T. Gardner, of Shirley; Miss Mary Brooks, Mrs. N. A. Tufts, Mrs. William J. Clifford, of Fitchburg.

FRUIT.

For the best dishes or baskets,	1st premium,	-	\$2,00
	2d premium,	-	1,00

FLOWERS.

For best displays of named Plants in pots,	1st premium,	-	2,00
	2d premium,	-	1,00
For the best displays of cut Flowers,	1st premium,	-	2,00
	2d premium,	-	1,00
	3d premium,	-	,50

In addition to the above premiums, there will be placed at the disposal of the Committee for gratuities, \$10,00.

V E G E T A B L E S .

Committee.—T. K. Ware, of Fitchburg; Porter Piper, of Leominster; Dennis Fay, of Ashby; Kendall Porter, N. C. Day, of Lunenburg.

Of Squashes, Pumpkins, Cabbages and Celery, there should be six specimens in each lot; of Cauliflower, three; of Onions, Beets, Turnips and Tomatoes, one peck in each lot; of Field Beans, one-half peck, and of Lima Beans, two quarts.

For the best collections of Kitchen Vege-

tables, - - -	1st premium, -	\$10,00
	2d premium, -	5,00
	3d premium, <i>Harris on Insects</i>	
Collections of Potatoes, - - -	1st premium, -	2,00
	2d premium, -	1,00
	3d premium, -	,50
Marrow Squashes, - - -	1st premium, -	1,00
	2d premium, -	,50
Hubbard Squashes, - - -	1st premium, -	1,00
	2d premium, -	,50
Crookneck Squashes, - - -	1st premium, -	1,00
	2d premium, -	,50
Pumpkins, - - -	1st premium, -	,75
	2d premium, -	,50
Cabbages, - - -	1st premium, -	,75
	2d premium, -	,50
Cauliflowers, - - -	1st premium, -	,75
	2d premium, -	,50
Celery, - - -	1st premium, -	,75
	2d premium, -	,50
Onions, - - -	1st premium, -	,75
	2d premium, -	,50
Turnip Beets, - - -	1st premium, -	,75
	2d premium, -	,50
English Turnips, - - -	1st premium, -	,50
	2d premium, -	,25
Tomatoes, - - -	1st premium, -	,50
	2d premium, -	,25

PREMIUMS.

97

Field Beans,	-	-	-	1st premium,	-	,50
				2d premium,	-	,25
Lima Beans,	-	-	-	1st premium,	-	,50
				2d premium,	-	,25
Seed Corn, in traces,	-	-	-	1st premium,	-	1,00
				2d premium,	-	,70
				3d premium,	-	,50

In addition to the above, there will be allowed for gratuities, 10,00

No person will be allowed to receive more than one copy of *Harris on Insects*; if more than one is awarded, cash will be paid instead, at the rate of \$3,00 per copy.

BREAD, BUTTER, CHEESE, PICKLES AND HONEY.

Committee.—Alfred Emerson, Nathan Upham, Charles Ide, Mrs. L. H. Bradford, Mrs. Abel F. Adams, of Fitchburg; Mrs. Howard Gates, of Ashby.

All Bread must have been baked on the Monday previous to the exhibition by unmarried ladies.

Competitors will be required to furnish a detailed statement in writing of the process of manufacturing Butter, Cheese and Pickles.

Wheat Bread,	-	-	-	1st premium,	-	\$2,00
				2d premium,	-	1,00
				3d premium,	-	,50
Unbolted Wheat Bread,	-	-	-		-	1,00
Bolted Rye Bread,	-	-	-	1st premium,	-	1,00
				2d premium,	-	,50
Rye and Indian Bread,	-	-	-	1st premium,	-	2,00
				2d premium,	-	1,00
				3d premium,	-	,50
Lump Butter, not less than 12 lbs.,				1st premium,	-	4,00
				2d premium,	-	3,00
				3d premium,	-	2,00
				4th premium,	-	1,50

June Tub Butter, not less than 25 lbs.,	1st premium,	\$3,00
	2d premium,	2,00
	3d premium,	1,00
Cheese, not less than 50 lbs., -	1st premium,	2,00
	2d premium,	1,50
	3d premium,	1,00
Pickles, - - -	1st premium,	,75
	2d premium,	,50
	3d premium,	,25
Virgin Honey in the comb, -	1st premium,	2,00
	2d premium,	1,00
	3d premium,	,50

MECHANICS AND MANUFACTURES.

Committee.—Stephen Shepley, S. F. Atherton, G. P. Hawkins, John Prichard, Aaron Wilkins, Lucius Aldrich, of Fitchburg; Amasa Bancroft, of Gardner.

For the best specimens of Mechanic and Manufactured articles, exclusive of ladies' home manufacture, there will be placed at the disposal of the Committee, the sum of \$100,00.

FINE ARTS.

Committee.—Kendall Brooks, W. F. White, of Fitchburg; Wm. Allen, of Leominster; Mrs. D. L. Abbercrombie, of Lunenburg; Mrs. Leander Comee, Mrs. J. A. Marshall, of Fitchburg.

For the best specimens of Paintings, Drawings, or other kindred productions in the Fine Arts, there will be placed at the disposal of the Committee the sum of \$20,00.

FANCY ARTICLES.

Committee.—Elnathan Davis, of Fitchburg; Jerome Gardner, of Shirley; Mrs. Eben'r Torrey, Mrs. Edwin Upton, Mrs. Waldo Wallace, Mrs. Benj. Snow, Jr., Mrs. Jabez Fisher, of Fitchburg; Mrs. W. A. Mandell, of Lunenburg.

For the best specimens of Ladies' Useful and Fancy Articles, of their own manufacture, including specimens of nice mending and darning, there will be placed at the disposal of the Committee, the sum of \$20,00.

ESSAYS.

Committee.—Eben'r Torrey, Moses Wood, E. F. Bailey, of Fitchburg.

All persons competing for these premiums must file their Essays with the Secretary on or before the 1st of September. Each Essay is to be marked with a motto or design, and accompanied with a sealed envelope containing a corresponding motto or design, and also the name of the author.

The envelopes of the successful competitors will be opened on the day of the exhibition, immediately upon the announcement of the awards.

For the best Essays on some practical subject connected with Agriculture, deemed worthy of publication in the Society's "Transactions."

1st premium,	-	\$10,00
2d premium,	-	5,00

PROSPECTIVE.

FOREST TREES.

All persons competing for the following premiums, must make their entries on or before the first day of June, in the year in which the premiums are to be awarded, and furnish a detailed statement of the whole management from the time of setting out, on or before November 10th of the same year.

For the best Plantations of any kind of Forest Trees, suitable for fuel or timber, raised from the seed, not less than five hundred in number, which shall be in the most flourishing condition in the fall of 1863,

1st premium,	-	\$25,00
2d premium,	-	15,00
3d premium,	-	10,00

EXPERIMENTS WITH MANURES.

Committee.—Solon Carter, of Leominster; Ephraim Graham, of Lunenburg; Isaac B. Woodward, of Fitchburg.

In accordance with the requirements of the Board of Agriculture, there will be paid for the most thorough, exact and reliable experiments upon the proper depth of applying manures, three premiums, as follows:

1st premium,	-	\$25,00
2d premium,	-	20,00
3d premium,	-	15,00

A circular containing full directions for the performance of these experiments, which were to be commenced in 1861, and continued through a rotation of three years—the premiums to be paid in 1863—will be supplied to all persons wishing to compete, on application to the Secretary.

GRAPES.

For the best Plantations of Native Grapes,
containing not less than fifty vines, all
having been set after Jan. 1, 1861, to
be awarded in 1864, - -

1st premium,	-	\$20,00
2d premium,	-	10,00

APPLES.

For the best Orchards of not less than fifty
trees, all having been set after Jan. 1,
1861, to be awarded in 1865, -

1st premium,	-	25,00
2d premium,	-	10,00

PEARS.

For the best Orchards of not less than fifty
trees, all having been set after Jan. 1,
1861, to be awarded in 1866, -

1st premium,	-	25,00
2d premium,	-	10,00

R U L E S .

All teams entered for plowing and for draught, must have been owned by the person entering the same for at least three months next previous, and the team must be driven, and the plow managed by him or by some one usually in his employ.

Any person competing for a premium who shall serve on a Committee having charge of the department in which he competes, shall retire from the Committee while his own competition is in question.

The several Committees will not consider themselves bound by the terms of the above offers, to award a premium for anything which they shall deem inferior.

Any person to whom a Premium shall have been awarded in consequence of any deception or misrepresentation used by him, shall not only forfeit such premium, but afterward be incapable of competing for the Society's Premiums.

All persons (ladies and minors excepted), not members of the Society, to whom may be awarded a Premium or Premiums amounting to \$5,00 or upwards, shall receive a certificate of membership for \$5,00, and the balance in cash. If the amount shall be less than \$5,00, a deduction of fifty per cent. will be made, unless the individual chooses to make the amount up to that sum, and receive a certificate of membership.

All Premiums not demanded on or before November 30th, will revert to the Society.

An extract from the General Laws of Massachusetts, passed in 1859.

Chap. 232, Sec. 1. "No animal or article, for which a premium shall have been awarded to the owner, by any incorporated Agricultural Society, receiving the bounty of the State, shall be considered a subject for any further premium of the same or any other such incorporated Society, except for qualities different from those for which the former premium was awarded, or for a higher premium; and no animal or article in any year offered for a premium, at any such Society, shall be offered for a premium at any other such Society in the same year; but nothing in this Act shall affect, restrain, or limit a competitor for premiums offered by the State Board of Agriculture, or the Massachusetts Society for the promotion of Agriculture, to be awarded within the incorporated County Agricultural Societies; but such premiums shall be subject to the rules and regulations prescribed by said Board, or by the Trustees of said Massachusetts Society."

Sec. 5. "A Society which shall neglect, in any year, to comply with the several general laws concerning Agricultural Societies, or with such regulations of the Board of Agriculture, shall not be entitled to the bounty of the State the year next succeeding."

CONTENTS.

	PAGE.
Annual Meeting,	12
Analysis of Premiums and Gratuities awarded,	72
Committees and Premiums for 1862, -	81
Life Members, names of,	73
Officers for 1861, list of,	12
Officers for 1862, list of, -	80
Report on Apples, -	42
Bread,	49
Bulls,	22
Butter,	49
Cheese, -	49
Colts, one, two and three years old,	21
Draught Horses and Mules,	21
Experiments,	65
Experiments directed by the State Board,	66
Fancy Articles,	50
Fat Cattle,	38
Flowers, -	45
Fruits, Assorted,	45
Grain,	64
Grapes,	44
Heifers, -	33
Honey,	50
Mares and Colts,	18

	PAGE.
Report on Mechanics and Manufactures, - - - -	52
Milch Kine, - - - -	30
Orchards and Vineyards, - - - -	58
Peaches, - - - -	43
Pears, - - - -	44
Pickles, - - - -	49
Plowing, - - - -	13
Poultry, - - - -	40
Quinces, - - - -	43
Sheep, - - - -	39
Spading, - - - -	17
Stallions, - - - -	17
Steers, two and three years old, - - - -	36
Swine, - - - -	41
Vegetables, - - - -	46
Working Oxen, - - - -	34
Yearling Steers and Steer Calves, - - - -	37
Rules for 1862, - - - -	102
Secretary's Report, - - - -	3
Abstract of Mr. Brooks' Remarks, - - - -	8
Statement of A. O. Cummins, Short Horn Cattle, - - - -	23
Adams, Abel F., Milch Cows and Heifers, - - - -	31
Caswell, Nathan, Devons, - - - -	28
Dole, David B., Milch Heifer, - - - -	33
Fisher, Jabez, Plantation of Native Grapes, - - - -	58
Page, Joel, Jersey Stock, - - - -	27
Reed, N. B., Cow, - - - -	32
Stratton, Albert, Experiments with Manures, - - - -	66
Wyman, W. G., Plantation of Native Grapes, - - - -	62
Wyman, W. G., Experiments with Fertilizers, - - - -	65
Woodward, Isaac B., Experiments with Manures, - - - -	67
Wyman, W. G., Experiments with Manures, - - - -	68
Treasurer's Report, - - - -	70

TRANSACTIONS
OF THE
WORCESTER NORTH
AGRICULTURAL SOCIETY,
FOR 1862.

PREPARED BY THE SECRETARY.



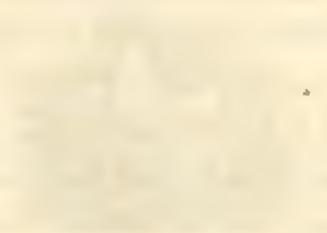
FITCHBURG:
PRINTED BY E. GARFIELD.
1862.

1910

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO



THE UNIVERSITY OF CHICAGO

ADDRESS.

BY A. N. ARNOLD, D. D.

Members of the Worcester North Agricultural Society :

I should have abundant reason to be embarrassed in appearing before you to-day, if I supposed that you expected to be *instructed* in regard to the details or the process of any department of agricultural industry. It is my misfortune to be wholly unacquainted with the practical part of the subject. But it will, perhaps, not be an unwelcome, nor wholly unprofitable diversion of your thoughts from practical details, if I occupy your attention during this half hour with some speculative and statistical aspects of the general theme. There are comprehensive and far-reaching views of this great subject of the cultivation of the ground, as well as practical rules and minute details.

“The profit of the earth is for all: the king himself is served by the field.” All human life is sustained by food; and that food consists either of the products of the soil, cultivated and uncultivated, or of the animals that are fed and fattened by those products. The only important exception is that of the produce of the waters, which contribute also their share towards the sustenance of the human race. Without cultiva-

tion, the earth could support but a comparatively small population, and this only of uncivilized men. Savages may subsist by hunting and fishing, with such eatable herbs, fruits and roots, as the ground spontaneously produces ; but they can never advance in civilization, while they live in this way ; nor can those portions of the earth's surface which are not cultivated sustain, for any considerable period, more than a very sparse population. The productiveness of the earth, in those substances which are necessary to maintain human life, and equally in those substances which minister to human comfort, and to the progress of civilization, depends very largely upon that human tillage which we denote by the word, agriculture. This undeniable fact at once challenges for agricultural labor the most important place and the most honorable rank among the diversified employments of men. In connection with this great fact, I would invite your attention to some general views of the productiveness of the earth. There are several aspects of this subject which are adapted to suggest interesting moral reflections, and to open important questions in regard to the future prospects of mankind.

We may introduce the subject by considering, first, the earth's productiveness as limited by the extent of its land surface. Of the 200,000,000 square miles which make up the surface of this terraqueous globe, about three-fourths are covered with water, leaving only about 50,000,000 square miles, or 32,000,000,000 acres of land. We might wonder that so large a proportion of the earth's surface should be covered with water, and be tempted to adopt the suggestion of an

old writer, (I think it is Sir Thomas Browne,) that "God loves *fishes* better than *men*," if we did not know that this vast watery expanse not only contributes to the fertility of the continents, but is absolutely necessary to their capacity for great productiveness. So great an evaporating surface is indispensable to furnish the material for watering the whole face of the ground. The boundaries of sea and land are fixed by the wisdom of the Creator, and perpetuated by the natural laws which he has established, so that we may not expect any considerable change in the relative proportions of these two essentially different components of the exterior of the globe which we inhabit. We know that on certain coasts, the sea has long been encroaching on the land, and that on certain others, the land has been crowding the water back: but these two opposite movements probably nearly balance each other, or, if they do not, they are so slow and limited in their action, that they do not materially affect the productiveness of the earth. The proportions of land and water over the whole globe are probably not now different, by any appreciable quantity, from what they were when Noah died. Human industry may do something, as in Holland, to scoop out a country from the ocean, and it may accomplish still more by draining lakes and marshes; but after all, it is not probable that any very considerable addition will ever be made by man to the producing surface out of which the growths that support human life must come. How far human industry, ingenuity and science may avail in reclaiming the naturally sterile regions of the earth, it may not be easy or safe to affirm. Utter sterility, such as that of the great sandy plains of Asia

and Africa, is probably incurable by any means that will ever be in the power of man. If we could first make the rain descend, where there is no roughness or variety of surface, and no vegetation, to disturb the equilibrium of the atmosphere, and none of the geographical conditions on which showers depend, vegetation would doubtless gradually encroach upon the arid waste. Or if we could first produce vegetation where there is no rain to water the parched ground, then the fertilizing showers would, no doubt, by an atmospheric law, in due time descend. But since we can command neither of these, we may as well regard those great deserts of the Eastern Continent as irretrievably doomed to perpetual unproductiveness. The great belt of barren sand which stretches across the northern part of Africa, and the centre of Asia, comprises about 6,500,000 square miles. Adding to this the aggregate of smaller tracts of land equally, or almost equally sterile, we have a total of about one-seventh of land surface of the globe which cannot be made to yield any tribute to human life or human luxury. The proportion is remarkable. As one-seventh of time is morally excepted from the term of human labor, so one-seventh of the ground is naturally excepted from the field of human industry, enjoying a grand and solemn Sabbath stillness.

A second aspect in which the productive power of the earth may be considered, is with reference to improved modes of cultivation. It is impossible to fix a limit to the extent to which science and labor may increase the products of the soil. We see a vast difference in this respect between different countries

equally favored by nature. Thus, in the Austrian Empire, there is more land under cultivation than in the British Isles, and this land is not of inferior quality, yet the production is one-third less; and this difference is mainly owing to the superior intelligence and more skillful cultivation of the Britons. Great expectations were entertained by theorists a few years ago, in regard to the results of the application of chemistry to agriculture; but I believe the diversity of ingredients in the soil, in different parts of the same field, presents an insurmountable difficulty in the way of the successful analysis of soils. But although science may not have succeeded, in this particular instance, in effecting any great addition to the productiveness of the ground, yet there can be no doubt that it will be found true in this matter, as in others, that "knowledge is *power*;" and it is therefore reasonable to look for a vast increase in the productiveness of land in all countries where civilization and intelligence prevail. It is only by gradual steps as knowledge has increased, and prejudice has been overcome, that the present amount of productiveness has been attained: yet the advancement, though gradual, has been wonderfully great. In the eleventh century, the average yield of wheat was not more than six bushels to the acre. It has fully trebled since that time, has it not? And to go back only half a century, the productive power of Great Britain, in the article of wheat alone, increased from 1801 to 1851, to an extent sufficient to support an additional population of 7,000,000; and this increase was mainly owing to improved cultivation.

The productiveness of the soil may be considered,

again, as affected by its division into small or large estates. Whether the greatest amount of natural products and of national prosperity can be obtained by having few owners and large estates, or by having many proprietors and small farms, is a question about which writers on political and social science are not agreed. Where the owners are few, and the estates large, the accumulation of capital gives greater facilities for introducing all improvements in the mode of cultivation, and so favors the highest degree of productiveness. But, on the other hand, where the landholders are many and the farms small, more land will be brought under cultivation, and so the aggregate production may be greater than where a smaller portion of the soil is tilled in the most approved methods, and brought to the highest degree of fruitfulness. The question will be likely to be decided by each one according to his preference of an aristocratic or a democratic condition of society. Large estates tend to great social inequality. Landed proprietors are regarded as the superior class, the only true *citizens*; and the condition of the actual laborers on the soil, if not that of slavery or serfdom, tends strongly in that direction. Multiply the number of proprietors of the soil, and you secure more intelligence and independence in those who cultivate it,—a hardy, virtuous, freedom-loving yeomanry, such as constitute the best citizens of a free state. In England the number of proprietors is less, compared with the extent of land, than in any other country of Europe; and England is the most aristocratic country in the world. With an accumulation of wealth never equalled in the history of the world, about one-tenth of its entire popu-

lation are paupers,—that is, they receive eleemosynary aid from the public purse. Much of this pauperism may be attributed to the intemperate and improvident habits of the poorer classes : but they would be much more likely to be temperate and provident, if they were owners of an amount of land sufficient, with temperance, prudence and industry, to support a family in comfort, and gradually to raise them to a higher social position. Besides, in the vast estates of the nobles, large tracts of land are wholly unproductive, devoted to parks for game, and other aristocratic uses. In Ireland, the evils of this overgrown ownership of land aggravated by the privilege of entail and the abuse of non-residence, had become intolerable ; and the government was obliged to provide a remedy, by an act of Parliament requiring the sale and division of encumbered estates. Since that act was passed, less than fifteen years ago, about \$150,000,000 worth of landed property has changed hands. And it is a significant fact, that within these limits of time, the number of children in the national schools has increased by more than half a million, although the population has been reduced by emigration during the same period fully 2,500,000. To express the change in the form of a proportion, the attendance in the schools has increased 285 per cent, (from 282,000 in 1843, to 804,000 in 1861,) while the population has diminished 30 per cent, (from eight and one-fourth millions to five and three-fourth millions,) showing an advance of above 400 per cent, (407) in the popular appreciation of the value of education. This is but one index of that great social revolution which is transforming Ireland into an industrious,

intelligent, prosperous and Protestant country. England, with all her high advance in agricultural industry, does not raise grain enough to feed her own people; or at least, does not feed her own people with the grain which she raises. France, with a soil less fertile, with a much less perfect system of agriculture, and with a population only 25 per cent less to the square mile, exports, when crops are good, from \$15,000,000 to \$20,000,000 worth of grain more than she imports. She raises on an average 225,000,000 bushels of wheat annually, or nearly seven bushels to every inhabitant. This is accounted for, in great part, by the fact, that in France there are 11,000,000 proprietors of land, or nearly one-third of the whole population, giving to each owner an average of five acres of arable land, while in England the proportion of land owners is probably not more than one in ten, at the most, and the greater portion of the whole cultivable land in the country is owned by only a few thousand nobles. Switzerland, mountainous and snow-clad Switzerland, with a population only one-eighth less dense than that of France, and if the space that admits of cultivation be alone taken into account, quite as dense as that of England, raises a greater proportion of the food which its inhabitants consume than England does. For in Switzerland, as in France, the land is divided among many small owners. The application of this principle to the different sections of our own country is obvious. Our Southern lands have been tilled by large and wealthy proprietors, and the result has been a lordly aristocracy, incompatible with republican ideas and republican institutions. Another result has been, the ignorance and

degradation of the great body of the population, whether white or black, whether free or enslaved. Slavery has no doubt been the chief cause and the worst aggravation of this state of society; but even apart from slavery, the ruin of these overgrown planters, and the division of their estates among a tenfold or hundredfold number of owners, would be a blessing to the land, conducive to productiveness, intelligence, virtue, and loyalty to republican ideas. We long hoped that this truth would become evident to these proprietors themselves, who were so proud of their monopoly of all the intelligence, and all the freedom, and all the nobleness of the land, as well as of all the land itself; and that considerations of political economy, of justice, of humanity, and of religion, would ultimately lead them to adopt more reasonable, righteous, and republican social institutions and forms of industry: but we were mistaken. Providence has brought the matter to another issue, and these overgrown aristocratic estates must be carved into smaller republican farms by the sharp sword of war.

The nutritive productiveness of the earth is affected, moreover, by the cultivation of unnutritious products. I do not refer to products which, though they do not furnish *food* for man yet minister to his wants and his comfort, such as cotton, flax, and other articles which are manufactured into clothing, and used in various other ways conducive to human civilization and progress. These are only in one degree less necessary than the products which go directly to sustain the life of man. I refer rather to those growths of the soil which are either absolutely pernicious, or at least useless, and to

those which are perverted to pernicious uses. Large tracts of productive land are occupied with crops of this kind. In the United States, the land devoted to the culture of tobacco is more than twice the amount that is occupied with the cultivation of rice, (400,000 acres : 175,000 acres,) and nearly half as much as that improved in raising beans and peas. In England, the land appropriated to raising grain for the manufacture of malt and distilled liquors would more than suffice to produce all the wheat which that country now imports; and this last use of it in place of the former, besides saving the country the \$80,000,000 or \$100,000,000 which she now pays annually for foreign wheat and flour, would increase the industry and thrift of her laboring class, and greatly diminish intemperance and pauperism. Millions of fertile acres in the Turkish Empire, and in British India, are occupied with the opium poppy; and the manufactured product goes to diminish the productive industry of every country where the drug is in common use, as it is throughout almost all Southern Asia.

The productive power of the earth is materially affected, again, by the difference between a state of peace and a state of war. War interferes with the supply which the earth produces for the wants of man in a variety of ways. It calls off many from the employments of agriculture to the service of arms. It diminishes the motives to agricultural industry, by making its avails uncertain and insecure. It lays waste fertile fields, and tramples down under its iron heel the unreaped harvests of the husbandman. Rival armies contend with each other for the ground where

the rich harvests of autumn wave, as lately we saw in the valley of the Shenandoah; and the result often is that the greater portion is destroyed, while only a remnant goes to feed the contending hosts, and the poor laborer is left to hunger and want. War causes an immense waste in consumption. In the feeding of large armies, there is an utter disregard of all that economy and thrift which characterize the ordinary household consumption in times of peace. Some political theorists have regarded war as a convenient means of reducing a surplus population. It may well be questioned, whether war ever fails to reduce the *production* of a country in fully as large a proportion as it reduces population. If it did not, it would be reasonable to look for a diminution in the price of the necessaries of life in time of war, whereas in fact it is well known that an advance in the prices of these necessaries is an almost invariable accompaniment of a state of warfare.

There is one more interesting view of the productive power of the earth, namely, its relation to the natural growth of population. There has been, from the beginning, a constant increase in the total population of the globe, constant, except as interrupted by one great judgment of God in ancient times. Population may be checked in a particular country, for a time, by pestilence, by war, by bad government and oppression. Thus want, discontent, and consequent emigration, have greatly reduced the population of Ireland, within the last quarter of a century. And, on the other hand, a particular country may gain much more than its natural increase, as this country has gained by immigration from

the old world. But leaving out of view these exceptional instances, in both directions, the natural tendency of population, in all countries not particularly barren, unhealthy, or ill-governed, is to a constant increase, up to the limit of their producing power. If it be true, that our race is advancing in civilization, knowledge, virtue and power, then the increase of the world's population will go on in an accelerated ratio. If men live more justly, temperately and virtuously, they will live longer, thrive better, and rear larger families. If wars ever cease, one important check to the growth of population will be abolished. If oppression ceases, and good government obtains, prosperity will prevail, and where there is prosperity, population rapidly advances. If humanity and charity increase in the world, the poorer classes will be better cared for, better fed, better clothed, better housed, more healthy, more long-lived and more prolific. If sanitary and medical science advances, diseases will be less frequent and less fatal, and the average term of human life will be continually lengthening. These causes are already producing these results; mortality is decreasing; the average duration of human life is advancing, in the countries that have made most progress in civilization, good government, and benevolence. All these signs point to the approaching fulfillment of the prophecy of Isaiah,—“There shall be no more thence an infant of days, nor an old man that hath not filled his days: for the child shall die an hundred years old; and he that misses of an hundred years (so some understand the latter part of the verse,) shall be reckoned accursed,”—‘shall be regarded as cut off prematurely by a divine judgment.’ In view of

all these considerations, we are justified in expecting, if the world lasts, and mankind advances, a more rapid increase in the world's population than has ever taken place in the past. Will the earth be able to feed so many new mouths? or is "the good time coming" darkened by the serious drawback of a prospective and permanent famine? We can hardly be much troubled by this apprehension. An all-wise Providence never lacks the means of adapting one part of its merciful arrangements to another; and if it be decreed that a happy period of health, longevity, and populousness shall dawn upon this suffering world, the food needful to support that population will not be wanting. Some pious political economist has said, in view of such a period of dense population, that should the exigency require it, no doubt God would bring another empty world alongside, to take off the surplus population of this, just as easily as the conductor takes on another car, when the train is too full. There may be little likelihood of any such relief; but, yet, it does seem that some relief will by and by be needed. For while the productiveness of the earth may no doubt be vastly increased, there seems to be reason for anticipating a still greater and more rapid increase in the productiveness of the human species. Let us look again more carefully at the probabilities on both sides. The lands that are now worse than wasted,—devoted to the cultivation of that which injures man, physically and morally, shortens human life, and entails incalculable misery upon families, and untold burdens upon society, may be reclaimed to their legitimate use; the uncultivated wastes may be improved; the parched land may, by

means not yet understood, become springs of water ; the deserts, not absolutely and incurably barren, may rejoice and blossom as the rose ; and improved modes of cultivation may multiply many fold the harvests of the husbandman. The present population of the globe, according to the most reliable estimates is a little less than 1,300,000,000, (1,280,000,000.)

At the rate at which Belgium is peopled, the territory of the United States would nearly suffice for this entire number. And I have no doubt our country *could* sustain, even at the present rate of productiveness, if all our available land was under cultivation, a population as dense as that of Belgium, which is nearly four hundred (383) to the square mile. It is true that Belgium does not raise sufficient food for its present population ; but it is also true, that only about two-thirds of the land in that kingdom is under cultivation,—less than five millions of acres out of seven millions two hundred and fifty thousand. Even in England, to say nothing of Ireland, Wales, and Scotland, there are about 3,500,000 acres of waste land that might be improved. This is more than one-tenth of the whole area of the country, and more than one-eighth of the amount actually under cultivation. With all available land under improvement, and with the increased fertility which improved culture will bring, I think we may safely assume that the earth will be able to feed and clothe as many human beings as there are acres of cultivable land upon its surface. This would be equivalent to six hundred and forty persons to the square mile, a density of population more than sixty per cent. greater than that of Belgium, which is now the most

thickly peopled country in the world. Deducting then from the 50,000,000 square miles which compose the land surface of the globe, the liberal allowance of one-fifth, for deserts, inland waters, mountain steeps, ice-bound regions, and lands otherwise not susceptible of cultivation, we have 40,000,000 square miles remaining, which would support, on the above assumption, 25,600,000,000 inhabitants, or just twenty times the estimated population of the world at the present time. This would give to the United States more than 1,500,000,000 inhabitants. These numbers may seem amazing, and the supposition of such future populousness incredible. But let us consider the ratio in which the human race is actually increasing on the earth, and we shall see no reason to doubt that its growing population will fully keep pace with its utmost possible fruitfulness. Assuming that only 6,000 years ago, (and it is, in fact, considerably less,) there were but two human beings in this world, how many times has the number doubled itself, in the elapse of those 6,000 years? Less than thirty times. This is equivalent to doubling once in every 200 years. If the present population were doubled but five times, it would greatly exceed the vast number which we have estimated as the possible limit of the earth's capacity to support human life. That is to say, at this rate of increase, in less than 1,000 years from the present time there will be 30,000,000,000 human mouths for the earth to feed. But our calculation is at fault. We have overlooked that great destruction of mankind, which took place, according to the common reckoning, more than 1,600 years after men began to multiply on

the earth. Beginning then with the flood, there were eight human beings on the earth forty-four centuries ago. Double this number twenty-six times and you have more than the earth's present population. This would be doubling once in about 170 years, and would allow less than eight centuries for the earth to arrive at that extreme density of population which we have assumed as the limit of its capacity to furnish food for man. Are these idle speculations, based upon uncertain or extravagant data? If any think so, let them remember the rapid growth of our own country. In less than ninety years, we have increased from 3,000,000 to more than 30,000,000. This is more than equivalent to doubling once in every thirty years. If we make an ample allowance for immigration from foreign countries, the natural increase of our people, if it continue according to the past ratio, would double our population at least as often as every fifty years. This rate of increase, extended all over the world, would bring the population of the globe up to the enormous aggregate of 30,000,000,000 in less than 150 years. But it will probably be long before most countries of the earth attain to that measure of liberty, good government, and prosperity which has given us such an unprecedented increase.

Still, these estimates show what the present system of things is capable of, according to the laws which have regulated the increase of population in times past; and they give rise to grave thoughts in regard to the future destiny of this world. According to what seems to be but a sober and moderate estimate, in less than one thousand years at the farthest, in about one-

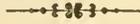
sixth of the time that mankind have already existed in the world, the number of human beings on the globe will fully equal the capacity of the earth to sustain them, according to any rate of productiveness in the soil which experience authorizes us to expect. What then shall we conclude? Shall fish be substituted for flesh and grain, and will man learn to be an amphibious cultivator of the watery acres, and all the year become one long Lent? Shall we have recourse to the supposition of a miraculous millennial fruitfulness of the ground, and endorse the prediction of Father Papias, the sanguine Chiliast bishop of the second century? "The days will come," he says, "in which there shall grow vineyards, having each 10,000 stocks; and each stock, 10,000 branches; each branch, 10,000 shoots; each shoot, 10,000 clusters; each cluster, 10,000 grapes; and each grape squeezed shall yield 10,000 measures of wine, (of nine gallons each;) and when any of the saints shall go to pluck a bunch, another bunch will cry out, 'I am a better bunch; take me, and bless the Lord through me.' In like manner a grain of wheat sown shall bear 10,000 stalks; each stalk, 10,000 grains; and each grain shall yield 10,000 pounds of the finest flour; and so all other fruits, seeds, and plants, in the same proportion. These things," adds the simple-hearted enthusiast, "are credible *to those who believe.*" But if our faith falls short of this millenarian measure, to what other supposition shall we have recourse? Shall we apprehend some second great catastrophe, like the ancient deluge, to relieve the overburdened earth, that it may start anew with only the remnant preserved in some new ark? That supposition

is forbidden by the voice of prophecy, assuring us that such a calamity shall never be repeated, but that the earth shall go on in its regular course of seed-time and harvest and multiplying population, till the end of all things. The seven-hued bow in the clouded heavens settles that doubt forever. Is the end of all things, then, as near as Dr. Cumming and his impatient adherents suppose? Are we rapidly approaching the final consummation, when the world and the works that are therein shall be burned up? We do not undertake to decide between these alternatives: we only say, that unless there is some undiscovered error in our calculations, there is sufficient theoretical ground to justify the raising of such questions. We are content to leave the solution of them to an all-wise Providence. The Creator of man placed him upon the earth with his task explicitly set, to "*replenish* the earth and *subdue* it." It is yet far from being replenished; it is yet far from being subdued. But our race is now accomplishing both parts of this mission with a rapidity altogether unprecedented in the ages past,—multiplying its numbers, subduing the wilderness, and yoking the powers and forces of nature into its service, as never before. Notwithstanding the doubts which our figures seem to justify, we are persuaded that these two operations will go on nearly parallel, so that the earth will not be replenished long before all the dominion that man can gain over nature shall be won; nor the earth thus subdued, until it is replenished nearly to its utmost capacity. When those limits shall be reached, and what shall thereupon ensue, we may calmly leave to the decision of Infinite Wisdom. The matter

belongs to those times and seasons which the Father hath put in his own power. He who commanded man to "be fruitful and multiply, and replenish the earth," will never suffer the world to become so populous, that the demand for food shall exceed the possible supply. However multiplied his human creatures may be, He will find means to satisfy their wants, and to fill their hearts with food and gladness. At any rate, "sufficient unto the day is the evil thereof." And we at least may say, sufficient unto the day is the food thereof. Our loaded tables, at these our annual feasts of harvest, sufficiently relieve us of all fear that we or our children will have to be put upon "short allowance," in consequence of the exhausted capacity of the earth to give us food. We may not say, revising the ancient motto of improvident selfishness,—“after us the famine,”—“let posterity take care of itself:” but we may safely and trustfully leave posterity to the care of that Benignant and Wonder-working Providence, which has supplied so bountifully the wants of the generations that have gone before us; and in the mean time, we may “eat our meat with gladness and singleness of heart, praising God.” If our speculations have encouraged the expectation that the earth is destined to be far more fruitful, and far more populous than it has ever yet been, that expectation agrees with the utterances of inspired prophecy. And if, at the same time, our speculations have conducted us to the conclusion, that the present system of things cannot continue always, that the rapid multiplication of human beings upon the earth is tending towards a *crisis* in the world's history necessitating some extraordinary divine interposition to meet the

emergency, that conclusion too is in accordance with the explicit declarations of the oracles of God. And so we come back from our wide wanderings over the earth and down the ages, bringing home at least this one sheaf of practical wisdom, that the laws of nature and of human progress are working out the very results which the Scriptures announce. Our speculations, however fanciful some of them may have seemed, will have done more than to amuse an idle hour, if they shall serve to present to our minds, in any new aspect of evidence or impressiveness, the important truth, that the God of nature and of providence is the God of the Bible, and that "the testimony of the Lord is sure, making wise the simple."

PAST PRESIDENTS AND ORATORS OF THE SOCIETY.



PRESIDENTS.

- 1850-1.—ABEL F. ADAMS, Esq., of Fitchburg.
1852-3.—HON. IVERS PHILLIPS, of Fitchburg.
1854-5.—HON. MOSES WOOD, of Fitchburg.
1856-7.—THOMAS R. BOUTELLE, M. D., of Fitchburg.
1858-9.—HON. JABEZ FISHER, of Fitchburg.
1860-1.—THOMAS BILLINGS, Esq., of Lunenburg.
1862-3.—LEWIS H. BRADFORD, Esq., of Fitchburg.

ORATORS.

- 1850.—HON. CHARLES HUDSON, of Lexington.
1851.—HON. R. RANTOUL, (appointment not filled.)
1852.—THOMAS E. PAYSON, Esq., of Rowley.
1853.—REV. HORATIO STEBBINS, of Fitchburg.
1854.—GOVERNOR EMORY WASHBURN, of Worcester.
1855.—HON. N. P. BANKS, of Waltham.
1856.—CHARLES L. FLINT, Esq., of Boston.
1857.—JUSTUS TOWER, Esq., of Lanesborough.
1858.—No appointment made.
1859.—HON. GEORGE S. BOUTWELL, of Groton.
1860.—DOCT. GEORGE B. LORING, of Salem.
1861.—HON. A. H. BULLOCK, of Worcester.
1862.—REV. A. N. ARNOLD, D. D., of Westboro.

OFFICERS OF THE SOCIETY FOR 1862.

ELECTED AT THE ANNUAL MEETING, WEDNESDAY, DECEMBER 4, 1861.

L. H. BRADFORD, of Fitchburg, *President.*

LEONARD BURRAGE, of Leominster, }
BENJAMIN WYMAN, of Westminister, } *Vice Presidents.*

W. G. WYMAN, of Fitchburg, *Secretary.*

T. C. CALDWELL, of Fitchburg, *Treasurer.*

OHIO WHITNEY, JR., of Ashburnham,
HOBART SPENCER, of Ashby,
S. W. A. STEVENS, of South Gardner,
C. C. FIELD, of Leominster,
W. B. HOSMER, of Leominster,
THOMAS BILLINGS, of Lunenburg,
CYRUS KILLBURN, of Lunenburg,
DANIEL PUTNAM, of Lunenburg,
JOHN BROOKS, JR., of Princeton,
HENRY BOYLES, of Princeton,
N. B. REED, of Princeton,
J. T. EVERETT, of East Princeton,
ANAN STOCKWELL, of So. Royalston,
NATHANIEL HOLDEN, of Shirley,
JAMES O. PARKER, of Shirley,
EZRA KENDALL, of Sterling,
J. M. SAWYER, of Sterling,
WARREN SIMONDS, of Templeton,
DANIEL C. MILES, of Westminister,
JOHN MINOTT, of Westminister,
E. MURDOCK, JR., of Winchendon,
A. F. ADAMS, of Fitchburg,
T. R. BOUTELLE, of Fitchburg,
JABEZ FISHER, of Fitchburg,
M. M. GAGE, of Fitchburg,
LEVI KENDALL, of Fitchburg,
ABEL MARSHALL, of Fitchburg,
J. A. MARSHALL, of Fitchburg,
JOEL PAGE, of Fitchburg,
J. P. PUTNAM, of Fitchburg,
JOSEPH UPTON, of Fitchburg,
I. B. WOODWARD, of Fitchburg,

Trustees.

JABEZ FISHER, of Fitchburg, *Member of the State Board
of Agriculture.*

SECRETARY'S REPORT.



THE distracted condition of our beloved country, the distress and sorrow almost everywhere prevalent in consequence of the cruel war now raging in the very midst of our previously happy land, the efforts being made by most of our citizens to sustain the Government in the vigorous prosecution of the war to a happy and we hope a speedy termination, and the consequent necessity for the most rigid economy of time, labor and money, induced the officers of many Agricultural Societies to omit, entirely, their annual exhibitions this season, as inappropriate to the times, and inconsistent with the duties of patriotism devolving upon all the members of these societies. Under these circumstances the officers of this society were frequently inquired of whether it would not be better to omit our exhibition and let all the funds that would otherwise be expended in premiums and other expenses go directly to support the Government?

This question was fairly met, and fully discussed, and the conclusion arrived at was, that while it is the duty of all citizens, in every department of business and labor, however humble, to aid and encourage the Government in its present troubles, in every possible

way, and to the extent of their ability, yet there are other ways in which this aid and support may be rendered our country than by enlisting in her armies, and fighting her battles, for those who do thus enlist and fight must be well fed and clothed, armed and equipped, else their sufferings will be greatly increased, their services wasted, and their lives lost to no avail; and those who produce, or aid in the production and manufacture of this necessary food and clothing, and these all important arms and equipments are also rendering valuable services to the same cause in which the others labor and suffer and die: in short, that the maintenance of our armies, the success of the war, and the future prosperity of the people depend in no small degree upon the diligence and success of those agriculturists, manufacturers and artizans who remain at home, and since the strongest, the bravest, and the best of all these classes are now in the field, (unless they have already fallen in their country's service,) and have become consumers and nonproducers of the articles so much needed; we who remain must do something more than weep and mourn for the loved and lost ones, and follow with our best wishes, and our prayers for their safety and success of the living. We must labor for them. And since the number and ability of the producers is very much lessened, and the absolute necessity for productions vastly increased, it becomes a question of no trifling importance how can intelligence, and skill, and labor be most advantageously applied so that the comparatively few and feeble laborers remaining can accomplish all, and more than all formerly accomplished by the many and the strong?

Perhaps there never was a time in the history of our country when it was so important that large quantities of corn and wheat, of beef and pork, and especially of wool should be grown as at present, to feed and clothe the multitudes of mechanics and manufacturers now directly or indirectly engaged in our country's service, to feed and clothe her vast armies and navies, and also to send abroad in exchange for foreign gold, and the productions of other regions for which our gold cannot now be spared.

It was decided, therefore, that any efforts or economical expenses on the part of our society, calculated "to benefit those who are engaged in agriculture and industrial pursuits, by inciting to investigation, to reflection, and to action, and by furnishing facilities for a free interchange of views, thereby to call forth the results of individual experience and observation, and to elicit practical and scientific information" which would aid, even in a small way, in the production and manufacture of these, and many other necessary articles, would be appropriate to the times, and consistent with the most patriotic views. The exhibition, therefore, with its accompanying discussions, and following publications were ordered, and occurred as usual.

The exhibition, the tenth under the present organization, really the thirteenth of the society, was held in Fitchburg, on Tuesday and Wednesday, September 30th and October 1st, 1862. A severe storm raging throughout nearly the whole time rendered the attendance less than usual, and detracted from the receipts, while the expenses were materially increased, and yet the exhibition in the main, especially considering the

more important objects had in view, was fairly a successful one.

Notwithstanding the severity of the storm every part of the programme was fully carried out, with but very slight alterations of time and place, reflecting much credit upon the Chief Marshal and his assistants, who were very prompt and efficient in the discharge of all their duties. Much credit is also due the several Committees and Superintendents whose duties exposed them more or less to the drenching rain.

The entries in the department of Stock were reasonably full, and embraced a large proportion of superior animals. Those of Fruits were unusually large, and the display very much superior to that of any other exhibition of the society. The full list of entries was as follows: Blood Stock—all pure bred animals—21; Grade and Native Bulls, 12; Milch Kine, 19; Heifers, 40; Fat Cattle, 11; Working Oxen, 14; Steers, 38. Total of Horned Cattle, 155; Horses and Colts, 62; Sheep, 32; Swine, 25. Total number of animals entered exclusive of Poultry, 274; most of which were on exhibition. For Plowing there were 7 teams entered, all of which performed. For Draught there were 42 animals entered. Farms, 1; Gardens, 5; Experiments, 6; Grain Crops, 18; Root Crops, 11; of Apples 660 plates were on exhibition; Pears, 380; Grapes, 55; Peaches, 46. Total of fruits of all kinds, 1166 plates or dishes. Vegetables, 195 lots; Flowers, 28; Bread, Butter, Cheese, Pickles, Honey and Preserves, 68; Mechanics and Manufactures, 225; Fancy Articles, 121; Fine Arts, 42. Total number of entries for the Hall, 1845. These were all marked with appropriate cards of dif-

ferent colors for the different Committees, each bearing the name of the article exhibited, and the name and residence of the exhibitor. Immediately after the awards were made, all articles for which premiums were awarded were also designated by other cards in red, white and blue, for the first, second and third premiums, and green for gratuities, bearing the name of the person to whom, and the article for which the award was made, with the amount awarded, so that all visitors could tell at a glance the articles which were deemed worthy of premiums by the Committees.

A similar system of designating the animals for which premiums were awarded was also adopted; ribbons of red, white and blue being used for the premiums, and green for the gratuities.

The usual dinner was served by Mr. Day at the Fitchburg Hotel, and the usual meeting of the society was held in the Lower Town Hall, at which an interesting and valuable Address was delivered by the Rev. A. N. Arnold, D. D., of Westborough, which is published herewith. An Essay was also presented by the Committee on Essays, which on opening the envelope containing the name of the author was proved to have been written by the Hon. Jabez Fisher, of Fitchburg. It is handsomely written, upon a homely subject, in the Doctor's usually careful and practical style, and is also published herewith.

Notwithstanding the promptness and efficiency with which the various Committees discharged their duties at the time of the exhibition, there has been more than usual difficulty in obtaining their finished reports, especially when remarks were intended to accompany

the awards in the publication of the "Transactions." This difficulty which has existed for several years, has increased gradually since the adoption of the plan to read at the meeting of the society only the awards, until it is now a serious evil, to which I deem it my duty to call the attention of the officers of the society, hoping that they, in their wisdom will devise some method to remedy it. Committees pass in lists of their awards, hastily, and often very imperfectly prepared, expecting that any errors that may occur in them will be rectified by the Secretary, and intending to prepare at their leisure, more carefully written reports for publication. I always request that these may be sent in during the month of October, and when this time has passed I remind them as I have opportunity, either personally or by letter, of the fact, and request them, if they intend anything for publication, to forward it immediately, as our printers usually commence their work about the first of November. A majority of them express a willingness to prepare something, and even desire that their awards may not be published without it, and assure me that they will attend to it in season; but frequently after the second, and sometimes after the third reminder, I am obliged to let their awards go to press without anything further from them, my plan for the publication having already been disarranged, and the printing delayed on their account.

While this is the rule, I wish to acknowledge that there are noble exceptions to it. In several instances, the present year, lists of awards, which were required immediately, were prepared with the utmost care, and so arranged as to be ready for the compositor without

the slightest change, and were not intended to be accompanied with other remarks. In others remarks intended to accompany awards equally well prepared, were sent in early, and in others delays occurred which were unavoidable, as for instance, a valuable article on the subject of Heifers, embracing the experience and observation of the author, was intended for publication, by Ezra Kendall, Esq., of Sterling, whose name, alone, in this connexion, is a sufficient guarantee for the practical and useful character of the article, but serious illness prevented his forwarding it in season. Another on the subject of Sheep, a well written article admirably adapted to the times, and full of useful suggestions (one of which was that written statements, embracing every possible item of information in regard to the management, expenses of keeping, &c., should be required of all competitors for the premiums in this department,) was prepared by Mr. C. S. Merriam, of Westminster, but failed to reach me in season, on account of a misunderstanding about the mail arrangements. I regret the failure to publish this article the more as the subject is attracting much attention in the peculiar condition of the cotton market, and the clothing business, and is one of general interest.

While I mention, with pleasure, these exceptions to the rule, I cannot disguise the fact that we do not, through our Committee's reports "call forth the results of individual experience and observation, and elicit practical and scientific information," or "furnish facilities for the free interchange of views," to the extent that was contemplated in the original constitution of

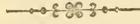
our association, from which I have quoted, or to the extent that we have formerly done.

Considering the subject, as I do, one of real importance, and having a bearing directly upon one of the primary objects of the society, which should be constantly kept in view, I would respectfully suggest, if no better plan has been found, the offer of several premiums, not exceeding in amount \$25.00 for the best reports, which must be carefully written, should contain the statements of the competitors, if any are offered, and be furnished to the Secretary on or before the 25th of October, except those referring to late crops, which must be furnished on or before the 15th of November.

My hope is that such an offer would induce *some* Committees to prepare reports creditable to themselves and worthy of their subjects, which would be read with interest and profit by the members and friends of the society, and would become a part of its permanent literature, tending to elevate its character and extend its usefulness, while the effort and labor on the part of such Committees would be of great advantage to themselves by inciting to more careful observations and experiments, to deeper study, and to more accurate thought.

Twelve new members have joined the society during the year, making the total number at present 568. The funds of the society have also increased by the amount of \$119.67, notwithstanding the decreased income from several sources and the increased expenditures in several directions.

ESSAY.



SUCCESSFUL AGRICULTURE.

“Muck is the mother of meal.”

By the term Successful Agriculture we do not wish to be understood to mean the success of the agriculturist. A successful farmer is supposed to be one, who, by and through the pursuit of his business, amasses wealth, adds to his acres and prospers in a pecuniary sense. Successful agriculture, on the other hand, has no reference to extent of possessions nor in any considerable degree to pecuniary results, but applies only to success in the tilling of a given quantity of land. It is proposed at the present time to direct attention mainly to one of the more important, in fact, the most important one of the indispensable requisites for a high degree of success. Agriculture is the art of tilling the earth for the sake of the product resulting from that tillage. Tillage includes every operation which the farmer performs from first to last for the benefit of a growing crop. Preparation of the land, planting the seed, all of the after cultivation and the harvesting of the product, are covered and expressed by the term, tillage.

Let us consider for a moment the particular motive that governs us in performing each of these operations. In the preparation of land for crops generally, "draining

is the first subject that occupies attention. If the water level reaches during the growing season so near to the surface as to interfere with the downward extension of the roots, then draining is demanded. If the crop be a perennial, or biennial, then there should never, at any season of the year, be standing water found so near to the surface as to submerge roots liable to be frozen. The object in plowing is to kill vegetation, if the land be in sward, and to lighten and pulverize the soil, that tender roots and rootlets may readily penetrate it in search of nutriment for the growing plant. In the application of various manures, the expectation of the cultivator is that they will furnish food in addition to what previously existed in the soil, and he looks for an increased product in consequence. The subsequent operations of hoeing and cultivating are for the purpose of keeping down the growth of vegetation other than that for which the husbandman is laboring, in order that this extraneous vegetation may not deprive the planted crop of that nutriment provided and designed for its especial use and benefit.

We may now inquire what are the conditions of success in the highest degree, in the production of results flowing from each of these divisions or operations, as applied to the cultivation of a crop on a given piece of land. If the surplus water has been removed by draining, and the plowing in its depth and character promises to be the best for the proposed crop, then all is done that can be in that direction. This however may not be the best, looking beyond the present. The highest success is only attained when the extreme productive capabilities of the soil are profitably reached.

In order to ascertain what these are, it may be necessary to inquire what is the most valuable or profitable product which the particular piece of land under consideration is capable of furnishing. With this idea before us we shall be more likely to succeed than if we look at merely present results. As a general rule, land cannot be plowed too deeply, if the whole soil inverted be of an even quality and homogeneous in its nature. Looking for the best results it is well to deepen the plowing a little each time until the best depth is reached. Deep plowing gives an increased range for the roots of plants, and the deeper the plowing the greater the exemption from the evil effects of extremes of moisture and drought. The number of times which the ground should be moved previous to planting depends upon various considerations. As a rule, it cannot be stirred, mixed and pulverized too much for the quantity or value of the crop, but may for its profit.

The time and manner of planting have an influence upon the crop but need not be noticed here. On the subject of after cultivation, there exists some difference of opinion. Many, and perhaps the majority, cultivate only to prevent the growth of weeds. A few, in order to stir the surface and prevent it from becoming hardened, and some for the purpose of hilling crops. The best result we think will be attained if we cultivate primarily to stir the surface, especially after heavy rains, and secondarily to suppress the growth of weeds, and but seldom or never for the purpose of hilling. Frequent stirring of the surface tends to promote the constant movement of moisture contained in the soil

and thus brings the matters dissolved in it, within reach of the spongioles of the roots. A great deal of unprofitable labor may be expended in growing a crop, and every intelligent cultivator will use only just so much as will pay, but should be satisfied with nothing less.

On the points enumerated we think that the limit of success is very nearly reached by our best cultivators. Concerning one other, and by far the most important, it will be generally acknowledged that there is room for very great improvement. We allude to the subject of manuring, and what we shall have to say farther will be in relation to it. It is a well known fact that if we plant crops of any kind upon a soil year after year without addition of any kind, the product will constantly and rapidly diminish until in a short time it ceases to be remunerative. It has been found from the experience of all ages that the fertility of soil can only be kept up by the addition of sundry substances, to which collectively, the name manure has been given. Manure may be defined as any substance, the addition of which to the land tends to promote its fertility. Chemically, manures can be divided into two classes; one class including all those matters which plants take up as food directly, and the other, such as assist the plant indirectly in aid of its nourishment but do not act as food. The distinction perhaps is not as yet perfectly understood, but the first class includes all organized, vegetable substances in a peculiar condition of decay, generally known under the comprehensive term, humus or vegetable mould. The second class comprises such other substances as contribute in any way to the building up,

or the perfecting of the structure of plants. Humus, in fact, is the pabulum from which vegetation is directly fed. Every soil capable of growing crops contains it. It may generally be known by the dark or black color which it gives to the upper layer of the soil. If we dig a hole in any cultivated field we shall find that this dark colored layer extends as deeply as the land has been lately plowed. That portion of soil immediately underneath this layer is commonly of the same character as the upper layer itself, except that it is nearly destitute of this vegetable matter. Humus is a compound and very complex substance, made up of various acids and salts, all of which must be rendered soluble before being taken into the circulation of plants by absorption through the roots. It is probable that most of the alkaline substances used as manures, such as those consisting largely of potash, lime and ammonia, act mainly by rendering humus soluble, so that although not in themselves nutriment in the same sense in which humus is, yet by combining with insoluble humus compounds, they render them soluble, and then the new soluble compound becomes food. It is important to bear this distinction in mind, that, although all substances included under the general term manure contribute to promote fertility in the soil to which they are applied, yet humus acts directly and principally, while most others mainly as adjuncts to that. For instance, the addition of soluble humus to a blowing sand, makes it at once capable of supporting vegetation, while without humus, none of the so called artificial manures would produce a like condition. Ashes would not cause a barren sand, free from humus, to be fertile, neither would lime, or in fact, any inorganic matter.

These statements may serve to explain some of the apparently contradictory results arising from the application of special manures. A farmer gives a piece of land a dressing of lime. The effect of lime is to render a portion of the humus in the soil, soluble, and vegetation appropriating it, a large crop is the result. Hence the inference, that lime is a valuable manure. He therefore repeats the application the following season, but neglects to use any humus producing material in connection with it. The crop in this case falls short of his expectation. A third trial exhausts nearly all the humus in the soil, and the land becomes barren. Hence, lime exhausts the soil. If there had been applied the second season an amount of humus equivalent to the quantity appropriated by the first crop, there would have been little or no falling off in the product.

The practical view deducible from these considerations is, that humus, or vegetable matter in a state or condition of decay, is the great want in the way of successful agriculture. Without humus, soil is absolutely barren. With an abundance of it, any crop may be grown by means of some of the artificial manures as additions. The soil of the Western prairies is made up in great measure of humus, the product of ages of decayed vegetation. A growing crop takes humus from the soil, but if allowed to mature and decay where it grows, there comes to be an absolute addition of humus to the soil, and the land becomes richer and capable of giving larger results. Where this action goes on from year to year and from century to century, as in the case of the prairies, the upper portion of the

soil becomes in time little else than an immense bed of humus. Now if this natural action could be imitated by the farmer, it is evident that he would be increasing the productive capacity of his lands each year, and in time might be able to reach the limit of success. What then stands in the way of it?

The great objection which presents itself is, that it is through the sale and use of the various crops grown, the farmer thrives, and if he is to leave them to decay upon the land he must himself starve. Therefore he feeds a part of his crops to his animals, consumes a portion in his family, and disposes of the remainder in exchange for articles which he cannot produce.

In the general agriculture of the country, hay is the largest and most valuable product, and may be considered in this connexion as a representative crop. A great portion of the hay grown is consumed on the farm or in the locality where produced. In the process of mastication the hay becomes finely divided, and after it has passed through the animal it is found to have lost a portion of its starch, albumen, &c., which have gone to assist in building up the structure of the animal or to supply its daily waste. That part which remains is the finely divided woody fibre of hay, mixed with some excrementious matters. The great bulk of the food which has passed through the animal is still hay, but it is found to have assumed a state from which, in the presence of moisture and warmth, it soon passes into the condition of humus. It becomes humus much sooner under the same circumstances than undigested hay. The loss in its humus producing qualities is inconsiderable. If this substance which is known as

stable or yard manure, be returned to the land, it will be nearly as valuable as if the original hay had remained and decayed on the land where it grew. Its bulk is unchanged, but the quality is just so far reduced as the animal has appropriated its nutritious constituents in adding to its structure, or in the production of fat or milk. In addition to this manure, a considerable proportion of that part of the food which goes to supply waste is eventually given off in the liquid excretion of the animal, and this liquid, when used in connexion with the solid, is found to have a pecuniary value equal to or even exceeding it. It does not form humus in the course of its decomposition, but it produces ammonia, and this alkali combining with the humus of the solid manure renders it soluble, and as a consequence at once available.

It is the experience of every careful and observing farmer, that, if the manurial product of an acre of grass be all saved and returned to the same acre, the productive power of the land will be increased thereby. It will be readily seen that this must be so, else every cultivated farm would long since have become barren or rather, it would never have been otherwise. Were it not a wise provision of nature that vegetation takes from the soil in the course of its formation much less humus than its decay will furnish, this earth would have been forever a barren waste, without a green or living thing upon its face.

This survey of the subject seems to open up to our view the principal source from which success is attainable in the pursuit of agriculture. If we carefully save all the vegetable matter of our lands, and return it to

the earth either before or after being used for feeding purposes, our soil must necessarily increase in its capacity to produce crops ; but if, on the other hand, by neglect, by wastefulness in any manner, or the indulgence of too great a greed for money to be obtained by selling hay or other products without returning their equivalent in manure by purchase or otherwise, we deprive our soils of this humus producing matter, they must necessarily run down and become less and less productive and valuable.

Let us look for a moment at the course pursued by a great majority of our farmers. Their hay and other forage is perhaps well fed, and produce an equivalent in manure. The solid portion is thrown out of the barn window to remain in a heap, exposed to the weather until the annual or semi-annual clearing up. In the mean time the pile heats, and ammonia is formed, which, uniting with the humus of the manure renders it soluble, and every rain that falls washes out a portion which either runs away, or is carried into the soil underneath. This action is repeated until a great portion of all that is valuable is completely lost. In addition to this the liquid manure is allowed to run entirely to waste. That the action above mentioned does take place is shown by the effect produced by a heap of manure lying during one or two rains in a field which is to be planted. The manure may afterwards be completely removed from that spot, and two or three inches even of the soil itself carried off, and yet it will give a better crop than any other part of the field ; simply because of the soluble humus which has leached out of the heap into the underlying soil. The same action precisely

takes place in the barnyard. The manure in its progress towards decay or the formation of humus, unites with the ammonia of the atmosphere, or that produced by the decomposition of the manure, and especially the liquid portion, becomes soluble, leaches into the ground and is lost. This is by far the most important source of waste, and we may consider how it shall be best avoided.

A plan which early suggested itself was to carry into the barnyard a quantity of absorbent material like straw, muck, loam, sawdust or other substance which would drink up and retain the soluble constituents of the manure. There is no doubt that these substances will have the effect designed if a sufficient quantity be employed, but a layer of any one of them has only a definite capacity, precisely like a quart measure. After the measure is filled we may continue to pour liquid into it for any length of time without having more than a quart in the end. So with a layer of muck or any other absorbent material, it will continue to drink in soluble humus until it can hold no more, after which, all that is poured upon it runs through unchanged. If enough of any of these materials could be furnished, all the manure might be thus saved, but this is probably never done. Aside from the difficulty, the expense necessarily incurred makes it a very unprofitable mode of proceeding. We contend that no man can afford to transport the soil of his farm to his barnyard for the purpose of manuring it and then back again. Even if he has a bed of muck to draw upon, which in itself is a mass of insoluble humus, needing but the addition of alkalis to neutralize the acids and render the humus

soluble, we believe it to be of no advantage to place it in an open barnyard, for the reason that the humus of the muck, when made soluble by uniting with the ammonia of the manure, is itself leached out, instead of retaining that from the manure.

There are, it is believed, three ways in either of which nearly all the valuable constituents of the manure may be saved and made available.

First. It may be kept under cover from the time it is dropped until delivered upon the land. The only source of loss under this plan is by heating and consequent "fire fanging." If this takes place the substance is just as completely burned up as if fire had consumed it. This can be avoided by having sufficient space that the manure may be spread out in a thin layer and not allowed to remain in a heap, or by keeping swine upon it, or by keeping it sufficiently moist, without water in excess. If the humus becomes soluble under this treatment, there can be no great loss because there is no surplus water present to dissolve it out, and it will therefore be preserved until carried upon the land. The liquid manure in this case should be preserved separate, inasmuch as the solid manure cannot retain it all. Some dry substance such as muck may be used to absorb it, or it can be retained in a water tight receptacle until needed for use.

Second. A water tight cellar may be provided to contain both the liquid and solid portions of the manure together. There should be enough liquid present to keep the solid manure always saturated. This can be done by adding water if the urine is insufficient. In this condition there can be no fermentation of a destruc-

tive character, neither any washing out of soluble elements of the manure, and the whole is saved without loss or depreciation until carried out for use.

Third. A mode which is theoretically perhaps the best of all, would be to spread the manure, both liquid and solid, upon the land while fresh. In this case whatever soluble matter might exist at the time, or which was formed afterward, would be washed into the soil by rains and there retained in a perfectly distributed condition until appropriated by growing vegetation. The objections to this plan are the inconvenience of so applying manure generally, its impracticability during the growing season, and also while the ground is deeply covered with snow.

The second mode, above given, is the one which we adopted some eight years since, and increasing experience leads us to the belief that, all things considered, it is the best. By this arrangement there seems to be absolutely no loss at all, and the liquid portion is at all times available, and the solid at any time after the liquid is all removed, which is readily accomplished by a chain pump of large calibre.

In this article it has not been our intention to do more than to bring into prominent notice the great want of our soils and the means of furnishing it. We cannot expect our farms to feed us unless we take care to feed them. There is too great a disposition at the present time to run after foreign fertilizers at high cost, under the delusive impression that in them is to be found a sovereign panacea for all the deficiencies of worn out soils. We are of the opinion that no man can be justified in resorting to such agents until he has

taken means to make the most of the materials within his reach at home. Why go to Peru for ammonia to render his humus soluble, without first taking steps to increase his stock of humus? All these concentrated or artificial fertilizers are important adjuncts, but for every one used, we should remember to apply an equivalent of humus producing material. Then we may expect an increase of our crops without a corresponding depreciation of the condition of our lands. Then shall we be tending toward that condition to which our attention has been directed, denominated Successful Agriculture.

REPORTS OF COMMITTEES.



ESSAYS.

The Committee on Essays respectfully submit the following report:

While we cannot but regret that but a single essay has been submitted to the Committee we are happy to be able to congratulate the Society that it treats upon a very important subject, contains much valuable instruction and many useful suggestions, evidently the result of careful observation and of much practical experience.

The Committee are unanimously of opinion that this essay is well worthy of publication in the "Transactions" of the Society, and they hereby cheerfully award the first premium of ten dollars to the author of the paper entitled, "Successful Agriculture" and bearing the motto "Muck is the mother of meal."

For the Committee,

EBENEZER TORREY.

FARMS.

The Committee on Farms regret that the premiums offered by the Society do not induce more of the good farmers of Worcester North to compete by entering their farms. Some years there has been none, and this

year but one, and that owned and improved by Mr. Martin Johnson of Lunenburg. Mr. Johnson's farm is situated about one-half a mile south easterly from the centre of the town on an eminence, and on both sides of the road leading to Lancaster. His mowing, tillage, garden, and orcharding with the buildings, on the easterly side, the pasture on the westerly side, the whole in but two lots, thereby getting rid of all subdivision fence. All the land on the easterly side of the road is of the first quality. Your Committee visited his farm on the 7th of July. His crops of hay, corn, and potatoes looked very well, also his garden seeds and vegetables, &c. His buildings are good, convenient, and well arranged for the making and saving of manure. He has commenced reclaiming some of his pasture land by under-draining and plowing to subdue the bushes which we think promises well, and, considering the great improvement he has made on his farm since owned by him, your Committee award to Mr. Johnson the Society's first premium of \$15,00. For ten years, at least, previous to Mr. Johnson owning the farm, as is well known to the Chairman of your Committee, the land on the easterly side of the road, being all then in grass, had the following treatment: During that time the owners gave it two or three bountiful top dressings of guano and plaster, (without the application of any other manure) which produced very large crops of grass. The grass was sold every year and carried off the premises. Many who thought the guano and plaster only a stimulant, prophesied that such treatment would eventually exhaust the land, and it would become worthless; but the fact, under Mr.

Johnson's treatment, by plowing and cultivating, has proved the reverse and that the land was not impoverished. You have the statement of Mr. Johnson, one fact, however, we think should be stated somewhere, that he has no help except what he hires, so that the present season he could not have had many leisure hours. After viewing his premises and partaking at his bountiful board, thereby having actual demonstration that the household department was well attended to by Mrs. Johnson and the daughters, in order to make out the day, your Committee visited, in the same neighborhood, the excellent farms of Messrs. Samuel Pitts and N. C. Day, and were amply paid for all trouble by viewing the great improvements made by each of them on their farms.

All of which is respectfully submitted.

For the Committee,

THOMAS BILLINGS, *Chairman.*

MARTIN JOHNSON'S STATEMENT.

FARMS.

The farm of thirty-eight acres that I entered for premium, I bought in the fall of 1856, without buildings or fence on it, as a part of your Committee know. Since then I have put up the buildings. The next season I think I cut about six tons of hay, built 250 rods of wall, and dug 130 rods of under drain, plowed and re-seeded all of the land that had previously been cultivated, and set about three hundred fruit trees, consisting of Pear, Apple, and Peach, in about equal

proportion, and set about 35 Grape vines. The present season I have kept on the farm one horse, one pair of oxen, four cows, also one one-year-old colt and three young cattle which were summered off the farm.

I make the expenses of the farm as follows :

Paid for labor,	-	-	-	-	-	-	-	-	-	\$78,00
Ashes,	-	-	-	-	-	-	-	-	-	10,00
Super phosphate,	-	-	-	-	-	-	-	-	-	32,00
Taxes,	-	-	-	-	-	-	-	-	-	30,52
Interest of Farm,	-	-	-	-	-	-	-	-	-	192,00
										<hr/>
										\$342,52

I credit the farm by :

20 tons of hay by estimate,	-	-	-	-	-	-	-	-	-	\$200,00
100 bushels of corn,	-	-	-	-	-	-	-	-	-	80,00
170 bushels of potatoes,	-	-	-	-	-	-	-	-	-	85,00
Growth on 300 fruit trees and 40 grape vines,	-	-	-	-	-	-	-	-	-	300,00
Garden seeds,	-	-	-	-	-	-	-	-	-	35,00
Garden vegetables,	-	-	-	-	-	-	-	-	-	65,00
344 lbs. of butter,	-	-	-	-	-	-	-	-	-	68,80
100 lbs. of cheese,	-	-	-	-	-	-	-	-	-	6,00
1100 lbs. of pork,	-	-	-	-	-	-	-	-	-	66,00
Pigs,	-	-	-	-	-	-	-	-	-	50,00
Poultry and eggs,	-	-	-	-	-	-	-	-	-	15,00
White beans,	-	-	-	-	-	-	-	-	-	7,00
Digging and laying 50 rods of under drain,	-	-	-	-	-	-	-	-	-	50,00
3 calves sold for,	-	-	-	-	-	-	-	-	-	12,00
110 bushels of worzel beets,	-	-	-	-	-	-	-	-	-	20,00
About 300 bushels of turnips,	-	-	-	-	-	-	-	-	-	50,00
1 ton of squashes and citrons,	-	-	-	-	-	-	-	-	-	20,00
2 loads of pumpkins,	-	-	-	-	-	-	-	-	-	5,00
										<hr/>
										\$1134,80
										342,52
										<hr/>
Net balance,	-	-	-	-	-	-	-	-	-	\$792,28

MARTIN JOHNSON.

APPLICATION OF MANURE.

The Committee for awarding premiums for "the most thorough, exact and reliable experiments upon the proper depths of applying manures," to be carried through a course of three years, have decided upon the following awards:

1st, to W. G. Wyman, of Fitchburg,	\$25,00
2d, to Albert Stratton, of Leominster.	20,00
3d, to Isaac B. Woodward, of Fitchburg,	15,00

Your Committee think that very much credit is due to the gentlemen for undertaking to carry through an experiment of this character, and although the premiums may seem somewhat large, yet we are convinced that they alone will not compensate for the labor, skill and care required throughout. The result of any one of these experiments is valuable, but by no means can we draw certain conclusions therefrom, because the result obtained in another instance is found to be different and apparently contradictory. It is only by the comparison of a large number, and a careful analysis of all the accompanying conditions, that valuable conclusions can be reached. We should be glad to notice some of the more obvious points, but as there were a number of experiments tried in other parts of the State, at the same time, and as a combination of all the results will be elsewhere attainable, we refrain from the attempt.

JABEZ FISHER, *Chairman.*

W. G. WYMAN'S STATEMENT.

A statement of the completion in 1862 of my experiment commenced in 1860, and continued in 1861, on the proper depth of applying manures, in accordance with the requirements of the Board of Agriculture. The size of the field, one acre and thirty-two square rods; the division into lots thirty-two rods each, and the number of lots the same as in 1860 and 1861. The crops, mostly clover, were harvested July 7th to 12th, and September 1st to 6th. They were mowed, one lot at a time, with common scythes, when the dew was off, then immediately weighed in the field, and when thoroughly dried the hay on lot No. 1 was again weighed with the following results :

	First crop, green.	Second crop, green.	Total.
No. 1, manure plowed deep,	3238 lbs.	1334 lbs.	4572 lbs.
No. 2, manure plowed shallow,	3078 lbs.	1754 lbs.	4832 lbs.
No. 3, manure harrowed in,	2892 lbs.	1534 lbs.	4426 lbs.
No. 4, manure on surface,	2788 lbs.	944 lbs.	3732 lbs.
No. 5, no manure,	998 lbs.	172 lbs.	1170 lbs.
No. 6, manure intermixed,	3572 lbs.	1366 lbs.	4938 lbs.

No. 1, first crop dry, 1163 lbs. ; second crop dry, 568 lbs. ; total dry, 1731. The acre that was manured produced 22,500 lbs., or 11½ tons green hay, or 4½ tons well dried hay.

	WEATHER.		
	First Third.	Middle.	Last Third.
May,	moist	dry	moist
June,	moist	moist	wet
July,	dry	moist	wet
August,	dry	dry	dry
September,	dry	dry	dry

W. G. WYMAN.

Fitchburg, October, 1862.

ALBERT STRATTON'S STATEMENT.

North Leominster, October 14th, 1862.

MR. W. G. WYMAN,—*Dear Sir*: I forward a report of third year's crop on the 45 square rods of land on which I made the different application of manure, as described in report of 1860, also in 1861, of oat crop. August 1st, 1862, harvested good well dried hay from lot.

No. 1,	288 lbs.	No. 4,	345 lbs.
No. 2,	269 lbs.	No. 5,	258 lbs.
No. 3,	336 lbs.		

Lot No. 2 appeared nearly the same as No. 3 and 4, except a small portion was winter killed or did not take well to grass.

	WEATHER.		
	First Third.	Middle.	Last Third.
May,	moist	dry	wet
June,	dry	moist	wet
July,	moist	moist	wet
August,	moist	dry	dry

Very respectfully yours,

ALBERT STRATTON.

ISAAC B. WOODWARD'S STATEMENT.

To the Secretary of the Worcester North Agricultural Society:

SIR: In continuance of my experiment on the application of manures the result this past season is as follows:

Lot No. 1, containing four square rods, where the manure was plowed in deep, the hay when dried weighed,	130 lbs.
Lot No. 2, manure plowed in shallow, the hay weighed,	135 lbs.
Lot No. 3, manure harrowed in, weight of hay,	136½ lbs.
Lot No. 4, manured on surface, weight of hay,	146 lbs.
Lot No. 5, without manure, weight of hay,	88½ lbs.

The weather was as follows :

	First Third.	Middle.	Last Third.
May,	dry	dry	moist
June,	moist	moist	wet
July,	dry	moist	wet
August,	dry	dry	dry
September,	dry	dry	dry

My intention is to keep the stakes at the corners of the several lots, so as to know how each one holds out.

Respectfully submitted,

ISAAC B. WOODWARD.

October 23, 1862.

GRAIN.

GENTLEMEN: Your Committee on Grain, Grass, Seed &c., report as follows. At the Town Hall, on the day of the fair, there were three lots Herd Grass Seed which we examined and awarded premiums to the following named persons :

On Herd's Grass Seed, B. Safford, of Fitchburg, 1st premium, \$2,00.

On Herd's Grass Seed, Levi Kendall, 2d premium, *Grasses and Forage Plants.*

On Herd's Grass Seed, Geo. Kendall, 3d premium.

At our second meeting no Grain or Statements were offered. At our third and last meeting, Grain and Statements were offered, but no one of the Committee appeared except the subscriber, therefore no premiums were awarded by your Committee, they submitting the statements with this report to the Board of Trustees of the Worcester North Agricultural Society for their consideration.

JOHN P. SABIN, *Chairman of Sd Committee.*

At a meeting of the Trustees held Nov. 11th, the foregoing report was accepted and adopted, and the Secretary instructed to publish it as written. On the verbal recommendations of the Chairman of the Committee on Grain, the Trustees then voted to award the following premiums, viz :

CORN.

1st, to Joseph Goodrich, of Lunenburg,	\$10,00
2d, to Benjamin Safford, of Fitchburg,	7,00

BARLEY.

1st, to Joseph Goodrich, of Lunenburg,	3,00
--	------

WHITE BEANS.

1st, to Abel Marshall, of Fitchburg,	2,00
--------------------------------------	------

CABBAGES.

1st, to Abel Marshall, of Fitchburg,	2,00
--------------------------------------	------

W. G. WYMAN, *Secretary.*

 JOSEPH GOODRICH'S STATEMENT.*

CORN.

The lot on which my corn grew contains 221 rods and is a clayey loam. The crop of 1860 and 1861 was grass without manure. It was plowed in August, 1861, six to eight inches deep, and cross plowed in May after the manure was spread; harrowed and furrowed; manured with thirty loads, twenty of which was spread and ten put in the hill; planted May 10th in hills three

*The statements concerning cultivated crops are made by the Secretary from the returned forms sent to the several competitors. In all cases where manure is estimated in loads, the loads are understood to contain thirty bushels each. The quantity of produce in all cases is ascertained by the actual weight of the whole merchantable crop, the weight being certified to under oath.—*Sec.*

feet by three and a half apart; plowed once and cultivated twice; was harvested October 25th to 30th. It was in a young orchard which was set out about five years ago.

Cost of plowing, harrowing, &c.,	\$7,00
Manure,	45,00
Seed and planting,	4,00
Harvesting,	5,00
Total,	\$61,00

Produce, 7471 lbs. of ears of corn, weighed November, and 3½ tons stover.

BENJAMIN SAFFORD'S STATEMENT.

CORN.

The acre on which my corn grew was a gravelly loam. The crop of 1860 was grass without manure, that of 1861, corn with thirty loads of manure. It was plowed about the middle of May once, about six inches deep, with one horse; harrowed once; manured with twenty-five loads, spread before plowing, and 300 lbs. superphosphate put in the hill; marked both ways and planted May 20th; cultivator run through once; hoed twice; tops cut in September; harvested last of October.

Cost of plowing, harrowing, &c.,	\$3,00
Manure,	31,75
Seed and planting,	2,00
Cultivation,	3,50
Harvesting,	5,00
Total,	\$45,25

Produce, 4170 lbs. of ears of corn, weighed November 5th, and about 2½ tons stover.

JOSEPH GOODRICH'S STATEMENT.

BARLEY.

My barley lot contains 205 rods; is a heavy, clayey loam; was in grass in 1860, without manure; in corn in 1861, with twenty-five loads of manure; was plowed the first of May, four and a half bushels seed sown and crossed lightly; mowed and raked August 5th. It was in a young orchard which had been set some twelve years, in rows thirty feet apart, and I think the crop was shortened somewhat by the shade of the trees.

Cost of plowing and other preparation,	-	-	-	-	\$5.00
Seed and sowing,	.	-	-	-	3.00
Harvesting,	-	-	-	-	5.25
Total,	-	-	-	-	<u>\$13.25</u>

Product, 1940 lbs. barley, weighed November 4th, and 2000 lbs. straw.

ABEL MARSHALL'S STATEMENT.

WHITE BEANS.

The eighth acre on which my beans grew is a light, thin, sandy loam. The crop of 1860 and 1861 was grass, without manure. It was plowed in September, 1861, about five inches deep; harrowed in the spring of 1862; manured with one load, put in the hill and planted June 6th, in hills, with two quarts of large white beans.

The product was 64 lbs. beans, weighed November 8th.

ABEL MARSHALL'S STATEMENT.

CABBAGES.

My cabbages grew on a plot containing twenty-three rods of a dark, deep loam. The crop of 1860 and 1861 was corn, with twenty loads of manure per acre each year. It was plowed once May 20th, about eight inches deep; manured with two and a half loads spread, harrowed and turned into ridges, with a double mould-board plow; sowed June 12th, with three oz. seed; was mostly destroyed by insects. In July 850 plants, which cost \$2,67, were set out. It was cultivated by being plowed twice and hoed once.

Cost of plowing and other preparation,	- - - - -	\$0,50
Manure,	- - - - -	3,00
Seeds, plants, sowing and transplanting,	- - - - -	3,25
Cultivation,	- - - - -	1,00
		<hr/>
Total,	- - - - -	\$7,75

Produce, 968 cabbages, or 42 per rod.

ROOT CROPS.

The subject of root crops, within a few years past, has engaged the attention of farmers somewhat; to ascertain their value as compared with other crops, for feeding stock. If roots can be raised for from six to ten cents per bushel—as we are told in many instances they have been—whether the time and money thus invested, will not “pay” better than spent in raising corn, hay, and other grains. Not as a principal crop, but as a part of the farm product. Most all kinds of stock are very fond of roots, and eat them as though it would do them much good. The aim, in part, of the

Worcester North Agricultural Society, in offering premiums, is to find out how and what to raise profitably. The premiums are small, and honors don't "pay" hired help, and the law requires so much that but few will undertake the task. Certain it is that but few entries are made in this, or any other departments, where the whole crop is to be weighed. And so far as this Committee are concerned, fewer comply with the rules in returning their reports; so that the Committee conclude that the crops are a failure, or so large that the expense of weighing so much, more than the premium,—which latter conclusion we think, in many cases, too true,—and deters many from making entries. It would seem that among the yeomanry of Massachusetts enough honest men might be found to serve upon committees, so as not to require such a law. If not, then the whole system will be a failure, we fear, and the law injure those it is intended to serve. The subject should receive some attention as it is of much importance to every farmer.

The Committee award the following premiums :

CARROTS.

To Abel Marshall, of Fitchburg, a gratuity,	\$4,00
Weight not up to the requirements of the rules, but well worthy of a gratuity.	

MANGOLD WURZELS.

1st, to Abel Marshall, of Fitchburg,	2,00
--------------------------------------	------

SWEDISH TURNIPS.

1st, Abel Marshall, of Fitchburg,	<i>Harris on Insects.</i>
To John G. Woodward, of Ashburnham, a gratuity of	1,00
Crop too small for a premium.	

J. M. SAWTELL, *Chairman.*

ABEL MARSHALL'S STATEMENT.

CARROTS.

The eighth acre which I cultivated with carrots is a dark loam; was in corn in 1860 and 1861, with twenty loads of manure per acre each year; was plowed twice for the present crop about 8 inches deep and raked by hand; manured with two and a half loads, spread before the second plowing; sowed June 8th with eight oz. orange carrot seed, with a machine; hoed once with a hand hoe, twice with a wheel hoe and wed by hand twice; harvested November 3d to 10th, by digging with a spade and spading fork.

Cost of plowing and other preparation,	-	-	-	-	-	-	-	\$0,75
Manure,	-	-	-	-	-	-	-	2,50
Seed and sowing,	-	-	-	-	-	-	-	1,50
Cultivation,	-	-	-	-	-	-	-	2,00
Harvesting,	-	-	-	-	-	-	-	5,32
Total,	-	-	-	-	-	-	-	<u>\$12,07</u>

I obtained 4786 lbs. carrots, equal to 19 tons 288 lbs., or 638 bushels per acre.

ABEL MARSHALL'S STATEMENT.

MANGOLD WURZEL.

The soil on which I raised my eighth acre of mangolds is a dark loam. I cultivated corn on it in 1860 and 1861, with twenty loads manure per acre each year. It was plowed once for this crop about eight inches deep, harrowed, manured with two and a half loads spread and turned into ridges with a double mouldboard plow; planted June 12th, with Ramsdall's

corn planter, on the ridges with seed raised by myself; plowed between the rows with a double mouldboard plow twice, and hoed by hand once, and harvested October 30th and 31st.

Cost of plowing &c.,	-	-	-	-	-	-	-	-	\$0,50
Manure,	-	-	-	-	-	-	-	-	2,50
Seed and planting,	-	-	-	-	-	-	-	-	1,00
Cultivation,	-	-	-	-	-	-	-	-	1,50
Harvesting,	-	-	-	-	-	-	-	-	4,00
Total,	-	-	-	-	-	-	-	-	<u>\$9,50</u>

Mangolds produced 4960 lbs., equal to 19 tons and 1680 lbs., or 661 1-3 bushels per acre.

ABEL MARSHALL'S STATEMENT.

SWEDISH TURNIPS.

My Swedish turnips were raised on a dark loam soil, cultivated with corn, with twenty loads manure per acre, each year 1860 and 1861.

The eighth acre, offered for premium this year, was plowed once eight inches deep, harrowed, furrowed, manured with two loads, applied in the drills; sowed June 18th, with three oz. Skirving's improved seed; hoed between the rows three times, turnips hoed once, and harvested November 1st.

Cost of plowing &c.,	-	-	-	-	-	-	-	-	\$0,50
Manure,	-	-	-	-	-	-	-	-	2,00
Seed and sowing,	-	-	-	-	-	-	-	-	0,50
Transplanting,	-	-	-	-	-	-	-	-	1,50
Cultivation,	-	-	-	-	-	-	-	-	2,00
Harvesting,	-	-	-	-	-	-	-	-	3,00
Total,	-	-	-	-	-	-	-	-	<u>\$9,50</u>

Produce, 4851 lbs. turnips, equal to 19 tons and 808 lbs. or 646 3-4 bushels per acre.

JOHN G. WOODWARD'S STATEMENT.

SWEDISH TURNIPS.

My lot was in grass in 1860, without manure, in oats in 1861, and no manure. The eighth acre for the present crop is a moist loam, resting on a clay subsoil; was plowed May 29th seven inches deep, and June 6th five inches; was ridged by turning two furrows together; manured with four and a half loads green cattle manure applied in the drill; sowed June 6th, with seed sower; hoed once about the middle of August, and harvested November 5th. The tops paid for harvesting.

The ground being nearly destitute of manure, as none had been applied for eleven years, and the dryness of the season caused the roots to be of small size, but very smooth and of fine shape. They were sown in drills three and a half feet apart, and thinned in the rows to about six inches apart, and in some places not quite so far. If they had been eight inches apart, to all appearances, they would have been better.

Cost of plowing &c.,	-	-	-	-	-	-	-	-	\$0,62
Manure,	-	-	-	-	-	-	-	-	6,00
Seed and sowing,	-	-	-	-	-	-	-	-	0,20
Cultivation,	-	-	-	-	-	-	-	-	1,00
									<hr/>
Total,	-	-	-	-	-	-	-	-	\$7,82

I obtained 2925 lbs. of roots, equal to 11 tons and 1400 lbs., or 390 bushels per acre.

VEGETABLES.

The Committee on vegetables are unanimous in their opinions that the display in this department fell considerably behind that of former years, both in quality and quantity. Some very fine specimens were shown; yet, as a whole, the display was not as good as it might have been had the members of our Society done their duty. It is undoubtedly true that the best vegetables raised in our vicinity, even by members of our Society, were *not* on exhibition in our hall. This we think arises, in some measure, from negligence on our part, rather inexcusable in not presenting to public exhibition the best they have; we think it quite as commendable to tell the public *how* four hundred pounds of any kind of vegetables may be raised from four square rods of land, and show a few specimens *not* overgrown, as to show an enormous vegetable, raised on the high pressure principle, the mode of raising which few prudent cultivators would care to follow. In conclusion, we would suggest that in future each exhibitor attach to his articles his mode of cultivation, kind of manure, average size, weight, quantity, &c., on a given space, and likewise any suggestions in raising any vegetable which may appear proper, to serve as guide and comparison for others, the great and true idea being not to raise overgrown vegetables not fit for bipeds, but to see how large an amount can be raised fit for man or animal, on a given space and at the cheapest rate.

The Committee award as follows, viz :

KITCHEN VEGETABLES.

1st and 2d premiums not awarded,

3d, to Alfred Marshall, of Fitchburg, *Harris on Insects*.

POTATOES.

1st, to Loriston Stockwell, of Fitchburg,	\$2,00
2d, Nathan Caswell, of Fitchburg,	1,00
3d, to J. G. Woodward, of Ashburnham,	,75

MARROW SQUASHES.

1st, to B. F. Proctor, of Fitchburg,	1,00
--------------------------------------	------

CROOKNECK SQUASHES.

1st, to N. C. Day, Lunenburg, 17 on one vine,	1,00
---	------

HUBBARD SQUASHES.

1st, to N. C. Day, of Lunenburg,	1,00
2d, to H. B. Fuller, of Fitchburg,	,50

PUMPKINS.

1st, to J. E. Woodward, of Ashburnham,	,75
--	-----

CABBAGES.

1st, to John Minott, of Westminster,	,75
--------------------------------------	-----

CELERY.

2d, to A. Crocker, of Fitchburg,	,50
----------------------------------	-----

TURNIP BEETS.

1st, to Thomas S. Eaton, of Fitchburg,	,75
2d, to A. Crocker, of Fitchburg,	,50

ENGLISH TURNIPS.

1st, to Thomas S. Eaton, of Fitchburg,	,75
2d, to John Minott, of Westminster,	,50

TOMATOES.

1st, to L. Kendall, of Fitchburg,	,50
2d, to Benjamin Wheeler,	,40

WHITE BEANS.

1st, to L. Kendall, of Fitchburg,	,75
2d, to D. Battles, of Fitchburg,	,50

LIMA BEANS.

1st, to C. A. Emory, of Fitchburg,	,50
------------------------------------	-----

SEED CORN.

1st, to Benjamin Safford, of Fitchburg,	1,00
2d, to Benjamin Wheeler, of Fitchburg,	,70
3d, to N. Caswell, of Fitchburg.	,50

GRATUITIES.

J. Q. A. Nutting, of Fitchburg, for pear, plum, cherry and strawberry tomatoes,	,30
Wm. C. Emory, of Fitchburg, tomatoes,	,30
I. B. Woodward, of Fitchburg, tomatoes,	,50
J. G. Woodward, of Asburnham, white beans,	,30
Hubbard Fuller, of Fitchburg, white beans,	,30
A. A. Marshall, white beans,	,30
B. Safford, white beans,	,30
James McIntire, of Fitchburg, seed corn,	,50
L. Stockwell, of Fitchburg, seed corn,	,40
Ira Holt, of Fitchburg, seed corn,	,30
Charles H. Simonds, of Fitchburg, pop corn,	,25
C. E. Caldwell, of Fitchburg, squashes,	,25
Willie E. Cunningham, Orange, squashes,	,25
Julia B. Andrews, of Fitchburg, citrons,	,50
L. Stockwell, of Fitchburg, citrons,	,40
Frank G. Davis, of Fitchburg, citrons,	,30
David Battles, of Fitchburg, carrots,	,25
Jacob Haskell, of Fitchburg, sweet corn,	,25
David Battles, of Fitchburg, potatoes,	,50
Abel Thurston, of Fitchburg, potatoes,	,75
L. A. Pearson, of Fitchburg, sweet potatoes,	,25
E. S. Burnap, of Fitchburg, some very fine pota- toes, (four years from the seed,)	,30
L. A. Pearson, of Fitchburg, water melons,	,60
A. A. Marshall, of Fitchburg, water melons,	,40
Levi Kendall, of Fitchburg, beans, new variety,	,50
Thomas S. Eaton, of Fitchburg, fine white turnips	,25
Mary J. Eaton, of Fitchburg, canary seed,	,25

All of which is respectfully submitted,

JAMES M. WOODBURY, *Chairman.*

BREAD, BUTTER, &c.

The Committee were disappointed in the specimens of fine wheat bread. After rejecting such as, in the opinion of experts, were baked on the day of exhibition, and also such as were submitted for examination by persons other than "unmarried ladies," they were unable to award to any competitor either of the Society's premiums. Obviously there is still room for improvement in this most important branch of domestic chemistry.

The following were the awards and gratuities:

WHEAT BREAD.

No premium awarded.

UNBOLTED WHEAT BREAD.

Miss O. E. Bailey, of Fitchburg, \$1,00

BOLTED RYE BREAD.

No premium awarded.

RYE AND INDIAN BREAD.

2d, to Miss Nancy Smith, of Fitchburg, 1,00

LUMP BUTTER.

1st, to F. Nourse, of Sterling, 4,00

2d, to Mrs. Levi Kendall, of Fitchburg, 3,00

3d, to G. S. Beaman, of Princeton, 2,00

4th, to Lydia Ramsdell, of Lunenburg, 1,50

JUNE TUB BUTTER.

1st, to M. Johnson, of Lunenburg, 3,00

CHEESE.

3d, to Geo. Miles, of Westminster, 1,00

PICKLES.

1st, to Mrs. J. M. Whitney, of Fitchburg, ,75

2d, to Mrs. A. Hubbard, of Fitchburg, ,50

3d, to Mrs. Levi Kendall, of Fitchburg, ,25

HONEY.

1st, to Mary Miles, of Fitchburg,	\$2,00
2d, to James McIntire, of Fitchburg,	1,00
3d, to A. P. Goodridge, of Fitchburg,	,50

GRATUITIES.

Mrs. M. E. White, of Fitchburg, strawberry and tomato preserves,	,50
Mrs. M. E. White, of Fitchburg, blueberry and tomato preserves,	,50
Mrs. C. E. Emory, of Fitchburg, pickled peaches, For the Committee,	,50

A. EMERSON, *Chairman.*

FANCY ARTICLES.

The Committee on Fancy Articles—composed of five ladies and two gentlemen—have carefully attended to the duty assigned them; and, in making the following awards, beg leave to say that the number of articles submitted to their inspection was large, and, both in Fact as well as Fancy, of very superior finish. These reasons, however, so creditable to the contributors, have increase the difficulties of rendering a just award. Your Committee believe they have been reasonably successful, and if so, they hope the community will see the benefit of having a couple of *gentlemen* of taste attached to their number, but so far as they may have failed, we trust it will be remembered that no committee of *ladies*, however distinguished their ability, can be expected to do *perfect* justice under circumstances which

require not only the ripest artistic judgment, but a far more extended examination than could possibly be given on the present occasion.

The Committee award the following premiums :

Miss Delia Stratton, embroidered pocket handkerchief,	\$1,50
Mrs. Peter Snow, wrought handkerchief,	1,00
Mrs. H. O. Putnam, embroidered flannel skirt,	,75
Mrs. Martha Ellis, embroidered skirt and wax flowers,	,50
Miss L. H. Stebbins, tidy and needle book,	,50
Miss Kate L. Crosby, (nine years old,) Boston, tidy,	,25
Miss Abbie L. Lowe, cake covers,	,25
Mrs. E. W. Ackley, box of embroidery,	,75
Miss Emily Gardner, worsted shawl,	1,00
Mrs. L. J. Kendall, wrought chair and quilt,	1,50
Mrs. M. E. White, transferred work,	,33
Lizzie L. Goodnow, knit cape and sofa pillow,	,50
Miss George Kendall, wrought chair,	1,00
Mrs. T. R. Boutelle, chair seat,	,33
Mrs. M. E. White, worsted flowers,	,75
Mrs. W. Fred White, worsted flowers.	,50
Mrs. Wm. Hogan, floral design,	,75
Mrs. S. C. Brigham, hair work,	,75
Mrs. Lucy D. Palis, white bed spread,	,50
Mrs. Mary Upton, silk quilt,	,50
Nancy M. Wood, bed quilt,	,50
Miss E. Young, hair work,	,50
Mrs. J. A. Gilbert, bonnet,	,50
Mrs. Fannie Cleaves, cushion and mittens,	,50
Miss Abbie Downe, worsted flower and frame,	,37

Mrs. D. A. Cory, dress and slippers,	,37
Miss Abby Younglove, flannel skirt,	,37
Mrs. O. H. Pierce, box of embroidery,	,37
Mrs. L. D. Warren, embroidered slippers,	,25
Mrs. Tamer Sheldon, yarn and mittens,	,50
Mrs. Lucy Dunsmoor, hose, mittens and gloves, woolen and linen,	,75
Mrs. Laban Bullock, rug,	,37
Mrs. Ira Holt, rug,	,25
Mrs. A. H. Fay, rug,	,25
Mrs. R. H. Hadley, rug,	,25
Mrs. Calvin Tolman, sock,	,25
Mrs. Betsy Merriam, socks,	,25
Mrs. Elizabeth Cheesmore, hose,	,25
Mrs. Anna Wyman, hose,	,25
Mrs. Jno. Smith, yarn,	,25
Miss Mary C. Lane, edging,	,25
Miss Jennie C. Lane, edging,	,12
Miss Emma L. Lane, net,	,10
Mrs. Lucy A. Nichols, cone basket,	,37
Mrs. L. N. Laventure, cone basket,	,25
John Marble, (blind—11 years old,) bead basket,	,25
Miss Ellen E. Smith, carpeting,	,25
Mrs. E. Garfield, knit bed spread,	,25
Miss L. J— Pratt, worsted cape,	,33
Miss Lizzie G. Gardner, breakfast shawl,	,33
Mrs. S. H. Tenney, rug mat,	,25
Miss Emma S. Young, table cover,	,12
Miss Fannie E. Lowe, collars and basket,	,12

Respectfully submitted,

E. DAVIS, *Chairman.*

FINE ARTS.

AWARDS.

H. J. Colburn oil painting,	\$2,00
Mrs. Freeland, oil painting,	1,00
Geo. A. Harwood, oil painting,	,50
Miss A. E. C. White, painting in water colors,	1,00
Miss Lucy W. Damon, heads in pencil,	,75
Miss L. Brown, heads in pencil,	,70
Miss Abbie L. Joslyn, heads in pencil,	,65
Miss Nellie Lowe, pencil landscape,	,75
Miss Ednah Lowe, pencil landscape,	,75
Miss Cochran, crayon head from life,	1,00
Miss Ellen M. Smith, crayon head (copy,)	1,00
Miss Abbie Ellis, crayon head (copy,)	,70
Miss Ellen Hawkins, crayon head (copy,)	,60
Miss A. E. C. White, colored crayon drawing,	1,00
Mrs. Allen, monochromatic drawing,	,25
Miss L. D. Newton, pencil sketches from nature,	,50
Miss A. E. C. White, head in India ink,	1,00
Mr. S. Sawyer, mechanical drawing,	,50
F. W. Ward, printing,	,25
J. C. Moulton, photographs,	1,00

The Committee also wish to make favorable mention of specimens presented by the following persons, mostly children, viz: Susie Goodrich, E. W. Hitchcock, Flora E. Wilder, Frank Whitney, E. T. Marshall, A. M. Hilton.

The Committee are glad of an opportunity to express their pleasure at the increased attention paid of late to painting and drawing. We regard the influence of Miss Cochran's teaching in Fitchburg as decidedly valuable, not solely because her pupils have made attain.

ments which do credit to their teacher, but also because attention to the fine arts refines, elevates and improves those who bestow such attention.

By order of the Committee,

KENDALL BROOKS, *Chairman.*

MECHANICS AND MANUFACTURES.

The articles which came before the Committee this year were perhaps less in number, but in utility, design and mechanical execution they would compare favorably with any former exhibition. If space permitted we should be pleased to mention articles which deserve more notice than they receive by the awards of the Society.

Mr. Thomas Sheldon brought in an ox yoke, a thing simple in its structure, and most people would say, easily made, but let any one try it, and if in a year's time he shall succeed in making a yoke of so good material, so well fitted in its general form, and so nicely finished, he will have good proof that he is a mechanic, and will be entitled to the thanks of every good farmer in the community.

Mr. S. G. Frost and Messrs. O. & S. E. Brigham, exhibited wagons, which, in style and finish, would have done credit to the best carriage manufactory in the State, while for strength and durability they were all a purchaser could ask for.

Messrs. S. & A. M. Sawyer exhibited a fuse, (too late to receive any award from the Society,) which must have been the result of long and patient study, and the

application of the rarest mechanical skill. It is so nicely calculated and so sure in its operation, that it is said, not one time in twenty does it fail to explode a flying shell within one-fourth part of a second to the given time.

We call attention to these instances of mechanical ingenuity and skill to show that our inventors and mechanics have been active and earnestly at work during the last season, and we believe there is no place in the country which demands more of them or will pay them better.

The Committee have awarded premiums as follows :

Charles B. Sawyer, for hot air furnace register, heater, &c.,	\$5,00
Thomas Sheldon, for ox yoke,	,75
Waldo Wallace, for plow,	1,00
Waldo Wallace, for soap stone stoves,	1,00
Elliot Wood, for horse shoes,	2,00
John Choate, for lot of medical preparation,	2,00
O. A. Wheeler, for writing desk,	2,00
Thomas Palmer, for porcelain and full set of teeth, 1st premium,	3,00
J. F. Adams, for teeth, 2d premium,	1,00
H. P. Minot, for machinists tools,	2,50
Joseph Pierce, for calf skins,	2,00
Oren Partridge, for boots,	1,00
J. L. Tenney, for case of boots and shoes gratuity,	,50
E. Buttrick, for coat and pants,	2,00
Sidney D. Willis, for spring bed, gratuity,	,50
S. G. Frost, for harness and saddlery,	2,00
Enoch Paige, for spring bed,	1,00
Abel F. Adams, for rye flour,	,50

F. L. Ruggles, for case of boots and shoes,	\$2,00
G. L. Sanford, for case of books and stationery,	1,00
H. A. Goodrich, for case of hats, caps and furs,	2,00
O. & S. E. Brigham, for Concord wagon,	2,50
O. & S. E. Brigham, for trotting gig,	1,50
S. G. Frost, for double seated wagon,	4,00
T. W. & F. A. Whitney, for child's carriage,	1,00
B. F. Proctor, for samples of wood turning,	1,00
L. D. Warren, for chronometer clock,	1,00

STEPHEN SHEPLEY, *Chairman.*

APPLES, PEACHES, PLUMS AND QUINCES.

The Committee on apples, peaches, plums and quinces, having discharged the duty assigned them, would submit the following report. The exhibition of apples was truly excellent, both in quantity and quality. We think it safe to say that such a display of fruit would do credit to any tables. Such a beautiful collection of the choicest varieties, of so fair proportions, of the richest flavor, and so tastefully arranged, spoke much of the careful attention of the contributors in their selections, and of the prosperity of the farmers of Worcester North. In awarding the small amount of premiums justly among so many the difficulty was apparent. Your Committee were glad to see such prominence given to the standard varieties, and we believe that much improvement might be made in many of our orchards by lessening the number of varieties, if the crop is designed for the market. There were some new varie-

ties presented, which, by further trial, may prove themselves worthy of place among the standards of this section. The show of peaches was fair; that of plums and quinces was not large.

APPLES.

For the best and largest exhibition of named varieties,

- | | |
|--------------------------------------|---------------------------|
| 1st, to N. C. Day, of Lunenburg, | \$4,00 |
| 2d, to J. A. Marshall, of Fitchburg, | <i>Harris on Insects.</i> |

For twelve varieties of five specimens each,

- | | |
|---------------------------------------|---------------------------|
| 1st, to Porter Piper, of Leominster, | <i>Harris on Insects.</i> |
| 2d, to Ezra Kendall, of Sterling, | 2,00 |
| 3d, to Addison Hubbard, of Fitchburg, | 1,00 |

Six varieties of five specimens each,

- | | |
|---|------|
| 1st, to Benjamin Snow, Jr., of Fitchburg, | 2,00 |
| 2d, E. E. Boyden, of Leominster, | 1,50 |
| 3d, Thomas Palmer, of Fitchburg, | 1,00 |

Three varieties of ten specimens,

- | | |
|-------------------------------------|------|
| 1st, G. P. Hawkins, of Fitchburg, | 1,50 |
| 2d, Benjamin Safford, of Fitchburg, | 1,00 |
| 3d, L. Stockwell, of Fitchburg, | ,50 |

Best exhibition of one variety,

- | | |
|--------------------------------------|------|
| 1st, to Alvah Crocker, of Fitchburg, | 1,50 |
| 2d, G. F. Nutting, of Fitchburg, | 1,00 |

PEACHES.

For the best collection,

- | | |
|------------------------------|---------------------------|
| D. H. Merriam, of Fitchburg, | <i>Harris on Insects.</i> |
|------------------------------|---------------------------|

For the best plate,

- | | |
|--|------|
| 1st, to A. L. Wyman, of Fitchburg, | 2,00 |
| 2d, to Benjamin Safford, of Fitchburg, | 1,00 |
| 3d, to Jabez Fisher, of Fitchburg, | ,50 |

PLUMS.

For the best collection,

J. A. Marshall, of Fitchburg, \$2,00

For best plate,

1st, to J. M. Twichell, of Fitchburg, 1,00

2d, to J. Haskell, of Fitchburg, ,50

QUINCES.

1st, to C. A. Emory, of Fitchburg, 1,00

2d, to Peter Snow, of Fitchburg, ,50

GRATUITIES.

Cyrus Thurston, of Fitchburg, 1,00

N. S. Boutelle, of Fitchburg, ,75

James Fisher, of Fitchburg, ,75

Jackson Burr, Ashby, ,50

E. D. Works, of Fitchburg, ,50

Nathan Caswell, of Fitchburg, ,50

M. M. Gage, of Fitchburg, ,50

J. McIntire, of Fitchburg, ,25

A. S. Dole, of Fitchburg, ,75

Jacob Haskell, of Fitchburg, ,50

Ira Holt, of Fitchburg, ,50

Samuel Burnap, of Fitchburg, ,50

Levi Kendall, of Fitchburg, ,50

Norman Stone, of Fitchburg, ,50

Thomas S. Eaton, of Fitchburg, ,50

S. W. Houghton, of Bolton, ,50

Daniel S. Eaton, of Fitchburg, ,50

Daniel C. Miles, Westminster, ,75

Waldo Wallace, of Fitchburg, ,25

Benjamin Snow, Jr., of Fitchburg, on peaches, ,50

D. C. MILES, *Chairman.*

PEARS AND GRAPES.

PEARS.

For best and largest named varieties,

1st, to Jabez Fisher,	\$4,00
2d, to Benjamin Snow, Jr.,	<i>Harris on Insects.</i>

For best twelve varieties,

1st, to Alvah Crocker,	<i>Harris on Insects.</i>
2d, to Jonas A. Marshall,	2,00

Third premium not awarded.

For best six varieties,

1st, to T. R. Boutelle,	2,00
2d, to A. Hubbard,	1,50
3d, to N. S. Boutelle,	1,00

For best three varieties,

1st, to Alvah Crocker,	1,50
2d, to George D. Colony,	1,00
3d, to J. M. Twichell,	,50

Best one variety,

1st, to Benjamin Snow, Jr,	1,50
2d, to Joseph Marshall,	1,00

GRATUITIES.

Alvah Crocker,	1,00
G. F. Nutting,	1,00
Z. F. Young,	1,00
T. S. Blood,	,50
George D. Colony,	,50
E. D. Works,	,50

GRAPES.

For best display of native,

1st, to Jabez Fisher,	<i>Harris on Insects.</i>
2d, to George E. Towne,	2,00
3d, to C. A. Emory,	1,00

GRATUITIES.

O. Whitney, Jr.,	\$1,00
Alvah Crocker,	1,00
Benjamin Safford,	,50
Ira Holt,	,50
H. F. Coggshall,	,50
No foreign grapes exhibited.	

RODNEY WALLACE, *Chairman.*

ASSORTED FRUITS AND FLOWERS.

The display of flowers were unusually good. Not only was taste displayed in the selection of varieties, but skill in their arrangement into groups and bouquets. We were gratified to see this evidence of increasing refinement in our community. No person who can find pleasure in the cultivation of flowers can be altogether destitute of the finer sensibilities. The same rule applies, but with stronger force, to the love of the beautiful in nature, as to the love of the beautiful in art. The ability to perceive and love it necessarily involves a certain development of the finer power and instincts. Moreover, it is difficult to see how one who loves and cultivates flowers can be irreligious. There is no more convincing and touching evidence of Supreme love than in the floral treasures scattered so lavishly over the earth—each floweret a miracle of living beauty—and proffering to every sense a pure and exquisite pleasure.

The body, too, as well as the mind, is improved by the love and cultivation of flowers. The early

hours, the pure air, the odor of the fresh earth, and the invigorating exercise all tend to promote that health and vigor of body without which there can be no real health of mind.

Your Committee found some difficulty in coming to a determination, but finally made their awards as follows :

FRUITS.

Best basket of assorted fruit,

1st, to Benjamin Snow, Jr.,	\$2,00
2d, to Waldo Wallace,	1,00

PLANTS IN POTS.

1st, to Dr. Jabez Fisher,	2,00
2d, to Mrs. F. Russell,	1,00

FLOWERS.

1st, to Mrs. M. M. Munroe,	2,00
2d, to Mrs. N. C. Day,	1,00
3d, Miss Mary E. Pierce,	,50

GRATUITIES.

Mrs. E. M. Howe,	,50
Mrs. Joseph Sawyer,	,50

For plant in pot,

Mrs. C. A. Emory,	,50
Mrs. J. F. Munroe,	,50
Mrs. M. E. White,	,50
Mr. Benjamin Safford,	,50
Mr. Jackson Burr,	,50
Mr. Josiah Sheldon,	,50

For assorted fruits,

L. A. Pierson,	,50
A. L. Wyman,	,50

Respectfully submitted by

C. H. B. SNOW, *for Committee.*

PLOWING—SINGLE TEAMS.

The Committee regret that the Chairman was not present. The other members present were unanimous in awarding to Sewall G. Myrick, of Princeton, the first premium of \$7,00. They also award to Thomas Sheldon, of Fitchburg, the second premium of \$5,00. They also recommend a gratuity of \$2,00 to Herbert Goodridge, of Fitchburg.

For the Committee,

JOHN G. WOODWARD.

PLOWING—HORSE TEAMS.

The Committee of plowing with horse teams, having attended to that duty, report as follows.

There were two teams entered for premiums and competed for the same. Your Committee make the following awards :

1st, to Joel Page, of Fitchburg,	\$7,00
2d, to J. P. Putnam, of Fitchburg, his team being managed by two of his boys, less than eighteen years of age, and very well done, a gratuity of	5,00

For the Committee,

JAMES PUTNAM, *Chairman.*

PLOWING—DOUBLE TEAMS.

Your Committee on plowing with double teams make the following report:

There was but one entry in *season* to compete for the premiums. The Committee were unanimous in awarding the first premium, of \$7,00, to Edwin Goodridge, of Fitchburg, in our opinion, the best plowman on the field. Alonzo P. Goodridge plowed with a double team. He plowed well, but not equal to the young man, in the minds of the Committee. To him we recommend a gratuity of \$5,00.

All of which is submitted by your Committee,

JOHN BROOKS, *Chairman.*

MARES AND COLTS.

The Committee on mares and colts have awarded the following premiums:

STALLIONS.

For stallions five years old and upwards,	
1st, to J. A. Harwood, of Littleton, (Roebuck),	
six years old,	\$10,00
2d to Oliver Wellington & Son, of Phillipston,	
for their seven-year old Morgan,	6,00
Justin Howard, of Worcester, for his Morgan	
eight years old, a gratuity,	6,00
Warren Simonds, of Templeton, for his Grey	
Eagle, seven years old, a gratuity,	2,00

FOUR YEAR OLD STALLIONS.

1st, to Wm. Brown, of Lunenburg, for his four-	
year-old Tippo,	4,00

2d, to Asa Merriam, of Hubbardston, for his
three-year-old stallion, \$2,00

BREEDING MARES.

1st, to Francis Conant, of Boxboro, 6,00
2d, to J. E. Merriam, of Princeton, 4,00

COLTS LESS THAN ONE YEAR OLD.

1st, to Ohio Whitney, of Ashburnham, 3,00
2d, to Francis Conant, of Boxboro, 2,00
3d, to Wm. E. Legeyt, of Fitchburg, 1,00
Jerome S. Gibson, of Ashburnham, a gratuity, 1,00

For the Committee,

JOHN K. GOING, *Chairman.*

DRAUGHT AND FAMILY HORSES.

The Committee on draught and family horses award
the following premiums :

DRAUGHT HORSES.

J. P. Putnam, of Fitchburg, best pair draught
horses, \$6,00
A. S. Dole, of Fitchburg, best draught horse, 5,00
Martin Clifford, of Fitchburg, 2d best draught
horse, 3,00

FAMILY HORSES.

Franklin Sawyer Sterling, 3,00

GRATUITIES.

E. C. Farwell, of Fitchburg, family horses, 2,00
Ohio Whitney, Jr., of Ashburnham, 2,00
Daniel C. Miles, of Westminster, 2,00

S. W. A. STEVENS, *Chairman.*

COLTS.

The Committee on Colts award the following premiums :

THREE-YEARS-OLD FILLIES.

1st, to Edmund Houghton, of Lunenburg,	\$4,00
2d, Levi Jackson,	2,00

TWO-YEARS-OLD GELDINGS.

1st, to Ohio Whitney, of Ashburnham,	4,00
2d, to Asa Holden, of Shirley,	2,00

YEARLINGS.

1st, to Levi Kendall, of Fitchburg,	4,00
2d, to John Wilker, of Ashburnham,	2,00

Respectfully submitted,

W. L. BROWN, *for the Committee.*

FAT CATTLE.

The Committee on Fat Cattle award the following premiums, regarding expense of feeding as directed :

COWS.

1st, to J. T. Everett, of Princeton,	\$6,00
2d, to Sewall G. Myrick, of Princeton,	3,00
3d, to Abel F. Adams, of Fitchburg,	2,00

THREE-YEARS-OLD STEERS.

2d, to Josiah Page, of Westminster,	4,00
-------------------------------------	------

The Committee recommend a gratuity to Sewall G. Myrick, for his two other fat cows, \$1,00 each ; and to J. G. Woodward, of Ashburnham, for his fat cow, \$1,00.

NATHANIEL WOOD, *Chairman.*

BLOOD STOCK.

The Committee on Blood Stock submit the following report:

DURHAM BULLS.

1st, to A. O. Cummings, of Millbury,	\$5,00
2d, to Abel F. Adams, of Fitchburg,	3,00
To A. C. & J. G. Wood, of Millbury, a gratuity,	3,00

AYERSHIRE BULLS.

1st, to N. C. Day, Lunenburg,	5,00
-------------------------------	------

DEVON BULLS.

1st, to Nathan Caswell, of Fitchburg,	5,00
2d, to Loriston Stockwell, of Fitchburg,	3,00

GRADE BULLS.

1st, to Stephen Houghton, of Lunenburg,	5,00
2d, to Joel Page, of Fitchburg,	3,00

BULL CALVES.

1st, to Joel Page, of Fitchburg,	5,00
2d, to Isaac B. Woodward, of Fitchburg,	3,00
3d, to John Cutter, of Winchendon,	2,00
A. O. Cummings and A. C. & J. G. Wood, of Millbury, for a beautiful herd of short horn cattle, a gratuity,	10,00
Nathan Caswell, of Fitchburg, for Devon heifers, a gratuity,	2,00
John Wilker, grade bull, a gratuity,	1,00

Respectfully submitted,

SOLON CARTER, *for the Committee.*

WORKING OXEN.

The Committee award the following premiums:

1st, to Loriston Stockwell, of Fitchburg,	\$6,00
2d, to Josiah Page, of Westminster,	5,00
3d, to Sewall G. Myrick, of Princeton,	4,00
4th, to Thomas Sheldon, of Fitchburg,	3,00
5th, to Joseph Wilker, of Ashburnham,	2,00
For the Committee,	

WILLIAM WOODBURY, JR.

STEERS—TWO AND THREE YEARS OLD.

But one pair of two-years-old, and six pairs of three-years-old entered. Four competed.

The Committee award the following premiums:

STEERS—THREE-YEARS-OLD.

1st, to J. E. Merriam, of Princeton,	\$5,00
Second not awarded.	
3d, to I. B. Woodward, of Fitchburg,	3,00

TWO-YEARS-OLD STEERS.

1st, to N. B. Reed, of Princeton,	4,00
-----------------------------------	------

TRAINED STEERS.

1st, to N. B. Reed, of Princeton,	4,00
-----------------------------------	------

LORISTON STOCKWELL.

YEARLING STEERS AND STEER CALVES.

Your Committee on Yearling and Steer Calves have awarded the following premiums :

YEARLING STEERS.

1st, to Sewall G. Myrick, of Princeton,	\$3,00
2d, to I. B. Woodward, of Fitchburg,	2,00

CALVES RAISED BY HAND.

1st, to N. B. Reed, of Princeton,	5,00
-----------------------------------	------

TRAINED CALVES.

1st, to Lyman W. Merriam, of Fitchburg,	3,00
2d, to N. B. Reed, of Princeton,	2,00

F. W. WRIGHT, *Chairman.*

MILCH KINE.

The Committee on Milch Cows and Heifers award the following premiums, viz :

HERDS OF COWS.

1st, to Abel F. Adams, of Fitchburg, for his herd of four cows,	\$10,00
2d, to Isaac B. Woodward, of Fitchburg,	7,00
3d, to Albert Stratton, of Leominster,	4,00

The number of entries of single cows and heifers was unusually small, and of those that were entered two were among the missing, viz: one cow entered by Joel Page, and one three-years-old heifer by Benj. Wheeler.

On Single Cows your Committee award :

1st, to N. B. Reed, of Princeton,	5,00
2d, to Joseph Upton, of Fitchburg,	4,00
3d, to Albert Stratton, of Leominster,	3,00

HEIFERS—THREE-YEARS-OLD.

2d, to Joseph Upton, of Fitchburg, 4,00
 The first and third premiums on this class were not awarded.

HEIFERS—TWO-YEARS-OLD.

1st, to Hosea M. Caswell, of Fitchburg, 5,00
 For the second and third premiums of this class there were no competitors.

THOMAS R. BOUTELLE, *Chairman.*

HEIFERS.

The Committee on Heifers award the following premiums :

TWO-YEARS-OLD.

1st, to Nathan B. Reed, of Princeton, \$4,00
 2d, to Geo. M. Gregory, of Princeton, 3,00
 3d, John Smith, of Fitchburg, 2,00

YEARLINGS.

1st, to A. F. Adams, of Fitchburg, 3,00
 2d, to Joel Page, of Fitchburg, 2,00
 3d, to Geo. M. Gregory, of Princeton, 1,00

CALVES.

1st, to Joel Page, of Fitchburg, 3,00
 2d, to George P. Hildreth, of Fitchburg, 2,00
 3d, to Joseph Upton, of Fitchburg, 1,00

CALVES RAISED BY HAND.

1st, to Joseph Upton, of Fitchburg, 3,00
 2d, to Joseph Cushing, of Fitchburg, 2,00

EZRA KENDALL, *Chairman.*

SHEEP.

The Committee on sheep award the following premiums :

FLOCKS.

1st, to A. P. Goodrich, flock of six sheep,	\$4,00
2d, to James McIntire,	2,00
H. Harris, gratuity,	1,00

COSSETS.

1st, to Alfred A. Marshall, one cosset,	2,00
2d, to James McIntire,	1,00
3d, to Loriston Stockwell,	,50

C. S. MERRIAM, *for the Committee.*

SWINE.

The Committee on Swine were all present and acting, except W. T. Sawyer, of Sterling, viz : Amos Norcross, of Fitchburg ; George Miles, of Westminster ; C. W. Jaquith, and David Lowe, of Fitchburg, and report. Whole number of entries eight. The following premiums were awarded :

Abel F. Adams, of Fitchburg, for fat hog more than eight months old,	\$3,00
Benjamin Safford, of Fitchburg, fat pig less than eight months old, first premium,	5,00
J. T. Duns Moor, of Lunenburg, for a breeding sow of great merit, but entered too late for premium, the Committee recommend a gratuity of	2,00
John L. Bailey, for a fat hog entered too late for premium, the Committee recommend a gratuity of	2,00

AMASA NORCROSS, *Chairman.*

POULTRY.

The Committee on Poultry make the following awards:

TURKEYS.

1st, to J. H. Laws,	\$2,00
2d, to A. Stratton,	1,00

GEESE.

1st, to John Smith,	2,00
2d, T. D. Wood,	1,00

BARNYARD FOWLES.

1st, to N. F. Day,	2,00
2d, to Porter Putnam,	1,00

DUCKS.

1st, to Mrs. Jeremiah Andrews,	2,00
2d, to Thomas Oakman,	1,00

GRATUITIES.

G. F. Nutting, for fowles,	,50
L. D. Wheeler, for fowles,	,50
Edwin Monroe, for fowles,	,25
Edwin Monroe, for doves,	,25

NATT COWDIN, *for Committee.*

GARDENS.

One of the most important auxiliaries to the well supplied table of a family is a good kitchen garden, not only in a pecuniary, but in a sanitary point of view. Good health, according to the best authorities, is greatly promoted by a daily supply of vegetables and fruit, and it is commonly known to the world that the mariner at

sea becomes afflicted with scurvy when long cut off from the vegetable kingdom.

The Committee, in making the award of premiums, did not find, in their opinion, a garden entered that was entitled to the first premium, according to their ideas of the standard for a *kitchen* garden. Although most were cleanly cultivated, yet there was a lack of *variety of the most common classes of vegetables* that could not be overlooked when looking for a garden, the excellence of which would be a criterion.

The flower gardens entered by Mrs. A. P. Kimball and Mrs. J. F. Monroe, were, considering the season and the ravages of the worm, in fine condition. We know that the fair hands that take such an interest in beautifying the earth and making a home pleasant will receive the thanks of all whose sensibilities are not so dull but that they can see and admire the wonders of creation in a beautiful flower.

The following premiums were awarded:

GARDENS.

First premium not awarded.

2d, to George E. Towne,	<i>Harris on Insects.</i>
3d, to Walter Haywood,	\$2,00

FLOWER GARDENS.

1st, to Mrs. A. P. Kimball,	2,00
2d, to Mrs. J. F. Munroe,	1,00

For the Committee,

CHARLES A. EMORY.

ANALYSIS OF PREMIUMS AND GRATUITIES AWARDED.

Amount awarded for	Plowing at the Exhibition	-	\$38,00
"	"	" Experiments on Manures	- - 60,00
"	"	" Farms - - - -	15,00
"	"	" Gardens - - - -	8,00
"	"	" Essays - - - -	10,00
"	"	" Neat Stock - - - -	196,50
"	"	" Horses - - - -	86,50
"	"	" Sheep - - - -	10,50
"	"	" Swine - - - -	9,00
"	"	" Poultry - - - -	12,25
"	"	" Grain - - - -	31,45
"	"	" Root Crops - - - -	21,50
"	"	" Fruits - - - -	83,50
"	"	" Flowers - - - -	10,50
"	"	" Butter and Cheese - - - -	14,50
"	"	" Bread, - - - -	2,00

Premiums and gratuities were paid to two hundred and thirteen different persons, and the amounts distributed as follows :

Fitchburg	-	-	-	-	-	\$408,37
Princeton	-	-	-	-	-	57,00
Lunenburg	-	-	-	-	-	54,75
Leominster	-	-	-	-	-	32,87
Westminster	-	-	-	-	-	19,50
Millbury	-	-	-	-	-	18,00
Ashburnham	-	-	-	-	-	13,30
Littleton	-	-	-	-	-	10,00
Sterling	-	-	-	-	-	7,00
Phillipston	-	-	-	-	-	6,00
Worcester	-	-	-	-	-	6,00
Hubbardston	-	-	-	-	-	2,50
Boxboro'	-	-	-	-	-	2,00
Templeton	-	-	-	-	-	2,00
Shirley	-	-	-	-	-	1,00
Ashby	-	-	-	-	-	,50

1862.	}	Amount of premiums offered	-	-	1105,75
		Amount of premiums and gratuities awarded	-	-	676,55
		Amount of premiums and gratuities paid	-	-	640,79
		Amount of permanent fund	-	-	4830,31

Dr.		THOMAS C. CALDWELL, Treasurer,	
1861.			
Dec'r. 4.	To amount on hand as per last settlement,		\$4,510,64
1862.			
April 4.	" cash as dividend of Washington Bank,		30,00
" "	" " " " " Bank of Commerce,		30,00
" "	" " " " " Safety Fund Bank,		15,00
" "	" " " " " North Bank,		9,00
Oct. 1.	" " for admission to Hall,		178,38
" 10.	" " as dividend of North Bank,		9,00
" 11.	" " " " " Safety Fund Bank,		15,00
" "	" " " " " Washington Bank,		30,00
" 15.	" " " " " Bank of Commerce,		30,00
" "	" " of Commonwealth for bounty,		600,00
Nov. 28.	" " for waste paper and pamphlets sold,		6,51
Dec'r. 2.	" " membership the past year,		60,00
" "	" " interest for money loaned,		58,70
			\$5,582,25
Dec'r. 3.	Amount in hands of Treasurer,	\$4,630,31	
	Increase the last year,	\$119,67	

THOMAS C. CALDWELL, *Treasurer.*

The undersigned have examined the above account of the Treasurer, and believe it correct.

ABEL F. ADAMS, JABEZ FISHER, JONAS A. MARSHALL,	}	<i>Com. on Finance.</i>
---	---	-------------------------

NEW MEMBERS.

<p style="text-align: center;">ASHBY.</p> <p>Fay, Dennis.</p> <p style="text-align: center;">BOXBORO.</p> <p>Conant, Francis.</p> <p style="text-align: center;">FITCHBURG.</p> <p>Kendall, Oliver, Hawkins, Gardner P., Woodbury, William Jr., Ruggles, F. L., Merriam, David H.</p>		<p style="text-align: center;">LUNENBURG.</p> <p>Houghton, Stephen.</p> <p style="text-align: center;">MILLBURY.</p> <p>Cummins, A. O., Wood, A. C. & J. G.</p> <p style="text-align: center;">WORCESTER.</p> <p>Howard, Justin.</p> <p style="text-align: center;">ASHBURNHAM.</p> <p>Humphrey Harris.*</p>
---	--	--

*Omitted in last year's list.

in account with Worcester North Agricultural Society, Cr.
1861.

Dec. 10.	By cash paid George Jewett for premium, by order of Committee,	\$0,50
“ 24.	“ “ “ J. J. Hardon, bill, cambric, $\frac{3}{4}$	3,12
1862.		
Jan'y. 7.	“ “ “ Fitchburg Post Office, for stamps,	4,00
“ 21.	“ “ “ E. Garfield, for printing report and posters,	116,32
Feb'y. 7.	“ “ “ L. Sprague & Co., for tacks and pins,	,25
April 4.	“ “ “ Fitchburg Post Office, for postage on 133 reports,	3,99
Oct. 16.	“ “ “ S. B. Ball, for services at Hall, &c.,	5,00
“ 17.	“ “ “ W. G. Wyman, cash paid out for services, &c.,	7,50
“ “ “ “ Fitchburg Post Office, for stamps,	4,50	
“ 18.	“ “ “ Daniel Stearns, services at Hall, &c.,	3,00
“ “ “ “ J. S. Brown, services at Hall,	2,00	
“ 20.	“ “ “ Abel Marshall, setting and removing pens, &c.,	22,00
“ 23.	“ “ “ J. W. Doe, services at Hall,	1,50
“ 25.	“ “ “ Fitchburg Hotel, forty-five dinners, October 1st,	22,50
“ 28.	“ “ “ J. J. Hardon, bill, cambric,	2,69
“ “ “ “ Tyler Younglove, services at Hall,	3,38	
“ “ “ “ C. H. Benton, services at Hall,	3,00	
“ “ “ “ S. P. Emory, services at Hall,	3,75	
Nov. 3.	“ “ “ E. Garfield, printing cards, tickets, &c.,	31,12
“ “ “ “ B. Parkhurst, services at scales,	,50	
“ “ “ “ C. L. Fairbanks, services at scales,	,50	
“ 11.	“ “ “ Abel Marshall, bill for swine pens,	28,20
“ 18.	“ “ “ W. G. Wyman, services as Secretary,	25,00
“ 19.	“ “ “ J. F. Stiles, bill, ribbon,	2,09
“ 22.	“ “ “ D. H. Merriam, two copies Harris on Insects,	5,00
“ 28.	“ “ “ R. Wallace & Co., paper envelopes, &c.,	1,80
“ “ “ “ J. J. Piper, bill, advertising,	4,50	
“ “ “ “ Lucius Aldrich, services at Hall,	3,42	
“ “ “ “ for premiums awarded, October 1st and November 11th,	640,79	
Dec'r. 3.	“ amount carried to new account to balance,	4630,31
		<u>\$5,582,23</u>

OFFICERS OF THE SOCIETY FOR 1863.

ELECTED AT THE ANNUAL MEETING, WEDNESDAY, DECEMBER 3, 1862.

L. H. BRADFORD, of Fitchburg, *President*.

LEONARD BURRAGE, of Leominster, }
BENJAMIN WYMAN, of Westminster, } *Vice Presidents.*

W. G. WYMAN, of Fitchburg, *Secretary*.

T. C. CALDWELL, of Fitchburg, *Treasurer*.

OHIO WHITNEY, JR., of Ashburnham,
JOEL HAYWARD, of Ashby,
S. W. A. STEVENS, of South Gardner,
SOLON CARTER, of Leominster,
PORTER PIPER, of Leominster,
THOMAS BILLINGS, of Lunenburg,
CYRUS KILLBURN, of Lunenburg,
DANIEL PUTNAM, of Lunenburg,
JOHN BROOKS, JR., of Princeton,
S. G. MIRICK, of Princeton,
J. T. EVERETT, of East Princeton,
ANAN STOCKWELL, of So. Royalston,
NATHANIEL HOLDEN, of Shirley,
JAMES O. PARKER, of Shirley,
SAMUEL OSGOOD, of Sterling,
J. M. SAWYER, of Sterling,
WARREN SIMONDS, of Templeton
DANIEL C. MILES, of Westminster,
J. W. FORBUSH, of Westminster,
JOHN CUTTER, of Winchendon,
A. F. ADAMS, of Fitchburg,
T. R. BOUTELLE, of Fitchburg,
JABEZ FISHER, of Fitchburg,
THOMAS PALMER, of Fitchburg,
LEVI KENDALL, of Fitchburg,
ABEL MARSHALL, of Fitchburg,
J. A. MARSHALL, of Fitchburg,
JOEL PAGE, of Fitchburg,
J. P. PUTNAM, of Fitchburg,
JOSEPH UPTON, of Fitchburg,
I. B. WOODWARD, of Fitchburg,

Trustees.

ABEL F. ADAMS, of Fitchburg, *Member of the State Board
of Agriculture.*

COMMITTEES AND PREMIUMS
FOR THE
ELEVENTH ANNUAL EXHIBITION,
TO BE HELD AT FITCHBURG,
On Tuesday and Wednesday, September 29th and 30th, 1863.

No person will be allowed to become a competitor for any of the Premiums herein offered, unless he shall have made an entry for the same, with the Secretary, within the time prescribed for each class, nor unless he shall also have furnished all required statements relating thereto within the specified time.

For the convenience of those who live at a distance, entries may be made by Mail; and all entries so made must be delivered at some Post Office one day previous to the expiration of the time specified, and must bear proof of having been so delivered either by a Post-mark, or a certificate of registry from the Postmaster.

STOCK.

All entries for premiums under this head, must be made on or before the Friday previous to the exhibition, and all stock must be owned by the person who enters it.

All live stock must have been raised by the person entering the same, or owned by him for at least three months next previously.

Each entry of stock for the pens must specify the breed of the animal, if known, and the age.

Fat cattle, working cattle, draught horses and swine must be weighed on the same scale, in Fitchburg, and will be weighed free of expense. The weight of all other stock will not be required.

BLOOD STOCK.

Committee.—A. O. Cummins, of Millbury; N. C. Day, of Lunenburg; Leonard Burrage, of North Leominster; A. F. Adams, H. M. Caswell, of Fitchburg.

Authentic pedigrees will be required.

Durham Bulls,	- - - -	1st premium,	-	\$5,00
		2d premium,	-	3,00
North Nevon,	- - - -	1st premium,	-	5,00
		2d premium,	-	3,00
Ayrshire,	- - - -	1st premium,	-	5,00
		2d premium,	-	3,00
Alderney,	- - - -	1st premium,	-	5,00
		2d premium,	-	3,00
Any other breed, pure blood,	- -	1st premium,	-	5,00
		2d premium,	-	3,00

The Committee may award gratuities for superior specimens of cows, heifers or calves, of either of the breeds named.

GRADE OR NATIVE BULLS.

Committee.—J. T. Everett, of East Princeton; Benjamin Safford, of Fitchburg; Josiah Puffer, of Still River; T. D. Wood, of Westminster; Gilman Day, of Baldwinville.

More than two-years-old,	- -	1st premium,	-	\$5,00
		2d premium,	-	3,00
Yearling,	- - - -	1st premium,	-	4,00
		2d premium,	-	2,00
		3d premium,	-	1,00
Calves,	- - - -	1st premium,	-	4,00
		2d premium,	-	3,00
		3d premium,	-	2,00

These may be of any breed, more than four months old.

MILCH KINE.

Committee.—D. C. Miles, Aaron Wood, of Westminster; I. B. Woodward, of Fitchburg; J. M. Sawyer, of Sterling; Joel Hayward, of Ashby.

Herds of four Cows or Heifers each,	-	1st premium,	-	\$10,00
		2d premium,	-	7,00
		3d premium,	-	4,00

The person receiving these premiums will not be allowed to compete for any other, with the same animals.

The Committees will regard age, quality and quantity of milk, expense of keeping, &c.

Cows,	-	-	-	-	1st premium,	-	\$5,00
					2d premium,	-	4,00
					3d premium,	-	3,00
Heifers, three-years-old,	-	-	-	-	1st premium,	-	5,00
					2d premium,	-	4,00
					3d premium,	-	3,00
Heifers, two-years old,	-	-	-	-	1st premium,	-	4,00
					2d premium,	-	3,00
					3d premium,	-	2,00

Competitors for premiums on milch cows, and milch heifers, will be required to certify in writing, at the time of entry, to the weight of the milk during the six days commencing with the first Monday in June, and the corresponding six days in September; and to the manner of keeping, and general management. Cows that calve near or after the first Monday in June, may be tried at another time.

HEIFERS.

Committee.—Benjamin Wyman, A. W. Benjamin, of Westminster; E. J. Merriam, of Princeton; Howard Gates, of Ashby; Stephen Ward, of North Ashburnham.

Intended to be kept for the dairy.

Two-years-old,	-	-	-	-	1st premium,	-	\$4,00
					2d premium,	-	3,00
					3d premium,	-	2,00
Yearlings,	-	-	-	-	1st premium,	-	3,00
					2d premium,	-	2,00
					3d premium,	-	1,00

HEIFER CALVES.

Committee.—Harlow Skinner, of Princeton; Alvin Ward, of Ashburnham; W. B. Hosmer, of Leominster; Josiah Page, of Westminster; Henry Chase, of Templeton.

Calves, more than four months old,	-	1st premium,	-	3,00
		2d premium,	-	2,00
		3d premium,	-	1,00

Calves, more than four months old, raised

by hand, - - - - -	1st premium, -	\$3,00
	2d premium, -	2,00
	3d premium, -	1,00

WORKING OXEN.

Committee.—John Brooks, Sen., of Princeton; Thomas Whitney, of Shirley; Levi Burr, of Ashby; D. S. Eaton, Joseph Smith, of Fitchburg.

Working Oxen, - - - - -	1st premium, -	\$6,00
	2d premium, -	5,00
	3d premium, -	4,00
	4th premium, -	3,00
	5th premium, -	2,00

The working oxen will be tried, attached to loads weighing, including the cart, one-third more than themselves.

STEERS MORE THAN ONE YEAR OLD.

Committee.—Cyrus Killburn, of Lunenburg; George M. Gregory, of Princeton; A. C. Wood, of Millbury; John Davis, of Ashby; P. H. W. Lowe, of Leominster.

Three-years old, - - - - -	1st premium, -	\$5,00
	2d premium, -	4,00
	3d premium, -	3,00

The three-years-old steers will be attached to carts, and tried like the oxen, on the same ground; the cart and load to equal the steers in weight.

Two-years-old, - - - - -	1st premium, -	\$4,00
	2d premium, -	3,00
	3d premium, -	2,00
Trained, two-years-old, - - - - -	1st premium, -	4,00
	2d premium, -	2,00

YEARLING STEERS AND STEER CALVES.

Committee.—Ephraim Graham, of Lunenburg ; Joseph P. Reed, of Princeton ; Timothy Brown, of Westminster ; Levi Smith, of Ashby ; Thomas Sheldon, of Fitchburg.

Yearlings,	- - - - -	1st premium,	-	\$3,00
		2d premium,	-	2,00
		3d premium,	-	1,00
Trained Yearlings,	- - - - -	1st premium,	-	3,00
		2d premium,	-	2,00
		3d premium,	-	1,00
Calves,	- - - - -	1st premium,	-	5,00
		2d premium,	-	3,00
		3d premium,	-	1,00
Calves, raised by hand,	- - - - -	1st premium,	-	5,00
		2d premium,	-	3,00
		3d premium,	-	1,00
Trained Calves,	- - - - -	1st premium,	-	3,00
		2d premium,	-	2,00
		3d premium,	-	1,00

FAT CATTLE.

Committee.—Ezra Kendall, of Sterling ; Solon Carter, of Leominster ; John Lowe, of Fitchburg ; Amos Miller, of Westminster ; Nathaniel Holden, of Shirley.

The entries of fat cattle must specify the mode of fattening. Committees will regard the expense of feeding.

Oxen,	- - - - -	1st premium,	-	\$8,00
		2d premium,	-	5,00
		3d premium,	-	3,00
Cows,	- - - - -	1st premium,	-	6,00
		2d premium,	-	3,00
		3d premium,	-	2,00
Three-years-old Steers or Heifers,	- - - - -	1st premium,	-	6,00
		2d premium,	-	4,00

SWINE

Committee.—C. H. B. Snow, of Fitchburg ; Paul Gates, of Ashby ; E. H. Nichols, of Leominster ; Abram Osborn, 2d, of Fitchburg ; George Miles, of Westminster.

Must be entered like other stock.

Boars, more than one year old, - - -	1st premium, -	\$4,00
	2d premium, -	3,00
Less than one year old, - - -	1st premium, -	3,00
	2d premium, -	2,00
Fat Hogs, more than eight months old, -	1st premium, -	4,00
	2d premium, -	3,00
	3d premium, -	2,00
Fat Pigs, less than eight months old, -	1st premium, -	3,00
	2d premium, -	2,00
	3d premium, -	1,00
Breeding Sows, - - - -	1st premium, -	3,00
	2d premium, -	2,00
	3d premium, -	1,00
Weaned Pigs, not less than four, -	1st premium, -	3,00
	2d premium, -	2,00
	3d premium, -	1,00

STALLIONS.

Committee.—Warren Simonds, of Templeton ; Benjamin Wallis, of Ashby ; I. D. Ward, of Ashburnham ; Leonard Day, of Fitchburg ; Henry C. Hill, of Gardner.

All persons offering Stallions, five years old and upwards, will be required to exhibit specimens of their stock.

Stallions, five years old and upwards, -	1st premium, -	\$10,00
	2d premium, -	6,00
	3d premium, -	4,00
Four-years-old, - - - -	1st premium, -	4,00
	2d premium, -	2,00
Three-years-old, - - - -	1st premium, -	4,00
	2d premium, -	2,00
Two-years-old, - - - -	1st premium, -	4,00
	2d premium, -	2,00

MARES AND SUCKING COLTS.

Committee.—George A. Torrey, L. P. Comce, of Fitchburg; S. P. Burpee, of East Princeton; James O. Parker, of Shirley; Washington Nichols, of Gardner.

The mares must be four years old and upwards, accompanied with their colts.

Breeding Mares,	-	-	-	1st premium,	-	\$6,00
				2d premium,	-	4,00
Colts, less than one year old,	-	-	-	1st premium,	-	3,00
				2d premium,	-	2,00
				3d premium,	-	1,00

DRAUGHT AND FAMILY HORSES.

Committee.—John K. Going, of Shirley; Porter Piper, of Leominster; A. B. Wood, of Westminster; J. H. Temple, of Princeton; F. W. Wright of Ashby.

Draught horses will be tried, attached to a stone boat, loaded to weigh one-third more than the horses.

The same draught horse cannot receive a premium as a single horse and also as one of a pair, but a draught horse may compete as a family horse.

These must be four years old and upwards.

Draught horses and mules, pairs,	-	-	-	1st premium,	-	\$6,00
				2d premium,	-	4,00
Draught horses, single,	-	-	-	1st premium,	-	5,00
				2d premium,	-	3,00
Family horses,	-	-	-	1st premium,	-	7,00
				2d premium,	-	5,00
				3d premium,	-	3,00

COLTS.

Committee.—George F. Vose, of Fitchburg; Ohio Whitney, of Ashburnham; W. M. Pride, of Fitchburg; Hobart Spencer, of Ashby; Mark Wilder, of East Princeton.

Three-years-old Geldings,	-	-	-	1st premium,	-	\$4,00
				2d premium,	-	2,00

PREMIUMS.

Three-years-old Fillies,	-	-	-	1st premium,	-	\$4,00
				2d premium,	-	2,00
Two-years-old Geldings,	-	-	-	1st premium,	-	4,00
				2d premium,	-	2,00
Two-years-old Fillies,	-	-	-	1st premium,	-	4,00
				2d premium,	-	2,00
Yearling Colts,	-	-	-	1st premium,	-	4,00
				2d premium,	-	2,00

SHEEP.

Committee.—Luke Wellington, of Ashby; S. G. Mirick, of Princeton; Jacob Brown, 2d., David Lowe, of Fitchburg; John Fairbanks, of Lunenburg.

Flocks not less than six, owned by one

person,	-	-	-	-	1st premium,	-	\$6,00
					2d premium,	-	4,00
					3d premium,	-	2,00
Cossets,	-	-	-	-	1st premium,	-	2,00
					2d premium,	-	1,00
					3d premium,	-	,50

POULTRY.

Committee.—E. B. Rockwood, J. M. Sawtell, Levi Shattuck, of Fitchburg; Joseph Whitcomb, of East Princeton; J. P. Davis, of Ashby.

Must be entered like other stock.

Barn-yard Fowls, not less than six,	-	-	-	1st premium,	-	\$2,00
				2d premium,	-	1,00
Turkeys, not less than six,	-	-	-	1st premium,	-	2,00
				2d premium,	-	1,00
Geese, not less than six,	-	-	-	1st premium,	-	2,00
				2d premium,	-	1,00
Ducks, not less than six,	-	-	-	1st premium,	-	2,00
				2d premium,	-	1,00

PLOWING MATCH.

All entries for plowing must be made on or before the Wednesday previous to the exhibition, and one dollar must be deposited with each entry, to be returned to the competitor if he plows, otherwise forfeited to the Society.

No teams or parts of teams will be allowed to compete for more than one of the premiums on plowing.

DOUBLE TEAMS.

Committee.—Nathaniel Wood, of Fitchburg; G. S. Beaman, of East Princeton; Josiah Page, of Westminster; David Lawrence, of Ashby; Levi Kendall, of Fitchburg.

Double Teams,	-	-	-	1st premium,	-	\$7,00
				2d premium,	-	5,00
				3d premium,	-	3,00

SINGLE TEAMS.

Committee.—Thomas Billings, of Lunenburg; W. B. Willard, of Sterling; G. W. Houghton, of Princeton; G. S. Merriam, of Leominster; Stephen Houghton, of Lunenburg.

Single Teams,	-	-	-	1st premium,	-	\$7,00
				2d premium,	-	5,00
				3d premium,	-	3,00
Minors with Steers,	-	-	-	1st premium,	-	6,00
				2d premium,	-	4,00
				3d premium,	-	2,00

HORSE TEAMS.

Committee.—Walter Brigham, of Worcester; John Brooks, Jr., of Princeton; Jonas A. Marshall, of Fitchburg; W. L. Brown, Lemuel Pitts, of Lunenburg.

Horse or Mule Teams,	-	-	-	1st premium,	-	\$7,00
				2d premium,	-	5,00
				3d premium,	-	3,00

CROPS.

All entries for Premiums in this department must be made with the Secretary, on or before June 1st, with the exception of English turnips, which must be entered on or before August 1st. Immediately after these dates the Secretary will transmit to all competitors a copy of the following blank form adopted by the Trustees, to correspond with the requirements of the Board of Agriculture.

In pursuance of authority delegated to the Board of Agriculture, by Chap. 24, of the Acts of 1862, Agricultural Societies receiving the bounty of the State, are required to make use of the following form, and be governed by its conditions in the mode of ascertaining the amount of crops entered for premium.

Worcester North Agricultural Society.

Statement concerning a crop of _____, raised by Mr. _____, in the town of _____, 1863.

What was the crop of 1861 ?

What manure was used, and how much that year ?

What was the crop of 1862 ?

What manure was used, and how much that year ?

What is the nature of the soil ?

When, and how many times plowed, and how deep, for the present crop ?

What other preparation for the seed ?

Cost of plowing and other preparation ?

Amount of manure, in loads of thirty bushels, and how applied, for the present crop ?

Value of manure upon the ground ?

When and how planted, and the amount and kind of seed ?

Cost of seed and planting ?

How cultivated, and how many times ?

Cost of cultivation, including weeding and thinning ?

Time and manner of harvesting ?

Cost of harvesting, including the storing and husking or threshing ?

Amount of straw, stover, or other product ?

REMARKS.

Signed by _____

Competitor.

From actual measurement, I hereby certify that the land which the above crop of covered, contained rods, and no more.

From personal observation, we hereby certify that the above answers are true.

I hereby certify that the weight of the above crop, as ascertained by me, on the day of , was pounds.

In ascertaining the weight of a crop, an average rod shall be selected harvested and weighed by one or more members of a committee, and the whole estimated by mutiplied it by the number of rods.

The certificate shall state the weight of all crops only when in a merchantable state. .

'RULES OF MEASURE.

Practiced and adopted by the State Board of Agriculture.

Wheat, Potatoes, Sugar Beets, Mangel Wurzel, Ruta- Baga, White Beans, and Peas,	60 lbs. to bushel.
Corn, Rye, Onions, - - - - -	56 " "
Oats, - - - - -	32 " "
Barley, Buckwheat, - - - - -	48 " "
Cracked Corn, Corn and Rye and other meal, except Oat, and English Turnips, - - - -	50 " "
Parsnips, - - - - -	45 " "
Carrots, - - - - -	55 " "

These forms must be returned to the Secretary on or before November 10th, with each question concerning the crop answered, and the certificates properly signed.

No person will be allowed to compete for more then one Premium, with a crop raised upon the same field, however large, with the same treatment.

Committees should not encourage *the irregular* entry of *accidental* good crops.

GRAIN.

Committee.—Levi Downe, of Fitchburg; William Baker, of Lunenburg; Daniel Works, of Fitchburg; J. G. Woodward of Ashburnham; N. S. Boutelle, of Fitchburg.

The Committee may award gratuities for valuable new varieties of grain.

For the most profitable crops of Corn, Wheat, Rye, Barley and Oats, one acre each; of Cabbages and Beans one-eighth acre each; the product of Corn to be not less than 4320 lbs. on the cob; that of Wheat, Rye, Barley and Oats not less than 1200 lbs. of grain each.

Corn, - - - - -	1st premium, -	8,00
	2d premium, -	6,00
	3d premium, -	4,00
	4th premium, <i>Grasses and Forage Plants</i>	
Wheat, - - - - -	1st premium, -	8,00
	2d premium, -	5,00
	3d premium, <i>Harris on Insects</i>	
	4th premium, <i>Grasses and Forage Plants</i>	
Rye, - - - - -	1st premium, -	3,00
	2d premium, -	2,00
Barley, - - - - -	1st premium, -	3,00
	2d premium, -	2,00
Oats, - - - - -	1st premium, -	3,00
	2d premium, -	2,00
Field Beans, - - - - -	1st premium, -	2,00
	2d premium, -	1,00
Herds-grass Seeds, - - - - -	1st premium, -	2,00
	2d premium, <i>Grass and Forage Plants</i>	
Red Top Seeds, - - - - -	1st premium, -	2,00
	2d premium, <i>Grass and Forage Plants</i>	

The Grass Seed, a half-bushel of each lot, to be exhibited at the show.

ROOT CROPS AND CABBAGES.

Committee.—J. M. Harris, James P. Putnam, John Smith, Hubbard B. Fuller, of Fitchburg; Edward Bacon, of Westminster.

For the most profitable crops of potatoes, one-fourth acre each; of Carrots, Onions, Beets and Turnips, one-eighth acre each.

Potatoes, not less than 3000 lbs.,	1st premium, -	\$4,00
	2d premium, -	3,00
Carrots, not less than 5500 lbs.,	1st premium, -	4,00
	2d premium, -	3,00
Onions, not less than 2000 lbs,	1st premium, <i>Harris on Insects</i>	
	2d premium, -	2,00

Sugar Beets,	-	-	-	-	1st premium,	-	\$2,00
					2d premium,	-	1,00
Mangold Wurzels,	-	-	-	-	1st premium,	-	2,00
					2d premium,	-	1,00
English Turnips,	-	-	-	-	1st premium, <i>Harris on Insects</i>		
					2d premium,	-	2,00
Turnips, of any other variety,	-			-	1st premium, <i>Harris on Insects</i>		
					2d premium,	-	2,00
Cabbages,	-	-	-	-	1st premium,	-	2,00
					2d premium,	-	1,00

F A R M S.

Committee.—Jabez Fisher, Joseph Upton, Joel Page, of Fitchburg.

All competitors must make their entries on or before the first day of May. Each farm will be open to the inspection of the Committee during the entire season. A detailed statement of the general management, together with the income and expenses for the year previous to November 1st, must be furnished on or before November 10th.

For the best cultivated and managed

Farm,	-	-	-	-	1st premium,	-	\$15,00
					2d premium,	-	8,00

G A R D E N S.

Committee.—Benjamin Snow, Jr., Thomas Palmer, Edwin Upton, of Fitchburg.

No person having received a premium for a kitchen or mixed garden shall be allowed to compete for another with the same land within five years, except for a higher one.

Entries must be made on or before June 1st.

Kitchen or mixed Gardens,	-	-	-	-	1st premium,	-	\$6,00
					2d premium,	-	4,00
					3d premium,	-	2,00
Flower Gardens,	-	-	-	-	1st premium,	-	2,00
					2d premium,	-	1,00

EXPERIMENTS.

Committee.—Alfred Hitchcock, of Fitchburg; James Putnam, of Lunenburg; W. G. Wyman, of Fitchburg.

All entries must be made at least one week before commencing the Experiments.

There will be placed at the disposal of the Committee for the best and most reliable Agricultural Experiments, made in 1863, the sum of \$50,00.

EXPERIMENTS WITH MANURES.

Committee.—Loriston Stockwell, I. B. Woodward, Abel Marshall, of Fitchburg.

In accordance with the requirements of the Board of Agriculture, there will be paid for the most thorough, exact and reliable experiments upon the proper depth of applying manures, three premiums, as follows:

1st premium,	-	\$25,00
2d premium,	-	20,00
3d premium,	-	15,00

These Experiments must have been commenced in 1861, and continued through a rotation of three years.

FOREST TREES.

Entries must be made on or before the first day of June.

For the best Plantation of any kind of Forest Trees, suitable for fuel or timber, raised from the seed, not less than five hundred in number, which shall be in the most flourishing condition in the fall of this year,

1st premium,	-	\$25,00
2d premium,	-	15,00
3d premium,	-	10,00

TOWN HALL.

No article intended for the Hall will be entitled to a premium, unless it shall have been deposited by one o'clock, P. M., on Tuesday, from which time the Hall will be occupied by the Committees exclusively, until half-past six o'clock, when it will be opened to the public for the evening. Admission fee, 10 cents; Season tickets, 25 cents.

All articles must have been grown, manufactured or produced by the person entering the same for premium, and should be plainly marked with the name and residence of the exhibitor.

A strict compliance with these regulations will be absolutely necessary.

APPLES, PEACHES, PLUMS AND QUINCES.

Committee.—Rodney Wallace, Oliver Kendall, of Fitchburg ; J. C. Allen, of Leominster, Ephraim Murdock, of Winchendon ; Elnathan Davis, of Fitchburg.

APPLES.

For the best and largest exhibition of named varieties, of three specimens each, - - - -	1st premium, -	\$4,00
	2d premium, <i>Harris on Insects</i>	
For twelve varieties, of five specimens each, 1st prem. <i>Harris on Insects</i>	2d premium, -	2,00
	3d premium, -	1,00
For six varieties of five specimens each, 1st premium, -	2d premium, -	2,00
	3d premium, -	1,50
For three varieties of five specimens each, 1st premium, -	2d premium, -	1,50
	3d premium, -	1,00
For the best exhibition of twelve specimens of one variety, - - - -	1st premium, -	1,50
	2d premium, -	1,00

No person will be allowed to compete for a premium in more than one of the above classes, with the same specimens of fruit ; and if the number of specimens exhibited does not correspond with these regulations, the fruit will be excluded from competition for the premiums.

PEACHES.

For the best collections, - - - -	<i>Harris on Insects</i>	
For the best dishes or baskets, - -	1st premium, -	2,00
	2d premium, -	1,00
	3d premium, -	,50

GRAPES.

For the best displays of Foreign Grapes, 1st premium,	-	\$3,00
2d premium,	-	2,00
3d premium,	-	1,00
For the best displays of Native Grapes, 1st premium, <i>Harris on Insects</i>		
2d premium,	-	2,00
3d premium,	-	1,00

In addition to the above premiums, there will be placed at the disposal of the Committee for gratuities, \$10,00.

ASSORTED FRUITS AND FLOWERS.

Committee.—C. W. Carter,, Mrs. J. A. Marshall, Mrs. L. H. Bradford, of Fitchburg, Mrs. D. L. Abererombie, of Lunenburg ; Mrs. M. T. Gardner, of Shirley.

FRUIT.

For the best dishes or baskets, - -	1st premium,	-	\$2,00
	2d premium,	-	1,00

FLOWERS.

For best displays of named Plants in pots, 1st premium,	-	2,00	
2d premium,	-	1,00	
For the best displays of cut Flowers, -	1st premium,	-	2,00
	2d premium,	-	1,00
	3d premium,	-	,50

In addition to the above premiums, there will be placed at the disposal of the Committee for gratuities, \$10,00.

VEGETABLES.

Committee.—Jacob Haskell, Cyrus Thurston, Charles Brigham, of Fitchburg ; Daniel Lowe, of Leominster ; W. H. Brown, East Princeton.

Of Squashes, Pumpkins, Cabbages and Celery, there should be six specimens in each lot ; of Cauliflower, three ; of Onions, Beets, Tur-

nips and Tomatoes, one peck in each lot ; of Field Beans, one-half peck and of Lima Beans, two quarts.

For the best collections of Kitchen Vege-

tables, - - - - -	1st premium, -	\$7,00
	2d premium, -	5,00
	3d premium, -	3,00
Collections of Potatoes, - - -	1st premium, -	2,00
	2d premium, -	1,00
	3d premium, -	,50
Marrow Squashes, - - - - -	1st premium, -	1,00
	2d premium, -	,50
Hubbard Squashes, - - - - -	1st premium, -	1,00
	2d premium, -	,50
Crookneck Squashes, - - - - -	1st premium, -	1,00
	2d premium, -	,50
Pumpkins, - - - - -	1st premium, -	,75
	2d premium, -	,50
Cabbages, - - - - -	1st premium, -	,75
	2d premium, -	,50
Cauliflowers, - - - - -	1st premium, -	,75
	2d premium, -	,50
Celery, - - - - -	1st premium, -	,75
	2d premium, -	,50
Onions, - - - - -	1st premium, -	,75
	2d premium, -	,50
Turnip Beets, - - - - -	1st premium, -	,75
	2d premium, -	,50
English Turnips, - - - - -	1st premium, -	,50
	2d premium, -	,25
Tomatoes, - - - - -	1st premium, -	,50
	2d premium, -	,25
Field Beans, - - - - -	1st premium, -	,50
	2d premium, -	,25
Lima Beans, - - - - -	1st premium, -	,50
	2d premium, -	,25
Seed Corn, in traces, - - - - -	1st premium, -	1,00
	2d premium, -	,75
	3d premium, -	,50

In addition to the above, there will be allowed for gratuities, 10,00

No person will be allowed to receive more than one copy of *Harris on Insects*; if more than one is awarded, cash will be paid instead, at the rate of \$3,00 per copy; and if any person to whom a copy is awarded already has one, he may receive the copy awarded, or the cash as above, at his option.

BREAD, BUTTER, CHEESE, PICKLES AND HONEY.

Committee.—L. W. Russell, Nathan Upham, Joseph Baldwin, of Fitchburg; G. H. Whitney, of Winchendon; Daniel Putnam, of Lunenburg; Mrs. J. T. Everett, of East Princeton; Mrs. I. B. Woodward, Mrs. William Woodbury, Jr., of Fitchburg.

All Bread must have been baked on the Monday previous to the exhibition by unmarried ladies.

Competitors will be required to furnish a detailed statement in writing of the process of manufacturing Butter, Cheese and Pickles.

White Bread,	- - - -	1st premium,	-	\$2,00
		2d premium,	-	1,00
		3d premium,	-	,50
Unbolted Wheat Bread,	- - - -	- . - -	-	1,00
Bolted Rye Bread,	- - - -	1st premium,	-	1,00
		2d premium,	-	,50
Rye and Indian Bread,	- - - -	1st premium,	-	2,00
		2d premium,	-	1,00
		3d premium,	-	,50
Lump Butter, not less than 12 lbs.,	-	1st premium,	-	4,00
		2d premium,	-	3,00
		3d premium,	-	2,00
		4th premium,	-	1,50
June Tub Butter, not less than 25 lbs.,		1st premium,	-	3,00
		2d premium,	-	2,00
		3d premium,	-	1,00
Cheese, not less than 50 lbs.,	- - - -	1st premium,	-	2,00
		2d premium,	-	1,50
		3d premium,	-	1,00

Pickles,	-	-	-	-	1st premium,	-	\$0,75
					2d premium,	-	,50
					3d premium,	-	,25
Virgin Honey in the comb,	-	-	-	-	1st premium,	-	2,00
					2d premium,	-	1,00
					3d premium,	-	,50

MECHANICS AND MANUFACTURES.

Committee.—George E. Towne, of Fitchburg; George Winchester, of Ashburnham; J. G. Wood, of Millbury; S. W. A. Stevens, of South Gardner; Hale W. Page, George H. Boss, Ira Carleton, of Fitchburg.

For the best specimens of Mechanic and Manufactured articles, exclusive of ladies' home manufacture, there will be placed at the disposal of the Committee, the sum of \$100,00.

FINE ARTS.

Committee.—A. J. Weaver, Miss Mary Brooks, Mrs. George A. Torrey, Mrs. T. Palmer, of Fitchburg; Mrs. William Allen, of Leominster.

For the best specimens of Paintings, Drawings, or other kindred productions in the Fine Arts, there will be placed at the disposal of the Committee the sum of \$20,00.

FANCY ARTICLES.

Committee.—Amasa Norcross, Benjamin Snow Jr., J. E. Manning, Mrs. E. Torrey, Mrs. N. A. Tufts, of Fitchburg; Mrs. Franklin Wyman, of Westminster; Mrs. N. C. Day, of Leominster.

For the best specimens of Ladies' Useful and Fancy Articles, of their own manufacture, including specimens of nice mending and darning, there will be placed at the disposal of the Committee, the sum of \$20,00.

ESSAYS.

Committee.—Ebenezer Torrey, Moses Wood, E. F. Bailey, of Fitchburg.

All persons competing for these premiums must file their Essays with the Secretary on or before the 1st of September. Each Essay is to be marked with a motto or design, and accompanied with a sealed envelope containing a corresponding motto or design, and also the name of the author.

The envelopes of the successful competitors will be opened on the day of the exhibition, immediately upon the announcement of the awards.

For the best Essays on some practical subject connected with Agriculture, deemed worthy of publication in the Society's "Transactions,"

1st premium,	-	\$10,00
2d premium,	-	5,00

COMMITTEES' REPORTS.

Committee.—The President, two Vice Presidents and Secretary.

For the purpose of inducing the Chairmen of the several Committees to take upon themselves more labor and care in elaborating their reports, the following premiums will be paid for the best reports :

1st premium,	-	\$6,00
2d premium,	-	5,00
3d premium,	-	4,00
4th premium,	-	3,00
5th premium,	-	2,00

Reports in connection with awards made on the day of exhibition, must be delivered to the Secretary on or before October 25th. All others on or before November. 15th.

Total amount of Premiums offered for 1863,	-	\$1165.75
--	---	-----------

PROSPECTIVE.

EXPERIMENTS WITH MANURES.

Committee.—Solon Carter, of Leominster; Ephraim Graham, of Lunenburg; Isaac B. Woodward, of Fitchburg.

In accordance with the requirements of the Board of Agriculture,

there will be paid for the most thorough, exact and reliable experiments upon the proper depth of applying manures, three premiums, as follows :

1st premium,	-	\$25,00
2d premium,	-	20,00
3d premium,	-	15,00

A circular containing full directions for the performance of these experiments, which were to be commenced in 1862, and continued through a rotation of three years—the premiums to be paid in 1864—will be supplied to all persons wishing to compete, on application to the Secretary.

Also for a new set of similar Experiments to be commenced in 1863, and continued through a rotation of three years—the premiums to be awarded in 1865, there will be paid :

1st premium,	-	\$25,00
2d premium,	-	20,00
3d premium,	-	15,00

All persons competing for the following premiums, must make their entries on or before the first day of June, in the year in which the premiums are to be awarded, and furnish a detailed statement of the whole management from the time of setting out, on or before November 10th of the same year.

Entries must be made on or before July 1st, 1863.

GRAPES.

For the best Plantations of Native Grapes, containing not less than fifty vines, all having been set after January 1st, 1861, to be awarded in 1864, - - -

1st premium,	-	\$20,00
2d premium,	-	10,00

APPLES.

For the best Orchards of not less than fifty trees, all having been set after January 1st, 1861, to be awarded in 1865, - - -

1st premium,	-	\$25,00
2d premium,	-	10,00

PEARS.

For the best Orchards of not less than fifty trees, all having been set after January 1st, 1861, to be awarded in 1866, - - -

1st premium,	-	\$25,00
2d premium,	-	10,00

LIVE FENCE.

Committee.—A. F. Adams, of Fitchburg; Daniel Putnam, of Lunenburg; J. A. Marshall, of Fitchburg.

For the best experiment demonstrating the feasibility of substituting live farm fence for those in common use; the entries to be made on or before May 1st, 1863, or whenever afterwards planted, and the premiums to be paid in 1868:

1st premium,	-	\$25,00
2d premium,	-	15,00
3d premium,	-	5,00

R U L E S .

All teams entered for plowing and for draught, must have been owned by the person entering the same for at least three months next previous, and the team must be driven, and the plow managed by him or by some one usually in his employ.

Any person competing for a premium who shall serve on the Committee having charge of the department in which he competes, shall retire from the Committee while his own competition is in question.

The several Committees will not consider themselves bound by the terms of the above offers, to award a premium for anything which they shall deem inferior.

Any person to whom a premium shall have been awarded in consequence of any deception or misrepresentation used by him, shall not only forfeit such premium, but afterward be incapable of competing for the Society's premiums.

All persons, (ladies and minors excepted), not members of the Society, to whom may be awarded a premium or premiums amounting to \$5,00 or upwards, shall receive a certificate of membership for \$5,00, and the balance in cash. If the amount shall be less than \$5,00, a deduction of fifty per cent will be made, unless the individual chooses to make the amount up to that sum, and receive a certificate of membership.

All premiums not demanded on or before November 30th, will revert to the Society.

An extract from "the General Statutes of the Commonwealth of Massachusetts," Page 376, Chapter 66.

SEC. 4. "No society receiving the bounty, shall distribute any part thereof for an animal or article for which a premium is awarded, unless it was produced within the limits of the society, or the animal has been owned and kept within its limits, by the person to whom the premium is awarded, for three months next preceding the award. And no animal or article for which a premium has been awarded to the owners by any such society, shall be considered a subject for any further premium of the society, except for qualities different from those for which the former premium was awarded, or for a higher premium, and no animal or article shall be offered for a premium at more than one such society in the same year." * * * *

SEC. 6. "A society which neglects in any year to comply with the laws relating thereto, or with the regulations of the board of agriculture, shall not be entitled to the bounty of the state the year next succeeding."

TRANSACTIONS
OF THE
WORCESTER NORTH
AGRICULTURAL SOCIETY,
FOR 1863.

PREPARED BY THE SECRETARY.



FITCHBURG:
PRINTED BY E. GARFIELD.
1863.

ADDRESS.

BY LUTHER H. TUCKER,
OF THE "COUNTRY GENTLEMAN," ALBANY, NEW YORK.

Mr. President and Gentlemen:

Ninety-five years ago to-day, (Sept. 30, 1768,) British troops were landed in Boston Harbor, and a regiment was quartered at Fanueil Hall. The oppression which had driven the Mayflower's passengers forth from their homes, had now sought out their descendants. Seventeen months later came the Boston massacre; and, ere long, the sparks thus kindled burst into that glorious flame which still gleams, on every anniversary of our Nation's birth, in the streets of every town, in the heart of every patriot—the same flame, indeed, that warmed those shivering seekers for religious liberty, on the bleak exposure of Plymouth Rock,—that lit up the darkest hours of our fathers' strife for political liberty,—and that now, in defence of a Constitution which is the guarantee of these liberties to ourselves and to our children, has fired *our* zeal for new sacrifice and as stern a struggle. I have not come among you to speak of war or politics, nor even to eulogize New England, in that, having shown, unweakened and unwasted, in 1776, the spirit bequeathed her by the

Pilgrim sailors of 1620,—she should once more, in these less heroic times, have stood as firm and bled as freely in behalf of the legacy of her sires. But as I trace this New England spirit,—not alone displaying itself in devotion to an idea—not merely willing to wear the crown of martyrdom for the sake of Freedom and good government,—but the spirit that has leavened the whole mass of our Northern population—the spirit that acts, that *educates*, that strives against obstacles in the physical world, as well as in the world of thought,—as I trace this spirit, constantly winning us new victories from the dominion of Nature,—constantly adding State after State to the roll of the original thirteen,—manifesting its energies in every mile of railway, not less than on every battle field, that tend to cement and sanctify the indivisible Unity of the Republic,—I cannot find myself on New England soil without some feeling as of the touch of hallowed ground—without some word in grateful recognition of the grand names and grand events that cluster about New England history.

And when we turn from the part New England has taken in building up the fabric of our national polity, from the services of her sons in the field and her statesmen in the cabinet, to the less splendid but scarcely less important annals of her industrial achievements, we are only met by renewed evidences of the same energy and foresight. We find her the pioneer in our foreign commerce,—her sails and seamen carrying the stars and stripes into every ocean,—one-third the tonnage and more than one-half the shipbuilding of the whole Union* now registered at her ports,—and her

NOTE.—*See Appendix 4.

fisheries, the primary school of our commercial and naval marine, sending out their pupils equally prepared to become fishers of men, in another than the apostolic sense, as they were in 1812, and would be in case of foreign war now,—or peaceful carriers of the spices of the Indies, the teas and silks of China, the fruits and wines of the Mediterranean. In inventions and manufactures, we find the tale of New England triumphs already trite. Her cunning hand has touched nothing that did not receive new life from the contact; her fertile brain has outflanked where it could not conquer. I suppose your “prints” are “warranted fast colors” in the waters of the Oronoco, the Ganges or the Hoang Ho, as well as in those of the Nashua and Merrimac. Your plows turn the soil for Australian and African crops. Men are plodding in your boots and shoes, or rolling along in your coaches or rail cars, amidst the dust of many climes. At this moment a Massachusetts engineer* is spanning the South American continent with an Iron road, to stretch its length a thousand miles over the chain of the Andes, from the Amazon to the Pacific. And, under the head of “articles not enumerated” in the schedules of the customs, what quantities of “Yankee Notions” go forth, to tickle the laughing faces of the children, to lessen the labors of husbands and housewives, to protect the health, or add to the comfort, or soothe the repose, not of the rest of our own quarter of the globe alone, but also of other races of men far across the seas.

Reverting, however, from Commerce and Manufactures, to that yet greater interest which stands behind them both, and constitutes the first aim of Human

*Mr. William Wheelwright.

Industry—the Cultivation of the Soil—we find the New Englander the inheritor of a land, resting on a sure foundation indeed, but one that *out-crops* somewhat overmuch for purposes of tillage,—of mountains and hillsides around which the pure air of Freedom must ever play, and that more readily than plow or reaper,—of streams quite as favorable often for mill-sites as for meadows,—of a season devoting almost as long a period, to the great delight of young people certainly, to sleigh-riding, as it includes from the sowing of spring grain to the gathering in of harvest—in fine, that he has ample scope for all the perseverance of his Puritan descent, in the effort to transform this unwilling heritage into civilized farming land and deep-soiled gardens. River valleys there are, rich enough it is true, and as beautiful to the eye of the agriculturist as to that of the artist. But the sea beats on ruder cliffs, and the waters of the rivers come down from less fertile highlands. How many brave men and frugal matrons, what lives of toil and patience and abiding faith, *these* have nourished—farmers, whose brains were in their work—farmers' wives, who *clothed*, as well as fed, husband and sons—families brought up in the fear of God, schooled, and started with this double capital of honesty and the rudiments of practical knowledge, to re-enact their fathers' parts, or to take parts of their own, as strong arm and active mind might guide the way—filling counting house and pulpit and legislative hall, planting cities, influencing the destinies and brightening the hopes of Nations! No vine trembles under its purple clusters, just ready for the wine press, in this clear Autumn sun: under your Summer breeze, no broad levels have waved, mile after mile, their bil-

lows of ripened wheat; no perennial verdure shall clothe your fields while the full year completes its round. Nor have those other fruits of skies that ever smile and lands that ever bloom, ignorance and indolence and pauperism, yet reared their heads amidst all the long two centuries of your tillage. Your sons have left your firesides to seek the broader and easier culture of the West; thither, as old England has sent her better breeds of cattle, so New England has sent her better breed of men: it remains to be proven whether in their new abode the latter, like the former, will improve upon the original type.

If, then, the chief end of New England farming had been to deal with men, mentally, something as Bakewell did with cattle and sheep, physically, beginning from so excellent a starting point, and furnishing for the free expansion of every native energy, influences so bracing and self-sustaining, while we might accord to such an agriculture, a rank still more exalted than to that of the famous English breeder,—still, as our race, unlike those in Bakewell's hands, is said to be perfected only through much tribulation, we might not end by placing the actual attractions of New England farming, for more selfish purposes, in a very winning light. And it is with the other and more immediate objects of the farm that we are to deal—as the scene of toil, indeed, but as affording opportunities, which we believe to be worthy of closer study and more zealous exertion, of securing a fair reward for that toil—opportunities moreover, which it is the design of a Society like this to bring to yet fuller development and to place still more readily within the comprehension and attainment of its members.

It is the result of increasing experience in the capabilities of a country, as it grows older, and the great principle of "division of labor" becomes more generally recognized amidst a denser population, to resolve the problem of the comparative purposes to which the different parts are best adapted. Water does not more surely tend to its own level, than do the various branches of Agriculture seek an equilibrium, provided there are cheap and untrammelled channels of intercommunication and transport, as there are among us. In this point of view, the history of the farming of any one district or of the country as a whole, might be rendered most instructive, if so written that we could trace in it the various steps by which the present equipoise, so to speak, has been arrived at, and ascertain more clearly what are the essential, and what are merely incidental, conditions of that equipoise, where we are to draw the line between a well advised adherence to established systems, as being the offspring of long practice founded upon immutable laws, on the one hand, and a senseless clinging to the past on the other, simply because it is the past. At the present time wheat is brought from the valley of the Mississippi to feed the farmers of Massachusetts, and hams from Cincinnati to supply the breakfast tables of Boston and Worcester. Under the competition of our great western country, with its exuberant and almost costless production, English farmers, too, are discussing the propriety of reducing their extent of grain land, modifying their system of cultivation, and grazing still larger quantities of stock, since we have not yet discovered any way of sending them beeves and wethers fattened for the butcher. Great Britain also furnishes

a striking example within her own limits of the appropriation of the land throughout whole counties mainly to some leading branch of agriculture. Norfolk and the Lothians are thus wholly devoted to tillage; Cheshire and Ayrshire are chiefly dairy counties; Northumberland and Aberdeenshire excel in grazing and breeding. I have been on farms of hundreds of acres in Norfolk that did not keep a milch cow for the supply of the table, nor raise a calf the season through, so rigidly is a particular combination of grain culture and the feeding of animals for the shambles there carried out. French hens lay the eggs for all England, and many of them are eaten too with bacon or ham packed in Ohio and Illinois.

Thus it is her natural conformation, as well as the competition of the West, that has turned the general farming of Massachusetts (that in the vicinity of cities, and in some of the river valleys, being for the moment excluded) mainly in the direction of breeding, grazing and feeding, dairying. In a word, it is grass farming and not grain farming, which constitutes your chief interest.

A careful examination of the Census returns for 1850 and 1860, to which I have devoted some time, together with your State Reports upon the Industry of Massachusetts for 1845 and 1855, seems to show that no very great changes have taken place in your farming during the past ten years,—those which have occurred being mainly of the following kind:

The extent of land rated as “improved” in the State, is reported in 1860 as but one per cent. greater than in 1850, which represents an increase of only about 22,000 acres. But the value of farms shows an

advance much larger (13 per cent.), proving that farm property is enhancing among you, probably owing to an increased revenue yielded by it, arising partly from larger production and partly from larger prices, at the latter period than at the former. The surface under tillage for the grains (wheat, rye, Indian corn, oats and barley) was somewhat smaller even, in 1860 than in 1850—a decrease, in the aggregate, of about three per cent. It is presumable that this slight diminution is due to the occupation of lands formerly in grain, for the growth of the garden and orchard products demanded by your cities, and of such other crops as tobacco, which has grown to its present importance in your State, almost entirely within ten, if not within five or six years past. An increase in the hay crop, shows that the surface mown has also been extended; more hay is probably sold in the cities now than ten years ago, and the improvements of modern machinery—the best mowers, and hay spreaders and hay rakes of the present day, render this sometimes one of the least costly and most profitable crops that can be grown on a large scale, in the neighborhood of good markets.

Not can we proceed without remarking that to the inventors and manufacturers of improved farm implements and machinery, as well as to the Agricultural periodicals and exhibitions by which they have been made known to the public, is to be ascribed much of the progress our agriculture is making from year to year, and no small share of the ability we have shown to carry on a war and at the same time produce crops, that are both of almost unprecedented magnitude. The value of the implements and machinery employed upon the farms of this State, is reported as twenty per

cent. greater in 1860 than in 1850 for each acre of "improved land"—an increase which is likely to be below, rather than above the truth, and which has certainly gone on since 1860 in a rapidly enlarging ratio.

Coming now to the Live Stock, we have to note a considerable increase in milch cows, while a slight increase in butter and a falling off in cheese, show that a smaller amount of the milk produced was manufactured into these two items, leaving something more than the actual increase in milch cows to supply the greater demand for milk by your growing city and village population. Working oxen appear to be decreasing in numbers, and farm horses to be increasing. Other cattle show a considerable increase, proving that more is done in feeding and grazing than heretofore. Sheep, which had already shown a great decrease in 1850 upon 1840, took another tumble during the ten years previous to 1860, decreasing one-third, and swine were also somewhat reduced in numbers. But, taking the aggregate of the farm stock kept, so nearly as we can set off the increase in some kinds against the decrease in others, I think it safe to affirm that the farms of the State are now carrying a *somewhat* larger burden than they did in 1850—perhaps, in general terms, equivalent to the keeping of from a hundred and three to a hundred and five head of cattle on land which then supported a hundred.

And in the character of the stock kept, there has been a marked improvement. The valuation aggregates thirty-two per cent.^s more in 1860 than in 1850, and if we allow for an increase of five per cent. in the total number of animals, we shall still have about twenty-five per cent. for the increased valuation per

capita on the whole. I cannot find any data to show that the markets for animal products have advanced sufficiently during the ten years to account alone for this increase; and while the change in the character of her live stock has not been so great in Massachusetts, during the period referred to, as in New York and throughout the West, owing to the fact that the general character of New England cattle was superior to that of the so-called "natives" in other States, and there was thus less room for improvement,—I think you will agree with me that this improvement *is* perceptibly going forward, that a more precocious maturity and greater size for the shambles are now attained, taking the average of all the New England stock that goes to market, while I know that in no State does the demand for improved animals evince a more healthy activity than here in Massachusetts, during the present year.

If, then, the chief end of your farming is comprised, as we have stated, in the three directions of breeding, grazing and feeding, dairying, we may perhaps linger profitably for a few moments over these subjects, taking them up in the order named :

I. BREEDING.—I presume that to the more northerly and less densely populated States of Maine, New Hampshire and Vermont, may be advantageously left the breeding of much of the stock that comes down into Massachusetts pastures and stalls to be grazed and fattened, or into Massachusetts dairies to be milked. Hence much of your stock must be taken as it comes; but there is not the less some opportunity for improvement here by the gradual introduction of breeds which shall turn the feed they receive to better account if possible, either for meat or milk, as may be preferred. Let us

glance, very briefly, at the various breeds which now present their claims upon your regard, and, in doing so, I should say that I am not conscious of any prejudice, as I certainly have no interest, in favor of one breed rather than another, except in so far as observation among practical men here and abroad, has made me in some degree acquainted with the results and tendencies of their experience.

1. Among *Cattle*, you will not be surprised I am sure, that the result of that observation has been to rank the Short Horn decidedly at the head of all other breeds for crossing upon common stock—its grades proving themselves uniformly heavier, more symmetrical and more precocious as feeders, and, as regards the milk pail, occupying at least a medium position. The main exception, if any exist, to the adoption of a Short Horn cross upon your stock—which, by the way, I believe to be admirably adapted for such a cross and likely to produce from it animals excellently fitted to meet your general wants—must be either in the case of farms peculiarly exposed and poor in herbage, or perhaps in those upon which the production of milk for sale is the chief object. In the former case the Devon, smaller in size and more capable of resisting cold and hunger, will occur to you; and, in the latter, the Ayrshire may be preferable, uniting as it does a larger flow of milk, with a frame on which, at the last, considerable flesh of very good quality may be attained for slaughter. The Ayrshire has succeeded well, moreover, on farms where butter and cheese are staples, although, as such farms should ordinarily pay greater attention to fitting beef for the butcher and are more likely to raise their calves, many would be inclined to a Short Horn cross on these,

provided due advantage is taken in keeping the cows in good enough order to pay for themselves as beef after they have brought in the revenue of the churn and the cheese press. The Alderney affords an excellent strain for small butter dairies where the butter is really first class, and can readily be sold at first hand to those who appreciate its excellence and are willing to pay a larger price accordingly ; but this breed is scarcely to be recommended for general dairy purposes, since it cannot be forgotten that the ultimate destination of all horned cattle is for the table, and the Alderney leaves little more than a skeleton after the milk pail is filled.

2. As regards *Sheep*, I cannot omit to urge upon your attention the earnest conviction I feel, that they do not receive among you the attention to which they are entitled. What is the reason of this neglect? It cannot be that there is anything in your climate which should confine you exclusively to dairying, or anything in your grasses which makes better beef than they would mutton! You know of the county of Ayr, from which the Ayrshire cattle come, mainly I presume from its fame as a dairy county, but how is it with sheep there?

I will not weary you with all the details of the statistical comparison I have drawn up between your own county of Worcester and that of Ayr,* but let me state that with an actual area 40,000 acres smaller than that of Worcester, Ayr has a larger surface on which a tillage rotation is carried out, so that she produces about four times as much grain as is grown in Worcester county, mainly oats and wheat. Now the total

*See Appendix B.

number of milch cows in Worcester county in round numbers, is 34,000 against 40,000 in Ayrshire, and of other cattle, old and young, 28,000 here against 45,000 there, which, making a total of 62,000 against 84,000, in view of whatever difference there may be in natural capacity, we may suppose to compare perhaps as favorably as we could expect. But now take the sheep,—and Worcester county, with all its admirable grazing lands, with all its productive power for hay and Indian corn and roots, with all its facilities for the purchase for feeding of the sheep brought down from the North and West by railroad to your very doors—with its 700,000 acres of land almost immediately adjacent to one of the largest cities in America, and with a constantly growing manufacturing population of its own, can only muster about 6,000 sheep—less than there are on some single estates in Great Britain, against almost *a quarter of a million*—forty times as many in the county of Ayr.

Now, gentlemen, I have already adverted to the fact that experience in any particular region, ends by settling down more or less definitively upon some particular branch of farming; and so much weight, I am willing to admit, should be given to the practical conclusions thus arrived at, as to render it somewhat hazardous to advocate the adoption of fundamental changes except for the strongest and clearest reasons. And what I would suggest here, is rather an effort to augment the stock of the farm, to reach, a little more nearly the standard in Ayrshire, for example, and to render the land more productive of food to keep that stock, and thus more productive of manures to add in turn to its own fertility—than that any of the stock you are now keeping should be discarded to make way

for sheep. The truth is that good farming tends so explicitly and so universally to increased favor for mutton growing, that I cannot but think it is that direction which the improvement of our Agriculture at the East *must take* before our farmers can hope to accomplish much more than they are already doing.

For you will please note that it is not with the most remote reference to the present high prices of wool, that I speak. The cheaper lands of Michigan and Wisconsin, and, when the Union is re-united, of Texas also, can grow wool as fine as we can grow it here, and send it to market with as little, or still less, loss from the cost of transportation, as any other product they can raise. It is the breeding of *mutton sheep* that is suffering most from neglect, yielding an income every year, involving some profit, from the fleece, which cannot be had from cattle, and selling at last to the butcher at a rate that shall return at least as good results upon the food and labor they have cost, as can be yielded in fattening beef.

Now among the breeds suggesting themselves for the purpose, there is considerable range for selection. The South Down has the advantage that its name goes far in commanding a price, like that of Alderney butter, with those who can appreciate and are disposed to pay for it. But the Oxford Downs which have been introduced into the neighboring county of Essex by my friend Mr. Fay, are a somewhat larger sheep, which, with their other merits, is constantly gaining them increased favor in Great Britain. The Cotswolds give perhaps still greater size, and on good pasturage yield a good account for all they consume, while, moreover, you have flocks of them in your own vicinity worthy of encouragement. The "Leicester" sheep bred in this country

have mostly a touch of Lincoln or Cotswold blood to increase their weight, and are preferred by some to the pure Cotswold.

In breeding both Sheep and Cattle, then, let me insist once more upon the importance of crossing constantly with some of the improved breeds that have been named. There must be herds and flocks purely bred to sustain the supply of blood for crossing ; but the practical farmer will find, here as in Great Britain, that the crosses are the best tools he can work with in carrying on his farm, and making the cash account come out right at the end of the year. With sheep, the ewes required should be good mothers as a first requisite, and then, whatever their size or breed, lambs sired by South Down or Oxford Down or Cotswold or Leicester blood, will be pretty sure to pay their way.

II. GRAZING AND FEEDING.—In what has been said under the head of Breeding, it has been taken for granted that the stock bred were to be fitted for slaughter or retained for use, not necessarily in the hands of the breeder, but at least within the limits of your own State. Time will oblige me to restrict myself only to remarks of the most general kind, both under this head and under that of Dairying, keeping in view *the broad results we desire to attain*, rather than the details by which they are to be accomplished.

Breeding, and grazing or feeding, naturally divide themselves in some degree, into separate pursuits ; and stock commonly passes into second hands for the latter purpose before going to market. At the same time, the farmer who raises young stock naturally has more or less concern with fitting it for the shambles. Aside

from the fact that working oxen are largely employed here, in the labors of the farm, most of which are probably reared and trained at home, and after their term of service is over, may well be put up to fatten; your ready markets afford good inducements for the breeding of calves and lambs, expressly to be fattened by the farmer raising them. Secondly, the opportunity of purchasing cattle and sheep coming into Brighton and Cambridge, when markets are low, and those not already in prime order can be bought to advantage, and of then keeping them in pasture or stall until a good market gives the means of selling at a fair return, is one of which there are doubtless many among you who frequently avail themselves. And, in the third place, there is the surplus of the young stock bred in a higher latitude, which naturally comes here to be "finished off," if not to acquire the bulk of the flesh it must attain for slaughter.

Now, where the sources of supply of stock for grazing and feeding, are so good as they must be here, the farmer possesses perhaps the most advantageous of all positions for bringing his farm into a fertile and remunerative condition. Those of you whose experience is of the longest standing will not have to be reminded that the great need of the Agriculture of our older States at the present time, is a more abundant supply of fertilizing material. Manufacturers of artificial manures are driving a better trade in New England probably than in any other part of the country, now that the impoverished lands of the South are mostly cut off from their reach. Those of you who are familiar with the printed treatises on Agriculture, from the earliest of the ancient writers down to this most prolific century

of books and papers and addresses, will not have to be reminded that the great burden of their whole song is Manure! *Manure!!* MANURE!! And as I run over the journeyings of a summer spent among the best farmers of the United Kingdom; as I note the successes of the shrewdest and most thorough of the cultivators of our own soils; as I trace back the files of the old Genesee Farmer, the Cultivator and the Country Gentleman, in which I have an interest, personal or hereditary, extending back for more than thirty years, I find that what observation in England and Scotland teaches us abroad is equally true on this side the Atlantic—that the care and quantity of manure made may fairly be taken as a measure of the profits obtained,—that with this as the first object sought, all other objects are in turn accomplished,—in a word, that the farmer's first and most important crop is that which comes out of his barn yard!

And beyond this, my friends, it is the fundamental verity and weight of this great fact, which first led the English breeder to those improvements in cattle and sheep which we have just been discussing, and of which you have had examples on your show grounds to-day, in the several breeds there exhibited, more than three thousand miles from the place of their origin. To raise crops for the food of man, stock must be fed and crops for their especial consumption produced; and the problem of securing that stock which might be fed to the greatest profit, reaching its importance out of the primal necessity experienced by the English farmer *for more manure*, provoked those efforts on the part of Bakewell and the Collings and Elman and Webb, and their compeers, which render the names of these leading

breeders as familiar to-day on the banks of the Danube and the Loire, in Australia and New Zealand and California, as they are here in Massachusetts, on the blue grass pastures of Kentucky, or the prairies of Ohio and Illinois. Your accomplished and practical Secretary Mr. Wyman, expressed the truth which you must often have realized in your own labors on the farm, when he wrote to the Country Gentleman six years ago, that the foundation of all successful culture lies in the preparation and application of an ample supply of manurial material, and that every sort of article which can be made to contribute toward this end, should be saved "as carefully as if they were grains of gold."

The course of English farming, not less than various experiments conducted there and here, shows that in nothing else do we get a more effective combination, or one more universally applicable, than in the well managed manures of the farm yard. And the point to which I wish to ask your especial attention is whether you cannot more economically purchase such feeding material for the stock you intend to fatten, as is most readily attainable, and take more pains to produce crops for them—such for example, as fodder corn, the legumes and the roots, than you can to expend your money on the fraternity of superphosphates, poudrettes and the like? These will doubtless give the farmer *a start* in securing a position at which he can eventually furnish fertilizing material to supply his own wants; there are crops, such as roots, and some partially exhausted pastures, on which preparations of bones may be profitably applied in any case, but the great question is to reach such a system of management by the grazing and feeding of stock, as shall develop the

capacity of the land to the utmost, either for that or for any other economical purpose, and then maintain that capacity, by going as little as possible, and not at all, if possible, beyond the home resources of the farm itself.

III. DAIRYING.—There is no branch of farming in which greater encouragement is at present afforded perhaps, than in the making of butter and cheese—unless for those so situated as to be able to dispose of the milk itself. We have learned to make both of sufficiently good quality to command buyers abroad; in no country is the consumption, of butter at least, so great in proportion to population as among ourselves, so that, between the home and foreign market, there seems no reason to fear that a strictly first class article of either should ever fail to bring a remunerative price.

With this consideration before us, there is one suggestion which may be perhaps most forcibly brought to the notice of dairy farmers, although you will at once recognize its applicability I trust, to farming of every other kind, and that is, that *the better the product—the more perfect the process of its production—the better the profit it yields*. Within the scope of this suggestion, is the more careful selection of the cows that constitute the dairy, in order to raise the average yield of butter or cheese for each cow kept, to as high an amount as possible, but upon that point we have partially touched under the head of Breeding. Within it, too, is the idea of higher keeping, so that the cow when done with for the dairy may sell well to the butcher—but to this we have also referred, in the last division of our subject. Within it, are embraced moreover, all the details of the dairy, the neatness and the skill required, and the

numerous conditions by which the greatest excellence and largest product of butter or cheese may be made to go hand-in-hand ; but, in an address like this, such details can hardly find a place.

You will then pardon me, if, passing outside of these minor but still most essential particulars, I give to this suggestion the broader ground on which it may not only include *them* all, but go beyond the limits of the dairy, and also reach, in these our closing paragraphs, the interests of the breeder and the feeder, indeed of all who are engaged in farming throughout the Eastern States : Could we not accomplish more satisfactory results, at less cost and hazard, if we had greater faith in our pursuit, and were willing to invest more of our capital in carrying it on ?

There are those, of course, who lack the means of more liberal expenditure on their farms,—who are compelled to economise, even when expenditures could be well repaid, because there are payments of interest or principal on their title deeds which must be met—but there are now also many others, who are constantly on the alert for investments; away from the farm, of the the money it has placed in their hands. If instead of taking, dollar by dollar, all that can be scraped together to buy stocks or mortgages, or venture into still more speculative undertakings, such farmers would only calculate the rate of interest they might obtain from a sufficient outlay to bring some part of the farm every year into the highest condition of productiveness of which it could be rendered capable, until by degrees its whole surface and that of the township in which it lies, should be thus gone over, the startling disparities that now exist between the productiveness of your

county of Worcester and that of Ayr, would by degrees be vastly reduced, and, unless I am much mistaken, your farmers here would in the end discover that their investments were safer, their interest larger, their farms still more rapidly appreciating in value, and their eventual means of making outside investments greater than at present. How many fields there are, now grown up with coarse herbage and affording only a short and poor pasturage, insufficient very likely to meet the actual taxes assessed upon them, which a hundred or two dollars in drainage, for example, might render the most productive part of the farm, returning thereafter taxes, cost of labor, interest on value and expenditures, and something beyond. How far short is a large part, not of this county alone, but of the whole State and country, of being in that condition which any practical farmer will recognize as the best, either for permanent grass or for a rotation of tillage crops—but which how many farmers, who know well enough by what means that condition is to be attained—whom I would not for a moment think of attempting to instruct in any of the secrets of their business—are contented not to reach, dreading the outlay required, because the returns seem distant,—preferring to send their money very possibly “out West” at one or two per cent. a month, and pinch the farm forever tighter and tighter because that money don’t get back from its Western tour at all. Such, gentlemen, is the fact, alas! of multitudes of investments outside the farm; if the farmer understands his business, should not his endeavor be, like that of the merchant or the manufacturer, to go on investing capital in it, until its machinery everywhere runs as smoothly, and its working powers are as greatly per-

fected, as capital can make them? The larger the scale also upon which any business, farming included, can be conducted, the better; provided only the capital is in proportion to the business done; and when we say that nine-tenths of our farmers are farming *too large a surface*, we only mean that they are attempting more than they have, *or will use*, the capital to do thoroughly and well.

Farmers of Massachusetts! I ask you to bear in mind that it is not your only end in life, still speaking Agriculturally, to secure a comfortable and honored livelihood from one year's end to another, as the seasons gather themselves in succession to the mighty harvest of the past, as the little faces around your firesides are putting on the soberer guise of more thoughtful years, as the frosts of an autumn to which there is no springtime of renewing verdure, begin to whiten upon *your* temples. I ask you that it should be your aim to secure that livelihood in such a way as shall add to the dignity and solid attractiveness of your pursuit for those who are just coming on to the stage, and whose selection of the parts to which their lives shall be devoted, will be so greatly influenced by the results of *your* lives and the teachings of your example. I ask you to take your part in the farther improvement of the farming of the State, not alone in your own interest and in that of the community in which you live, but for the sake of the generation which is to follow in your footsteps. It is not that I would urge you to any mingling of high sounding words or theories, but yet imperfectly understood, in the round of your daily labors. It is not that I would present the picture that might be drawn, of a wooing and gentle and

loving Nature, to none so dear, by none so freely and proudly enjoyed, as by him who sits amidst his own well won acres, under the roof that sheltered his fathers. It is not that I would remind you of the close alliance between your occupation, with its many requisites, and a thorough study of all those physical sciences which link themselves so closely with the culture of the soil, nor of the fact, that the higher the culture of the mind, the greater may be the pleasure derived from investigating the problems and winning the victories of the farm. But I would meet you among the implements, the animals, the fruits, the household articles, that are assembled on such an occasion as this, directly from your homes and fields, on the practical ground of farming, not as some are fond of styling it, as a *profession*, but as a BUSINESS. And I would suggest to you, that it is still more *as a business* that it should be conducted, in order to satisfy in it the longings of your sons, possessed as they probably are, of that inborn energy, that Yankee go-a-head-iveness, which delights in overcoming obstacles when the mind is once awakened, and fair scope for its exercise is offered. Train them in the keeping of your accounts; and let each year's figures enter more fully into detail, until there is no question that can come up, to which the answer in black and white may not be found on record. As you shall invest more capital in bringing up your land and carrying out improvements, let them see the object in view; let them share with you the pleasure of working out a successful result. A practical familiarity with the labors of the field they must doubtless acquire, in order to be farmers; such an education as lies within your means, every American father, thank God, gladly

gives his sons: but, if you would have them farmers worthy of the name, remember that there is much beyond holding the plow or studying in the school room, that tends to mould the tastes of childhood, to direct its thoughts, to arouse its spirit. You can not only show that you are managing your business with the same precision and as great mental energy and foresight as the merchant, but, more than this, in every plot from the garden you give to childish hands to till, you can encourage the effort to make the most and best of what it yields; in every pet from the poultry yard, or in the barn or field, you grant them for their own, you can take care that it shall be a good specimen of its kind, of which the youthful owner may be justly proud—in fine, you can interest the child in *reading about* the land he cultivates or the animal he cares for, you can induce him to *think*, you can implant in his mind the ambition to *excel*. In these three directions, moreover, lie the great deficiencies of our grown up farmers.

Farmers of Massachusetts! Grand as is the task of Agriculture in feeding mankind, and vast as are the interests of which it holds the key, there is a level higher than that of our material wants—beyond and above the sphere of bounteous harvests and busy ships and peaceful homes,—of all that is transient and perishable,—a level at which the dignity of your own and every other pursuit of gain or pleasure, is merged in the nobler and more enduring dignity of the manhood that is the birthright of the soul. Such, and so far above the platform of our daily struggles, is the great battleground of Freedom and Truth on which our country is now contending. For the Independence earned by our

fathers' hardships; for the Constitution they bequeathed us, hallowed by the blood it cost, glorious in the light of the triumphs it has won; for territory inviolate, for sovereignty unimpaired, for Union inseparable,—for these, and nothing else and nothing less,—let the country strive as one man, with all the strength and faith and stubbornness that arise from consciousness of duty and Divine approval,—and no corruption of cities, no miserable clangor of party discord, no vile hopes of profit or promotion in the disgrace of that grand old Flag, shall avail to drag its stars and stripes in the dust, or blot out the ensign of the Republic from the heraldry of Nations!

APPENDIX.

A. The latest official statement I have at hand, is the United States Commerce and Navigation Report for 1859—according to which, the vessels built in that year had an aggregate capacity of 156,602 tons burthen, out of which vessels with a tonnage of 79,432 tons were built in New England. The total tonnage of the United States in 1859 was stated, in the same report, as 5,145,037 tons, of which 1,766,250 tons belonged to New England.

B. Agricultural Statistics of the Counties of Worcester in Massachusetts and Ayr in Scotland, for the year 1855, unless otherwise specified.

	WORCESTER COUNTY.			AYRSHIRE.		
Total area in acres,.....			706,000			665,000
Population,.....		[1860]	159,659		[1851.]	189,858
Number of Farms,.....			7,002			3,329
Area "Improved Land," acres.....			483,472			
Area "Under Rotation of Crops," acres, ..						258,154
Crops produced—Wheat,.....	BUSH.	ACRES.		BUSH.	ACRES.	
Rye,.....	46,101	650		430,421	12,847	
Barley,.....	51,571	3,967		12,127	362	
Oats,.....	41,137	1,890		33,221	971	
Indian Corn,.....	283,556	9,930		2,475,186	61,648	
Total grain—bushels	418,918	16,185	841,283			2,950,955
Total area Grain crops, acres.....	32,622	ACRES.	32,622	75,828	ACRES.	75,828
Other Tillage crops, Potatoes,.....		9,439			8,167	
Turnips,.....		172			16,480	
Other Roots,.....		658			1,136	
Beans,.....					3,485	
Other crops,.....		1,481			898	
Total area Roots, &c., acres,.....	11,750		11,750	30,166		30,166
Area in Hay,.....	117,117			151,216		
Fallow,.....				944		
Area under Rotation, Ayrshire and corresponding area in Worcester County, ..	161,489			258,154		
Live Stock.—Horses,.....			13,484			9,702
Milch Cows,.....		33,917			39,286	
Other Cattle,.....		18,561			28,809	
Calves,.....		9,443			15,913	
Total Cattle,.....			61,921			84,008
Sheep and Lambs,.....			6,212			245,373
Swine,.....			11,023			12,483

ORDER OF EXERCISES AT THE CHURCH.



Voluntary, By the CHOIR.

Prayer, by REV. MR. HEARD.

Original Hymn,* by MRS. CAROLINE A. MASON,
OF FITCHBURG.

The countless worlds, Oh Lord, are Thine,
Thy fiat spoke them into birth ;
These suns, that in their orbit shine,
Are Thine, and Thine this moving earth ;—

This moving earth, with all that fills
Its wide expanse from sea to sea :
The cattle on a thousand hills,
As well as man, belong to Thee.

The ripening fruits proclaim thy care ;
Thy hand, untiring though unseen,
With patient skill perfects each pear,
And ripens every grape we glean.

The grain springs up, the blade appears,
Then the full corn beneath the sun ;
So, all along the obedient years,
Thy perfect will on earth is done.

How manifold thy works, Oh Lord !
In wisdom hast thou made them all ;
Be Thine Almighty power adored,
While grateful at thy feet we fall.

Address, by LUTHER H. TUCKER, ESQ.,
OF ALBANY, N. Y.

An Original Poem, by MRS. CAROLINE A. MASON,
Read by LEVI W. RUSSELL, A. M., of Fitchburg.

Closing Hymn, by the CHOIR.

*The Hymn and Poem were kindly prepared by MRS. MASON, for the occasion, at the request of the Society. SEC'Y.

P O E M .

The world is growing old—so sages say
 And poets sing ; but look abroad to-day :
 How like a monarch, throned and plenty-crowned,
 Our regal earth ! her ruddy temples bound
 With chaplets of bright flowers, and at her feet
 Her waving harvests and her fruitage sweet.
 Here are no signs of eld or dull decay,
 Despite what poets sing and sages say.

Man ripens and decays ; his glorious powers
 Dim 'neath the shade of his declining hours ;
 Age dulls his eye, and ere his knell is rung,
 Palsies the cunning of his glowing tongue,
 Man, *man* decays, but earth is ever young !

Dear mother-earth ! as fresh as when at first
 In Eden's garden her young life was nursed ;—
 Renewed each year, as often as the spring
 Sets all the trees astir with blossoming,
 And witches into music every stream
 Beneath the magic of her April gleam.
 See how the generous sap from her own heart
 Pours without stint, and strengthens every part
 Of her young offspring : trees and shrubs and flowers
 Share in her fullness and partake her powers.
 She paints her roses, and with equal care
 Flushes with carmine nectarine and pear ;
 She hangs her grapes out, sweet and purple-dyed,
 Nor slight the grass green-growing far and wide ;
 Her loving hands with equal skill adorn
 The crimsoned tulip and the tasseled corn.
 No partial step-dame she, our mother-earth !
 She counts naught alien nor of stranger birth ;
 Her broad breast cradles all her love brings forth,
 Nor weighs her favors by the claimant's worth.

A lesson here for *us*, oh, gentle friends !
 Though, in good sooth, whoe'er obedient lends
 A listening ear in nature's patient school,
 Will shape his life by many a wholesome rule
 Not chronicled in books—and therefore we,
 Tillers of earth, who all her secrets see
 As well as hear, what patterns we should be !

But this by way of prelude to a strain
 Which, though but rudely sung, yet hopes to gain
 Your ears attentive,—though we all agree
 The theme's but hackneyed ;—naithless, come with me
 Down this rude lane ablaze with golden rod
 And fresh with fragrance from the up-turned sod,
 To where yon farm-house lifts its modest head,
 By peace, content and health inhabited.
 The tranquil kine, reposing in the grass,
 Turn dreamy eyes upon us as we pass ;
 The shy sheep gaze askance, and chanticleer
 Disturbs the silence with a lusty cheer
 From the far barn-yard : sights and sounds are these
 To make the saddest cheerful and at ease.
 How full the quiet spot of sweet perfumes,
 Aromas of fresh grass and clover-blooms !
 How like a sabbath stillness, or like prayer,
 The cloistered calm of this sequestered air !

Anon the swinging scythe perchance is heard ;
 Anon the sacred, sabbath calm is stirred
 By sounding flail or woodman's axe anear,
 Reëchoing through the forest sharp and clear :
 The dim, old forest, where the children go
 A nutting when the leaves are all aglow
 Beneath the frost-kings touch. Such merry routs
 The little people tell of thereabouts !
 And then the huskings and the apple-bees,
 The pleasant picnics underneath the trees,—
 What city belle can boast such joys as these ?

But not *outside* the modest farm-house dwells
 Its sweetest charm ; that quiet roof-tree tells
 Of love and trust beneath its humble dome,

And all that glads and sanctifies a home.
 Here the good house-wife plies her cheerful tasks
 From morn to eve, nor gift nor guerdon asks,
 Save the sweet payment of her husband's smile
 And God's dear love and health and strength the while.
 Her rosy daughters, not too fine to scil
 Their pretty fingers with the marks of toil,
 With cheerful patience sew the lengthened seam,
 Prepare the meal or churn the yellow cream,
 Or lead the toddling baby, that essays
 Unequal steps about the household ways,
 Or hasten to the door, when daylight fails,
 To unburden "father" of his brimming pails.
 Thrice happy man, thrice happy father he !
 His smoking supper ready, on his knee
 The crowing baby, and around his board
 Health and content ; he well may thank the Lord !

Life has its trials, whatsoe'er our lot ;
 But if there be, on God's dear earth, one spot
 Crowned more than others with His favors lent,
 'Tis such a home as this : All calm content,
 All peaceful, heavenly influences meet
 To purify, enrich and make it sweet.
 Within, without, around it and above,
 Good thoughts, like blessed angels, rove and rove.
 The very cattle, knee-deep in the brooks,
 Have lessons for us in their patient looks ;
 The silent hills, slow-stretching far away,
 The shady hollows with the lambs at play
 In their cool bosoms, the rejoicing rills,
 The sobbing of the lonely Whip-poor-wills,
 The misty glories of the purpling morn,
 The night's deep splendor when the stars are born,
 The corn up-springing through the sun and rain,
 The ripening fruitage and the nodding grain,
 The changing seasons as they come and go,
 Winter, the pilgrim, with his coif of snow,
 Spring, the sweet charmer, Summer, all ablaze
 'Neath the rich dower of her meridian days,
 And, best of all, glad Autumn, blithe and sweet,

Laying her wealth uncounted at our feet!—
Who, living out his peaceful life among
Scenes such as these, more eloquent than tongue
Of priest or prelate, who, if he be wise
To learn the lessons set before his eyes,
But shall imbibe the wisdom they impart,
And win the blessing of the “pure in heart!”—
Such as “see God,”—see him not only there,
In His dear, far-off heaven, but everywhere:
In the bright glancing of the robin’s wing,
As in a planet’s steady, ceaseless swing;
In the small mercies of the passing years,
As in the forces which control the spheres;
In little, household trials, wisely sent,
As in the pangs which rend a continent;
In every strange vicissitude of earth,
In smiling plenty and in direful dearth;
See Him in all His gracious hand has sent
Of joy and sorrow mercifully blent,
And seeing, love, and loving, be content!

OFFICERS OF THE SOCIETY FOR 1863.

ELECTED AT THE ANNUAL MEETING, WEDNESDAY, DECEMBER 3, 1862.

L. H. BRADFORD, of Fitchburg, *President*.

LEONARD BURRAGE, of Leominster, }
BENJAMIN WYMAN, of Westminster, } *Vice Presidents.*

W. G. WYMAN, of Fitchburg, *Secretary*.

T. C. CALDWELL, of Fitchburg, *Treasurer*.

OHIO WHITNEY, JR., of Ashburnham, }
JOEL HAYWARD, of Ashby, }
S. W. A. STEVENS, of South Gardner, }
SOLOM CARTER, of Leominster, }
PORTER PIPER, of Leominster, }
THOMAS BILLINGS, of Lunenburg, }
CYRUS KILLBURN, of Lunenburg, }
DANIEL PUTNAM, of Lunenburg, }
JOHN BROOKS, JR., of Princeton, }
S. G. MIRRICK, of Princeton, }
J. T. EVERETT, of East Princeton, }
ANAN STOCKWELL, of So. Royalston, }
NATHANIEL HOLDEN of Shirley, }
JAMES O. PARKER, of Shirley, }
SAMUEL OSGOOD, of Sterling, }
J. M. SAWYER, of Sterling, } *Trustees.*
WARREN SIMONDS, of Templeton, }
DANIEL C. MILES, of Westminster, }
J. W. FORBUSH, of Westminster, }
JOHN CUTTER, of Winchendon, }
A. F. ADAMS, of Fitchburg, }
T. R. BOUTELLE, of Fitchburg, }
JABEZ FISHER, of Fitchburg, }
THOMAS PALMER, of Fitchburg, }
LEVI KENDALL, of Fitchburg, }
ABEL MARSHALL, of Fitchburg, }
J. A. MARSHALL, of Fitchburg, }
JOEL PAGE, of Fitchburg, }
J. P. PUTNAM, of Fitchburg, }
JOSEPH UPTON, of Fitchburg, }
I. B. WOODWARD, of Fitchburg, }

ABEL F. ADAMS, of Fitchburg, *Member of the State Board
of Agriculture*

REPORTS OF COMMITTEES.



FLOWERS.

The Committee on Assorted Fruits and Flowers report as follows :

But one dish of Assorted Fruit was on exhibition in the Hall, and the Committee with remarkable unanimity, decided that it was entitled to one of the two premiums offered by the Society. They accordingly awarded it the second, it not being of such excellency as to entitle it to the first. The small display in this department can hardly be accounted for when we consider that this has been a fair fruit year. It would seem desirable that if any show is made in this direction hereafter, it be on a larger scale.

The exhibition of Plants in Pots was also small. The number competing for premiums was quite small, and none of them were of superb excellence. It was a matter of regret that there was not a large display of excellent plants; for they are certainly to be found in abundance in this community. Here, again, the first premium was not awarded.

Of Cut Flowers there were but few. And but few that were shown had particular merit. The paucity of the exhibition in this department is doubtless attributable to the early frosts. The Committee believed, however, that better things could have been done.

The displays in other departments where the frost might have interfered was, we think, good. With a little more care and a little more effort our Hall, already beautiful, might have been rendered infinitely more so by magnificent displays of these precious treasures of earth.

Native flowers were looked for in vain. This is a feature of the Fair, we believe, usually left out. But why should it be? It is very certain that a Bouquet of these would have received at least a gratuity. They might easily have formed a prominent feature of the floral display, for at this season there is always an abundance of them. The fields, the woods, and the roadside are gay with them. Common are they? They have not the honor to have travelled across the sea, if they had they would be called, many of them, magnificently beautiful. Indeed they are so. For every flower should be esteemed less for its rarity than for its intrinsic beauty. Many of our wild flowers more rare and more beautiful than others would well repay an introduction to the garden, notwithstanding the humiliating fact that they are indigenous to the valleys of New England.

It would be gratifying to have evidence of a growing interest in the flowers of the field and woods. There is a great abundance of them in all this vicinity. It would not be difficult to find towards a hundred distinct species even at this late season, and many of them though common are perfectly exquisite. The study and love of Native plants and flowers should underlie and accompany all taste for those of the garden. And these in goodly numbers should have a place in the exhibition Hall. We would also suggest that a collec-

tion of the various Native grasses properly prepared and arranged, would show to advantage; and also a display of forest leaves, of which there is an infinite variety, would add a pleasing feature to the exhibitions.

The Committee award the following premiums:

FRUITS.

Best dish of assorted Fruit,
2d premium to Waldo Wallace, \$1,00

PLANTS IN POTS.

2d, to Mrs Joseph Pierce, 1,00

A Japonica.—It was not particularly elegant, but considering the difficulty of rearing this plant it was considered worthy of a premium.

Esther F. Sheldon, a gratuity of ,50

This was an Oleander of moderate size and beauty.

Mrs. Josiah Sheldon, a gratuity of ,50

A Salvia, which, though not a remarkably fine specimen, would have appeared to better advantage, in the opinion of the writer, if left simply growing in its pot. To bind a quantity of flowers and foliage around the pot, though in themselves beautiful, detracts from the good effect the plant might otherwise produce.

Mrs. Lizzie White, a gratuity of ,25

Three pots of plants: a common, small Fuschia, a very delicate little Amaryllis, and a Jacoba.

FLOWERS.

1st, to Mrs. Gilbert Howe of Sterling, \$2,00

An elegant bouquet, consisting of a much larger variety of flowers than were found in any other, some of which were rare. Good taste and skill appeared in its arrangement. And here it may be said that it is

possible to make a poor bouquet with fine flowers. Not everything, but much depends upon the grouping and disposition of colors and forms.

2d, to Hattie Putnam, \$1,00

A pyramid. A very prettily constructed piece. As a work of art it had much merit. The flowers were artistically arranged; but an intermingling of more dark colors, we think, would have added to the effect. The variety of flowers was comparatively small.

3d, to Mrs. J. F. Monroe, .50

A plate of flowers. A very fine display, being of good size and arranged with excellent taste.

GRATUITIES.

Mary E. Lowe, a pyramid bouquet, .50

Mrs. N. S. Boutelle, a pair of table bouquets, .25

Mrs. Lizzie White, bouquet, .25

Mrs. Josiah Sheldon, bouquet, .25

Emily Wiswell, bouquet, .25

Mary E. Lowe, flowers upon a plate, .25

A perfect little gem, exhibiting much skill in its arrangement.

The Committee would also make honorable mention of a Fuschia contributed by Mrs. Mary Upton. Its size was large and foliage heavy.

They would also make (dis) honorable mention of a Tobacco plant. No name attached. If the Committee had been satisfied that no worse use would again be made of the "vile weed," of which this we should say was a very good representative, than thus to put it on exhibition, they would have awarded it a premium.

While the floral display at this Fair was not what was desired, still there was much to be commended. While some of the flowers were quite imperfect, a large

number of the Dahlias, for instance, being centered or having imperfections in form and blossom, yet there were many fine specimens of rare and elegant flowers. And while good taste was generally displayed in the arrangement, there was carelessness shown in some instances. In the opinion of the Chairman, though others of the Committee were not in sympathy with the idea, strictly good taste demanded more of green foliage intermixed with the flowers in some instances, thus affording a relief to the glare of many brilliant colors grouped together. Nature uses her greens without stint, and perhaps she is a safe guide in this matter.

There are two styles of bouquets: the loose, flowing style of construction which appears to be the most natural, though perhaps not so durable or convenient for use, and the compact, firmly tied system. Both have advantages and defects, and both may be made beautiful. The latter seems to be the ruling style, of which are found the various works of carpentry, and geometrical forms and figures, as the cone, the temple, the pyramid, etc. A bouquet of this character is well enough in its way, and as a piece of artistic skill may be very worthy. But it is artistical and formal, while the former is natural and graceful, easily formed, and should always be found when possible on the sitting room table or mantle.

We have supposed and still believe that floriculture is receiving increased attention. This is as it should be. And yet we would have clearer proof that this is true of the masses—of him who, toiling upon his little patch of ground for his daily bread, has hard work to earn the little income which barely furnishes a support, as well as of the man who maintains a magnificent

greenhouse. While no community can boast of too many of the latter, we believe the former class should be encouraged to do something, or if already doing, then more, in the way of cultivating flowers. For it is the universality of flowers rather than here and there a magnificent profusion that is to benefit and bless the world. The poor man who toils hard to raise grain, potatoes, and the like, and thus obtains a livelihood for his family, does well. But he can do better. Without neglecting in the least what are considered the more practical and substantial duties of husbandry, he can take a little time to cultivate some few choice flowers which may, while ministering to his higher wants, produce even a little income. In many instances a mere amateur in the business has originated some splendid plant for which the nurseryman has been glad to pay twice the amount of all his fruit and vegetables. But set the pecuniary consideration aside. Let it not become a question of dollars and cents. For not everything should be measured by a standard of mere utility and profit. That man should be pitied who can see no good in life but in the pecuniary gain or in the mere animal indulgences of eating and drinking.

In the matter of floriculture it is said that our rural population is far behind that of England and France. "There one can hardly pass a cottage even of the humblest kind, that is not adorned with a border or two of flowers, consisting of roses, daisies, tulips, or iris, and which has not climbing plants, as, for instance, the jessamine, and rose, and honeysuckle, crowning its windows and porches, and hanging like pictured tapestry about the walls."

Mrs. Howitt in her work entitled "Rural Life in

England," says that "many cottagers are most zealous and successful florists." She speaks, too, of the "many picturesque rustic huts, built with great taste and hidden by tall hedges in a perfect little paradise of lawn and shrubbery,—delightful spots to go and read in of a summer day, or to take a dinner or tea in with a pleasant party of friends."

Now every man who occupies a little cottage, or cabin even, that he has made his home and the home of his family, can and should do something to beautify it and make it attractive. We say every *man* should do it, for this labor should not be performed solely by the wife and daughter. Men are not yet rid of the idea that raising flowers is exclusively "women's work."

Now it is not weak or womanish for a man to admire and cultivate flowers. God meant the beautiful in Nature not for woman alone. And if to love and cultivate the beautiful flower is promotive not only of exquisite delight, but of purity and refinement, then certainly men should perform their share of this delightful work.

Let not the farmer, therefore, nor the strong man of any employment, excuse himself from this work on the ground that it is not within his province of labor, or that he is above the admiration of flowers, or that "they look well enough but do no good." Suppose they have no usefulness—though we do not admit it—but suppose they do no good; how much good do the splendid colors of fruit and vegetables do? Yet the plainest farmer enjoys all these better for their beautiful hues, and he knows it, and cannot help it, and still those hues have no more of utility about them than the tint of the *Gladiolus*. The fact is there is just

as fine a vein of enjoyment in man's nature as in woman's, and in the farmer's as in any man's. Therefore he should have and enjoy his flower-beds. Let the green-house be added if he chooses; but the flowers that do not need its shelter should never be excluded from the farmer's home. The Asters and Dahlias and most of the Lilies, the Crocus, Tulip and Hyacinth, the Primrose and Polyanthus, the Roses and Pinks of countless varieties, the Chrysanthemums and Gladioluses, Phloxes and Gilliflowers, are but a few of the long list that can be successfully cultivated without the green-house, and such as require no care in winter beyond the saving of seed or the storing of bulbs just out of the way of the frost.

It is true that every farmer does raise flowers in a certain direction without making it a speciality. The productions of the orchard, the vineyard, and the field, originate in flowers—bright, fragrant, beautiful flowers. For a little season the potato patch becomes a vast flower garden, each blossom perfect and beautiful. So in its turn does the garden of pease and beans. And what in the flower line is more grand and magnificent than the blossoming fruit orchard! As the little child has it, "It is God's great bouquet." But all these things are useful and therefore are cultivated. But we would have the idea of utility ignored in this matter, and would recommend to every farmer who has not already begun, to begin at once the cultivation of flowers for their own sake. Better raise but one or two varieties than none at all; for no one can raise a flowering plant of the commonest kind without soon extending his culture to others more attractive. The Sunflower would do better by the door than uncomely

weeds or single leaved tanzey. It is a noble plant. Its gorgeous blossoms have rather an honest look. But if planted the ruling consideration should be that it is a flower, and not that its seeds are good for making oil or feeding fowls. But there is the Morning-glory, the Four-o'clock, the Lilac, the Poppy or the Marigold. Begin with one or more of these. All of them are truly elegant notwithstanding our long familiarity with them. Begin with something that needs care and the children will end with something worth admiring. A love of flowers should be encouraged in the children. A bit of land should be afforded them and perhaps a premium offered them for the best cared for flower border. In this way, as well as in the matter of good books and papers may home be made attractive. And when home becomes attractive a great end is gained. Better for the boys to be cultivating flowers and otherwise decorating home, than to seek for recreation in the street or the saloon. We would like to see every school-yard so furnished that both teacher and pupils might have the means of cultivating and enjoying flowers. And steps have just been taken in Rhode Island to accomplish this result.

Indeed, where are flowers out of place? Our cemeteries are now embellished, not only with evergreens and shrubs, but largely with flowering plants. All these impart a freshness and bloom to the habitation of the dead which rob the grave of much of its gloom, and speak of a bright life beyond.

“ Bring flowers to crown the cup and lute,
Bring flowers, the bride is near ;
Bring flowers to soothe the captive's cell,
Bring flowers to strew the bier.”

Flowers are inappropriate nowhere. And representations of them are found everywhere. They are inwrought into all the arts and embellishments of life. Many persons who have neither the taste nor inclination to cultivate flowers, and who proclaim even against their being placed upon the table in church, regarding it as inappropriate and almost sacrilegious, surround themselves with representations of them upon their carpets, both at home and in church, upon their tapestry, their clothing, and their ornaments.

The story of flowers and their effect upon the heart and the well being of man, has not yet been half told. The kind Creator made them not in vain. He committed no mistake when he made flowers. They were not designed to be a waste. The commonest and most insignificant flower that blooms is both perfect in itself and is exquisitely beautiful, and was made for some purpose. It is a profound study. There is much to learn as well as admire in the contemplation of the minutest floweret. Every flower that decks the earth, every leaf of the forest, and every blade of grass on which we tread, convey lessons, which, if rightly read,

“ Will lead us from earth’s fragrant sod,
To hope, and holiness, and God.”

These elegant floral treasures scattered profusely over the earth have aptly been styled the Scriptures of the earth.

“Your voiceless lips, O flowers, are living preachers ;
Each cup a pulpit, and each leaf a book.”

Respectfully submitted,

C. W. CARTER, *Chairman.*

FINE ARTS.

PREMIUMS AWARDED.

J. C. Moulton, photographs,	\$1,50
Charles F. Lamb, photographs,	1,50
Mrs. A. H. Bingham, oil painting,	3,00
F. L. Palmer, oil painting,	2,00
Miss Cochran, oil painting.	1,50
Miss Abbie Ellis, crayon drawing	1,00
Louise Haskell, pencil drawing, (figure)	1,00
Lucy Damon, pencil drawing, (figure)	1,00
Jennie L. Whitney, pencil drawing, (figure)	,75
Mattie Hamilton, pencil drawing, (landscape)	1,00
M. Louise Haskell, pencil drawings, (landscape)	,75
Helen Lowe, pencil drawing, (landscape)	,50
Myra Richardson, pencil drawing, (landscape)	,50
Mrs. J. L. Joslin, embalmed flowers,	,50
Mrs. Maria Kennon, coal frame,	,50
Nettie S. Dix, hair wreath,	,75
Sarah J. Hadley, hair wreath,	,75
Ellen M. Lowe, worsted flowers,	,50
Sarah A. Graham, moss wreath,	,50
Henry Haskell, worsted picture,	,50

In addition to the above, the Committee desire to express the pleasure they feel in seeing such a fine exhibition in the department of the Fine Arts. They think in many points the paintings and drawings surpass those of any previous year. The pieces drawn by the pupils of Miss Cochran presented a good appearance and showed much merit. They feel that they deserve notice here. The small amount of money placed at their disposal was the only reason

for not awarding premiums to more of them, especially to Marion Snow and Mary A. Tolman.

The Oil Painting, by Mrs. A. H. Bingham of Ashby, were of increased value in the mind of the Committee, by being original designs. The Committee think it well for a competitor in this department to manifest good taste in the *selection of subjects*, as well as in the *execution* of them.

They desire to suggest the importance of all the articles being presented before the hour appointed for the meeting of the Committee.

Some pieces which perhaps might have received notice, were passed without examination because presented at such an unseasonable hour.

All of which is respectfully submitted by your Committee.

A. J. WEAVER, *Chairman.*

ESSAYS.

The Committee on Essays regret, that for the second time they are compelled to report that no Essay has been submitted to them for examination.

Two years ago the Committee made a similar barren report; but they had hoped this year, after the reception of the learned and instructive Essay of the last year from one of the most active and useful members of our Society, which commanded the first premium, that so valuable an example might be followed.

But the Committee are much gratified to be able to say that the Poem of Mrs. Mason, which has just been

read to us, so full of rich thoughts, most beautifully expressed, has been referred to them ; and they do with great pleasure unanimously recommend to Mrs. Charles Mason a gratuity of Ten Dollars, feeling that those of us who were present, will not soon forget the delight with which we heard it, and that all of us may never be unmindful of the lesson it teaches—that

“ Man ripens and decays ; his glorious powers
 “ Dim 'neath the shade of his declining hours.
 “ Age dulls his eye ; and ere his knell is rung,
 “ Palsies the cunning of his glowing tongue.
 “ Man, *man* decays ; but earth is ever young.”

For the Committee,

E. TORREY, *Chairman.*

FRUITS.

PEARS.

We presume that among the large majority of our farmers, little or no interest is felt in the general subject of fruit culture ; and perhaps lowest in the scale, stand those noble and luscious fruits, Pears and Grapes.

And why this neglect ? Undoubtedly the same reasons exist for it, that prevent other classes of men from readily engaging in what is a deviation from their usual customs and habits. The conservative element in man is generally a tenacious one, and in none more so, than in the very respectable class of our staid and solid farmers. This is a virtue we would not eradicate, and which we will not undervalue, but simply

claim that this *osseous* element of society shall gracefully yield to the demands of an enlightened progress, and suffer itself to be gently moved by the intellectual muscles of thought, and investigation, and discovery, upon these joints—the hinges of improvement—and thus open the doors of the mind to an increasing knowledge and a higher self culture.

In urging upon the attention of our farmers the claims of the pear as an article of production for the market, we are not obliged to invite them to embark upon a project of uncertain experiment. For through the persevering efforts and skill of those pomologists who have made the development and culture of this noble fruit a speciality of their lives, it has been carried successfully through this epoch of its history, and now stands forth tested and proved, a crop as certain and reliable and as profitable, as almost any other product of the soil. So that now, all the farmer has to do, is to appropriate to himself that knowledge that has been obtained through the patient study and experience of others in their life labors for the development of new varieties, and by long years of cultivation and observation in testing their various qualities as to excellence and hardy growth, and adaptedness to various climates and soils; and in ascertaining the best rules for their management and care; which are good and regular bearers, and which the most profitable for a market production. This information is now within the easy reach of all.

A feeling may prevail in some minds that pear culture is a sort of fancy enterprise, suitable only for fancy men—as one of those activities of life to be ranked as a kind of agricultural gymnastics—and below

the dignity of the genuine farmer who should devote his sole attention to the great staples. The entire dignity of farming consists simply in being "*the business of feeding mankind.*" It all rests upon the one single but broad fact of the human stomach, and whatever administers to its wants, and through it, contributes to the health and pleasure of the human system, and the innocent enjoyment of that table exercise which no person's dignity has ever yet dared to ignore, becomes an element of human happiness, the production of which is dignified and honorable.

We are quite certain, that the occult forces in vegetable life, in forming and ripening for us the pear, the peach and the grape, stand as high in the scale of Nature's workmanship, as in the production of the potatoe, the cabbage and the turnip. And it may be true in more senses than one, that the results of our labors in fruit culture, culminate nearer the skies, than in the production of root crops.

But as pecuniary profit lends dignity to almost every occupation, let the pear crop be tested in this light also.

The following statements are from the address of Marshall P. Wilder, before the American Pomological Society, at its seventh session :

"A young orchard owned by Mr. Chapin of Western New York, of four hundred trees, eight years from planting, produced fifteen barrels of pears in 1853, selling in New York for \$450,—and fifty barrels in 1854, yielding him \$1000. Wm. Bacon of Roxbury, Mass., has about an acre devoted to pears. From two trees only, he has realized more than \$100 a year, and from his whole yearly crop, over \$1000. William R. Austin of Dorchester, from an orchard of between five

and six hundred trees, mostly on quince roots, has sold in six years, commencing when the trees were six years old, what amounted to \$3,408. Mr. Earle of Worcester, has one Buffum pear tree, which yields him annually, from \$30 to \$40. Mr. Pond of the same city planted in 1850, three hundred and fifty Bartlett pear trees a year from the bud. In 1857 he sold from them fifty bushels amounting to \$250." Many more facts in the same direction might be cited; but these are enough to show that there is money in the business.

We are much of the opinion, that farmers should more generally engage in the business of pear raising. When we reflect how few people ever have the pleasure to regale themselves upon the best varieties of this delicious fruit, owing to the high prices at which it is sold, we can readily see that the production of this crop can be very largely increased, with no danger of breaking down the market. For an increased supply will be followed by such an increased demand, as to prevent the price from falling below that point, that shall be fairly remunerative. With an acre, or half an acre devoted to pears, the farmer would find ample time to attend to the requirements of his little orchard, without encroaching upon his other crops. And with the requisite knowledge which every intelligent man can now so easily obtain, he would make pretty sure, a generous return for the outlay. And then, the intellectual effort of reading himself up on this subject, the knowledge he might obtain of the laws of vegetable growth and development--which knowledge is so richly interspersed through the writings of all those who treat on pear culture,—would become a valuable accession to one's mental store-house, and serve to incite to a wider thought, and a habit of closer observation.

But it will be essential, in the first place, that he should make the selection for his orchard, from those varieties that are the most hardy and productive, and will be eagerly sought for in the market. The location and soil should be favorable, and the ground stirred and enriched from time to time, as the necessities of the trees may require. All stimulation to a late growth of wood that will not properly ripen, before the season closes, should be avoided, and any tendency to such growth should be immediately checked, as it is very liable to ultimate in the frozen-sap-blight, a disease fatal to the pear tree.

For good practical information on this whole subject, we would recommend Mr. Field's excellent work on pear culture.

But should any one enter upon this business, without the requisite knowledge for success, and with no love for his new vocation, and so mismanage his trees ; or leave them in utter neglect to struggle alone with the weeds and the grass, he will probably encounter the same failure, that he would by dealing with any other crop with the same measure of ignorance and neglect.

The presentation of pears for the table at our annual fair this year was very good, though not perhaps any better than in some preceding years. We missed the usual contributions of Hon. Moses Wood, and Benjamin Snow, Jr. The number of contributors seemed to indicate the fact, that not a few of those who have a garden and a homestead, are becoming somewhat interested in the subject of pears. We trust that their example will be more generally followed by those who possess larger means for the production of this noble fruit.

GRAPES.

We are glad to perceive by the number and character of the contributions offered for premium in this department, that the interest in the cultivation of this fruit has year by year, gradually increased.

The two varieties that seemed to take the lead for their superior qualities and perfection, were the Concord and Delaware. The Concord appears to be more generally cultivated, while the Delaware seems to have been but recently introduced into this vicinity, and its adaptedness to this locality therefore is not as yet fully tested. But the plate of Delawares presented by Mr. Emory, was certainly ripened to the greatest perfection, and was invested with a sweetness and deliciousness, that "melted with multiform flavor on the palate." From the few specimens we have seen, we confess a favorable leaning towards this variety, but a general cultivation will of course better test its various qualities.

Our cold and variable New England climate, is considered very unfavorable to the proper culture of the grape. And it certainly is a serious obstacle to the perfect ripening of our best American varieties; while the foreign grape can be perfected, only under glass. Stern old winter with his unwelcome lingerings, chilling as he does, with his cold breath, the breezes of May; and the early frosts of September which betoken his returning footsteps, make up for us a year of which well two-thirds are given over to the partial or complete reign of the winter king. Such a climate is indeed unfavorable not only to the highest perfection of the grape, but to general vegetation also; for many of our staple crops, oftentimes suffer in consequence.

A climate, and soil like ours, cannot of course present the best conditions for that high state of farming, that will yield great crops with little labor, and no painstaking. Such is not the privilege of New England agriculture. But her peculiar privilege is this: that these obstacles of coldness of climate and sterility of soil, but furnish the occasion for the development of the true New England glory, in the characteristics of her people—industry, skill, genius, perseverance, ingenuity in overcoming all natural impediments, powers of contrivance, and skillfully conducted experiments, ultimating in invention and discovery. These constitute the depths of New England's resources. Do the frosts ruin the corn crop? New England enterprise does not succumb under the blow, but plants a kind of earlier growth and ripening—for corn the farmer will have. Does the grass winter kill? or does the drouth cut it short? The farmer does not give up the hay crop. He still labors on for success, and studies for protection from adverse causes. And so it is, that New England stands to-day foremost in that skill and science, that constitute a successful agriculture. And we are sure that when the energy, perseverance and skill of our people are once enlisted in grape culture, all obstacles to success will in due time be mastered, and our markets be filled with the delicious clusters.

It strikes us that an addition, to the few already existing varieties of real excellence, well suited to this climate, would be desirable. When this small number is compared with those of the pear and the apple, it certainly is a meagre show. Now we see no reason, why, with the same labor and pains that has been bestowed on other fruits, for this purpose, an equal success may not be

attained, and we think that the results would be more speedily obtained, than in fruits of a slower growth, and bearing.

The history of the development of the pear, reveals to us the inexhaustable resources of Nature, to evolve and multiply varieties, and to increase their excellence. And we doubt not, that these skillful and mysterious forces in their latent and hidden capacities, are richly laden with the germs of numberless varieties of the grape, which for excellence and fitness for our climate, may surpass any as yet known.

When we consider that the grape is indigenous to this country, growing everywhere, on river-side, and on hillside, climbing over and along old stone walls, and on high forest trees, flourishing in exuberance without care and cultivation, we cannot withstand the conviction, that Providence designed that the grape should become an article of agricultural production. And we cannot but believe, that under the skillful developing hand of man, guided by a true knowledge of the laws of grape culture, this fruit may, by the same ameliorating process, follow the history of the pear, and from the wild state of one or two kinds, expand into numberless varieties of superior excellence, and suited to the necessities of our climate.

In the matter of the care and management of the grape vine, we have taken the liberty to cull the following few extracts from a paper prepared by R. H. Phelps of Connecticut, entitled, "Cultivation of Grapes in New England," and published in "Patent Office Report for 1858, Department of Agriculture." We deem them of far more worth than anything we could offer from our own experience and observation.

SOIL AND ITS PREPARATION.

“As a general rule, we prefer a porous soil, moist in a degree, but not retentive of moisture—warm, friable loom, which can be readily pulverized, and is not liable to become hard baked by the sun. A soil abounding in disintegrated rocks, redish gravel, or brown per oxyde of iron, appears to be especially adapted to grapes. Nearly all of our American varieties will thrive upon land on which a good crop of Indian corn can be raised; and upon the mountains and stony hillside where grain or grass would make but stunted growth. They will feed and produce where other vegetation would starve. This is believed to be true all over the world. In some parts of Europe the vine is grown on ledges so steep that the laborers can only with difficulty stand at their work. With us, a subsoil, porous and permeable is absolutely requisite, that the roots may penetrate, which they will do to a great depth if no obstruction prevents. A stiff retentive substratum can be ameliorated by deep and thorough drainage with tiles, so that air can be admitted and the surplus water pass off. It is well under any condition to break the earth to the depth of eighteen inches in any ground where the grape is planted. It is not claimed that poor sterile land is to be preferred, but a proportion of sand, gravel and stones underlying deeply the surface soil, is generally suitable for this product. Between soil and location, I consider the former of the most importance. If a vine has sufficient depth in any good earth, it will ordinarily thrive in any good locality. There is however something to choose in situation as regards exposure, and a southern or southeastern declivity is usually recommended. A hilltop or gently undulating surface

is better than a level, or deep valley. Upon hill summits or elevated ground, the temperature is more mild and uniform than in the valleys beneath, and consequently such locations are better adapted to the grape."

MANURING.

"Like other plants deriving their best nourishment from a return of the chemical constituents which have been extracted from the soil, contained in their own decaying vegetation, the leaves and prunings of the vine are congenial elements for its growth. Bones, old leather, refuse plaster, turf compost, soap suds, &c., constitute good manure. Bones appear to be the best of all substances to promote its permanent vigor. In digging up a grape vine, near which some bones had been buried, I was surprised to see with what avidity the roots sought after them; every bone was literally covered with a network of fibrous rootlets, and every cavity so filled with them that it was impossible to disengage the bones without tearing the rootlets to pieces. A dressing of wood ashes, each year, is a benefit, by supplying the loss of alkalis which are largely consumed by the grape. Whatever element of fertility is applied, it should never be done when the grapes are approaching their full size, nor early in the fall; because the result will be a larger growth of canes, which not being sufficiently matured to withstand the winter and spring frosts, would hazard the life of the vine.

Mulching the ground with light manure, muck, or especially with vine leaves, makes an absorbent for the heat during the day, which is in part radiated at night, causing a more equal temperature, and during the hot

drouth of summer, holds in absorption the rains and dew, thus screening the earth from two extremes, heat and drouth, lessening the danger from autumn frosts, and promoting a full development and maturity of fruit."

PRUNING AND TRAINING.

"As to the right time for pruning vines in New England, we have mostly come to the conclusion that early winter is the best, say in the month of November, soon after the falling of the leaves.

Respecting the best method of pruning vines, opinion is undergoing a decided change. The practice in Europe of very close pruning has been followed in this country by foreign vine dressers, without duly considering the difference of climate and the character of our vines. Ours are indigenious, while the vines of Europe were originally brought from Asia, some two thousand years ago, and have been dwarfed by excessive pruning, so that they will bear the loss of nearly all their tops with comparative impunity, and submit to be planted in hills about as thick as our Indian corn. But at last they show the certain effects of long ill usage, in the fatal *oidium*, or blight.

As some portions of a vine naturally die out of themselves, each winter, would it not be well to follow the hints of Nature in *our* practice? As a general rule, that system of pruning is best which shortens or thins out a moderate portion of each season's growth, allowing a gradual and uniform increase, and with a view to check the tendency of the vines to bear fruit exclusively on the extreme ends of the branches. But no one system of pruning is adapted to every condition, for something depends on the age of the vine, the

variety, and the space allotted to its growth. It is to be remembered that the fruit always grows on young or new shoots, which start from the wood of the preceding year. This principle will serve as a general guide in pruning the vine under all circumstances ; and any one by a little practice can perform the work. Some varieties of moderate growth are pruned and trained according to what is called the *renewal system*, upon stakes. The mode or training which is gaining favor with us, is that upon wires. This method is suited in a remarkable degree to the vine, as its nature is to ramble far over hedges, trees and fences, and to clasp its tendrils tenaciously around every twig and shrub within its reach. By trellising upon wire, no tying up is necessary which saves much labor ; for the tendrils, their natural and best support eagerly take hold of the strands of wire, and have a chance to indulge their rambling and climbing propensity. Wall trellising is gaining favor wherever practiced, and can be done with much economy. A few feet of waste or unoccupied ground about a barn, outhouse, shed, or near the walls of a dwelling afford a most congenial spot for grape vines, and they are easily trained so as to cover a large area on the side or roof of a building."

We trust that ere long this New England character of ours, becoming interested in grape culture, will overcome all obstacles of climate and the lack of desired varieties ; and so make our own section of the country to abound in this excellent fruit, bringing it, in its perfected state, within the reach of all.

The Committee make the following awards :

PEARS

For best and largest named varieties,	
1st, to Jabez Fisher,	\$4,00
Second premium not awarded.	
For twelve best varieties,	
1st, to Wm. M. Leath,	<i>Harris on Insects</i>
2d, to Alvah Crocker,	2,00
3d, to Dennis Fay,	1,00
For best six varieties,	
1st, E. D. Works,	2,00
2d, N. S. Boutelle,	1,50
3d, Benj. Safford,	1,00
For the best three varieties,	
1st, T. R. Boutelle,	1,50
2d, J. M. Twichell,	1,00
3d, Joseph Sawyer,	,50
For best one variety,	
1st, Dennis Fay,	1,50
2d, J. M. Twichell,	1,00

GRATUITIES.

J. A. Marshall,	1,00
G. P. Hawkins,	1,00
N. Upham,	,50
B. F. Proctor,	,50
A. Hubbard,	,50
T. Palmer,	,50
C. Thurston,	,50
C. H. Colburn,	,50

GRAPES.

For best display of native,	
1st, C. A. Emory,	<i>Harris on Insects</i>
2d, W. G. Wyman,	2,00
3d, Jabez Fisher,	1,00

GRATUITIES.

A. Crocker,	1,00
Benj. Safford,	1,00
F. A. Whitney,	,50
T. Palmer,	,50
Levi Kendall,	,50
T. R. Boutelle,	,50
Ohio Whitney, Jr.,	,50
Amos Durant,	,50

For the Committee,

E. F. BAILEY, *Chairman.*

 APPLES.

Premiums awarded on apples by the Committee as follows :

There was no competition for the largest and best varieties.

For twelve varieties five specimens each,	
1st, Ezra Kendall, Sterling,	<i>Harris on Insects</i>
2d, Dr. J. A. Marshall, Fitchburg,	\$2,00
3d, Levi Kendall, Fitchburg,	1,00
For six varieties of five specimens each,	
1st, Thomas Upton, Fitchburg,	2,00
2d, Dr. J. Fisher, Fitchburg,	1,50
3d, William M. Leathe, Fitchburg,	1,00

For three varieties of five specimens each,	
1st, Jacob Haskell, Fitchburg,	\$1,50
For twelve specimens of one variety,	
1st, G. P. Hawkins, Fitchburg,	1,00
2d, David Lowe, Fitchburg,	,50

PLUMS.

1st, Ohio Whitney, Jr., Ashburnham,	1,50
2d, Cyrus Thurston, Fitchburg,	1,00

QUINCES.

1st, C. A. Emory, Fitchburg,	1,00
2d, J. P. Hayward, Sterling,	,50

GRATUITIES.

Waldo Wallace, Fitchburg,	,50
---------------------------	-----

GRATUITIES ON APPLES.

Charles H. Colburn, Leominster,	1,00
Samuel Osgood, Sterling,	,75
J. P. Hayward, Sterling,	,75
E. Graham, Lunenburg,	,50
C. Flagg, Sterling,	,50
B. Safford, Fitchburg,	,75
S. M. Caswell, Fitchburg,	,75
N. S. Boutelle, Fitchburg,	,75
T. R. Boutelle, Fitchburg,	,75
Thomas Palmer, Fitchburg	,75
A. Hubbard, Fitchburg,	,75
Alvah Crocker, Fitchburg,	,50
Waldo Wallace, Fitchburg,	,50
N. A. Tufts, Fitchburg,	,50

For the Committee,

RODNEY WALLACE, *Chairman.*

VEGETABLES.

Your Committee regard the department committed to them as one of the most important branches of agriculture, and believe that the health and happiness of man and of animals depends much upon its successful prosecution. The Scriptures declare that all things are full of labor. In a well cultivated garden this remark holds true, and yet it is believed that no part of the farm pays better than this, when proper care is bestowed upon the preparation of the soil, the selection and timely planting of the seed, and especially when there is constant vigilance in subduing the weeds, for without the latter, however, much care may be bestowed upon the preparation of the soil and the planting of the seed, the cultivator will realize but an indifferent crop. So much depends upon causes entirely beyond our control, such as the degree of heat, the early and latter rain, that no one can expect to bring to the highest degree of perfection every kind of vegetable in the same season; but this same objection holds good against every other crop raised by the farmer. The utility of vegetables, as has been before intimated, as an article of food for man and animals, does not admit of a question, and the Beneficent Being who rules over all has made them not only essential to our health, but also to contribute to our enjoyment, for like the various kinds of fruit they are also agreeable to our taste. We believe that among the vegetables best adapted to the table are the various kinds of the Potatoe,—the Hubbard and Marrow Squash, the early Turnip Beet and the purple top English Turnip; and for animals we think that the Mangel Wurzel, and the Sugar Beet are among the best. Your Committee were highly grati-

fied at the numerous and excellent specimens of garden vegetables exhibited at the late fair of the Worcester North Agricultural Society. That there has been a marked improvement in the quality of garden vegetables since the formation of this Society cannot be doubted. It is no longer the object of exhibitors to present mammoth specimens, which are usually of an inferior quality, but at this exhibition the vegetables were of a medium size, which are uniformly of a better quality for the table, and of the most approved kinds. Your Committee cannot but make honorable mention of the collection of kitchen vegetables presented by N. C. Day, of Lunenburg, containing twenty-two kinds with fifty-four varieties; also by Dennis Fay of Ashby, and J. M. Sawtelle and Benjamin Safford of Fitchburg, all of which were highly creditable to the skill of those gentlemen in this department. There were other specimens equally good, but none containing so great a variety.

We learn that C. L. Flint, Esq., Secretary of the State Board of Agriculture, imported at great expense some seed potatoes from Belgium and distributed them gratuitously throughout the State, requesting that they might be carefully experimented with and the results made known to the public at the various exhibitions, and in the published transactions of the Societies. Of the portion of this new acquisition which fell to the share of our Society, five pounds were planted by Abel F. Adams, in forty-four hills, and produced two and a half bushels of good sized, handsome looking potatoes, the quality of which has not yet been tested. Three pounds were planted by J. M. Sawtelle, and yielded about the same quantity that Mr. Adams' five pounds

did. Six hills affording twenty-seven pounds. Two pounds were planted by William G. Wyman, Secretary of our Society, on the sixteenth of May, in a drill under the shade of fruit trees, and were dug when unripe while the vines were still fresh and green, for the purpose of exhibiting them at our fair. From the two pounds planted fifty-four pounds were obtained. Farther experiments will be made to test the productiveness, value, and especially the *table qualities* of this European variety of potatoe and its adaptation to our soil and climate. No indications of disease have appeared in any of the samples produced.

In conclusion, your Committee hope that the department of vegetables will receive increased attention, and would remind cultivators that on no part of the farm, perhaps, so much as in the garden, is it true, that what is worth doing at all is worth doing well.

The Committee make the following awards :

KITCHEN VEGETABLES.

1st, N. C. Day, Lunenburg,	\$7,00
2d, J. M. Sawtelle, Fitchburg,	5,00
3d, Dennis Fay, Ashby,	3,00

POTATOES.

1st, J. P. Hayward, Sterling,	2,00
2d, E. Bird, Lcominster,	1,00
3d, Nathan Caswell, Fitchburg,	,50

MARROW SQUASHES.

1st, Benj. F. Proctor, Fitchburg,	1,00
2d, Lawrin Pratt, Fitchburg,	,50

HUBBARD SQUASHES.

1st, Charles Brigham, Fitchburg,	1,00
2d, Jabez Fisher, Fitchburg,	,50

VEGETABLES.

65

PUMPKINS.

1st, John Minot, Westminster,	,75
2d, A. Hubbard, Fitchburg,	,50

CABBAGES.

1st, Walter Heywood, Fitchburg,	,75
2d, Lawrin Pratt, Fitchburg,	,50

CAULIFLOWERS.

1st, Walter Hayward, Fitchburg,	,75
---------------------------------	-----

ONIONS.

1st, Lawrin Pratt Fitchburg,	,75
------------------------------	-----

TURNIP BEETS.

1st, B. F. Proctor, Fitchburg,	,75
2d, Joel Hayward, Ashby,	,75

ENGLISH TURNIPS.

1st, John Minot, Westminster,	,50
2d, Levi Kendall, Fitchburg,	,25

TOMATOES.

1st, Levi Kendall, Fitchburg,	,50
2d, Isaac B. Woodward, Fitchburg,	,25

FIELD BEANS.

1st, David Battles, Fitchburg,	,50
2d, Joel Hayward, Ashby,	,25

SEED CORN.

1st, Daniel North, Westminster,	1,00
2d, Benj. Safford, Fitchburg,	,75
3d, Nathan Caswell,	,50

GRATUITIES.

Benj. Safford, Fitchburg, coll. kitchen vegetables,	2,50
David Lowe, Fitchburg, Hubbard squashes,	,50
Wm. G. Wyman, Fitchburg, potatoes,	,25
A. A. Marshall, Fitchburg, watermelons,	1,00
E. Bird, Leominster, citrons, etc.,	,25
I. B. Woodward, Fitchburg, beets, etc.,	,25

David Battles, Fitchburg, potatoes and beets,	,25
George P. Hildreth, Fitchburg, cabbages,	,25
A. P. Goodridge, Fitchburg, squashes,	1,50
N. C. Day, Lunenburg, squashes,	,50
Jabez Fisher, Fitchburg, potatoes,	,50
Jonas A. Marshall, cabbages,	,25
Geo. E. Towne, Fitchburg, cabbages,	,50
Geo. Burnap, Fitchburg, potatoes,	,25
Jacob Haskell, Fitchburg, cheese, pumpkins and sweet corn,	,50
James McIntire, Fitchburg, seed corn,	,25
Dennis Fay, Ashby, seed corn,	,25
N. C. Day, Lunenburg, seed corn,	,25

For the Committee,

J. HASKELL, *Chairman.*

BREAD, BUTTER, CHEESE, &c.

Of the articles submitted for our examination, the first two named above, were largely represented and of excellent quality, as a whole. The number of entries of the others was disproportionate to their importance; they were deemed entirely worthy, however, of the premiums awarded them. It is gratifying to see a good exhibition of those articles which enter into the daily consumption of almost every family, and upon the excellence of which, depends, in a great measure, our health, and, therefore, happiness. It is always honorable and highly commendable to compete for premiums on such things; for the production of that which

is superior, stimulates others to the production of something as good or better, the exhibitor thus becoming a public benefactor. Mutually assist each other, then, by showing the products of your skill and labor, giving at the same time, full and accurate statements concerning the same.

BREAD

We do not need the testimony of medical men to convince us that our health depends largely upon the quality of the bread we eat. And what affects the body affects the mind also. Not more surely does the cochineal insect grow gradually red from the crimson cactus blossoms on which it feeds, than does a man's temper become morose by living upon sour bread. The importance to the community, then, of having good bread, can hardly be over estimated.

The young lady who is skilful in music, painting, &c., has it in her power, under favorable circumstances, to give much pleasure by the practice of those arts; but she who habitually makes good bread, deserves a daily blessing from all who partake of it. Our prayers for "daily bread" are answered by the "smiling plenty" which "crowns the year;" but how badly we do our part towards furnishing it when we convert His bountiful, life-giving harvests into some clammy unwholesome compound, which it would be a piece of bitter irony to call the "staff of life."

Those who make good bread, say that it is a simple and easy thing to do. But the way to do it must first be learned. We would say to young ladies, then, get the necessary information from some source; then, if, in after life, you are so placed as even to put this labor

upon others, it may not come amiss to be able to instruct a servant how to do the same.

We acknowledge it to be much easier to preach than to practice. However, we will say that were we a young lady, we should consider it our duty to respectfully decline all "proposals" for the management of a household, until, among other domestic accomplishments, we could make a good, wholesome loaf of bread.

Below will be found such statements as we have received from those to whom premiums were awarded :

Miss Susie A. Sawtell, who drew the first premium on white bread, makes it as follows : With three pints of warm milk, one half teacup full of hop yeast, lump of butter of the size of two walnuts, mix good flour into a sponge at night. Set the same to rising till morning ; then stiffen the mixture by more flour ; adding a little soda, if it should have become sour, put into a hot oven and bake about three-fourths of an hour.

Miss Mary C. Gates sends the following as her method of making rye bread : To three pints of rye flour, add two tablespoonfuls of home-made hop yeast and one pint of milk. Mix well together, then set to rise over night. In the morning put into a pan, let it rise half an hour and bake one hour.

BUTTER.

The exhibition of butter was large and of unusual excellence. Considering that it is the chief reliance of a large class of farmers for support and profit, it may not be out of place to devote some space to giving such information on the subject as we have been able to glean from reliable sources.

The most essential things in butter making after

producing the milk, are undoubtedly the following: 1st, getting *all* the cream; 2d, having it in a good condition for churning; 3d, making a complete separation of the butter from the buttermilk; 4th, preserving the butter, when to be kept for a considerable time, in such a manner as to retain its original sweetness and good flavor.

In regard to the first point, there are three things which are essential; good light, a free circulation of air, and a proper temperature. There are a very few who have not learned to avoid close dark cellars in which to set milk for butter; but if the milk room be above ground, the milk, during the hot season, will often become so soon curdled as to prevent the rising of a portion of the cream. If the dairy room has a northern or northwestern exposure, with a room over it, between it and the roof, this will be less likely to occur. This trouble is remedied in some of the best dairies of a neighboring state by constructing the milk-room partially underground, admitting air and light through latticed windows near the top. A free circulation of air under the pans is secured by placing them on a frame work of horizontal bars, instead of board shelves. The proper degree of coolness in warm weather, is imparted to the milk by some skillful dairy-men, by setting the pans into shallow troughs, into which a stream of aqueduct water may be made to run at pleasure. In this connection it may not be out of place to call attention to a new milk pan invented and exhibited, at the late fair, by J. F. Monroe & Co: This invention combines the means of a very perfect circulation of air and an insulation, by which the milk is no more liable to sour during a thunder storm or the

sultry weather attending it—so the inventors claim—, than at any other time. The pan differs from the common tin milk pan, in having short glass legs, or buttons, fixed to the bottom, which, being nonconductors of electricity, perfectly insulate it, thus preventing souring of the milk by electrical currents. The circulation of the air through the center of the pan is secured by an upright funnel from the bottom. It is simple, not expensive, and appears to be a valuable invention; at any rate worthy of notice and trial.

Experiments conclusively show that milk to be perfectly creamed should not be more than three inches in depth. The time required for the cream to rise, depends upon the temperature of the room. At 50° , it will rise in 36 hours; at 55° , in 24 hours; at 58° , in from 12 to 16 hours. *The condition of the cream*, after being taken from the milk is a matter of importance. Cream that is allowed to become sour, will make a better article of butter than that which is fresh. It being in this condition will also facilitate the operation of churning. Butter made from sweet cream is neither great in quantity nor superior in quality. The cream when allowed to stand for some days before churning should be frequently stirred to prevent curdling. In regard to the temperature of the cream when in the churn, it must be at 62° before the butter will come; but it is better to raise it from about 55° by agitation in the churn, than to have it higher when put in,—otherwise a soft white article will be produced.

It is hardly necessary, perhaps, to remind any one that cream or butter becomes very easily tainted; so that the air of the dairy room should be frequently renewed and rendered free from unpleasant odors. The

standard of neatness for the same can hardly be too high. A practical observer on this subject says: "Cleanliness may, indeed, be regarded as the chief requisite in the manufacture of good butter. Both milk and cream are so exceedingly sensitive to the air, in everything with which they come in contact, as to impart the unmistakable evidence of any negligence, in the taste and flavor of the butter."

The third requisite for the production of good butter, is a proper separation of the same from the milk and curd mixed with it when churned. Over churning is not advisable for aiding in this, for, although it may facilitate the process, and slightly increase the quantity of butter, it diminishes that fine, waxy, yellowish appearance so agreeable to the eye. There are two methods in practice for effecting the above; one by washing the butter with cold water so long as it runs off white; the other by "working it over." By the former it can be kept longer fresh; by the latter a higher and more agreeable flavor is retained. The best way generally is to knead thoroughly with a butter worker, and dry with a large sponge and dry cloths.

In the preservation of this article, great care should be exercised. There are two substances which are changed in rancid butter,—the fatty matters and milk sugar; and two agents by which this is effected, caseine, or curd, mixed with the butter, and the oxygen of the atmosphere. This fact, then, establishes the importance of entire freedom from the former and exclusion from the latter. If the salting be seasonably done it arrests or greatly retards the change which any curd which may remain, would otherwise produce. Great care should be taken that the packing be done in

vessels perfectly tight, pressing the butter as solid as possible, covering it with a brine. Butter dealers prefer wooden tubs or firkins for keeping, to stone ware, and of the former none is better than oak.

Good butter depends more upon the manufacture than upon all other things put together. A judicious writer upon this subject remarks: "In every district where good butter is made it is universally attributed to the richness of the pastures; though it is a well known fact that, take a skillful dairy-maid from that district into another, where good butter is not usually made, and where, of course, the pastures are not deemed favorable, she will make as good butter as she used to do.

If the public wish for superior butter, (and who does not?) they must be willing to make a greater discrimination than heretofore, between the prices of what they seek for, and that which is positively bad. So long as an inferior article brings about the same price as that which is extra, people must expect that they will sometimes be unable to find what they want in the market. We hear of a man who has received forty cents per pound for all of his butter the present season, at a well known public house in Boston. His herd of cows consists partly of the Jersey stock. May there be more such butter makers and more such customers.

This report being already too long, we omit making remarks on other articles, only giving the awards.

· WHITE BREAD.

1st, Susie A. Sawtell, Fitchburg,	\$2,00
2d, Alice Wellington, Ashby,	1,00
3d, N. E. Grey, Fitchburg,	,50

UNBOLTED WHEAT BREAD.

1st, Olive E. Bailey Fitchburg,	1,00
---------------------------------	------

BOLTED RYE BREAD.

1st, Mary E. Gates, Ashby, \$1,00

RYE AND INDIAN BREAD

1st, Alice Wellington, Ashby, 2,00

2d, N. Louisa Smith, Fitchburg, 1,00

3d, Mary E. Merriam, Fitchburg, ,50

LUMP BUTTER.

1st, Charles Flagg, Sterling, 4,00

2d, George Miles, Westminster, 3,00

3d, Mrs. S. G. Myrick, Princeton, 2,00

4th, Benj. Wallis, Ashby, 1,50

GRATUITIES.

Ezra Kendall, Sterling 1,50

L. Ramsdell, Lunenburg, 1,50

JUNE TUB BUTTER.

1st, L. Ramsdell, Lunenburg, 3,00

2d, Addison Howe, Ashburnham, 2,00

3d, A. J. Stone, Fitchburg, 1,00

CHEESE.

1st, George Miles, Westminster, 2,00

Henry Spooner of Barre, had on exhibition some fine cheese but did not compete for a premium.

HONEY IN COMB.

1st, Gardner Merriam, Leominster, 2,00

2d, J. M. McIntire, Fitchburg, 1,00

JELLY—GRATUITIES.

Mrs. Lizzie White, Fitchburg, for three varieties, ,75

Mrs. J. T. Farwell, for Crab Apple jelly, ,50

PICKLES.

Mrs. I. B. Woodward, Fitchburg, ,75

Mrs. S. G. Frost, Fitchburg, ,50

GRATUITIES.

Miss Lizzie White, Fitchburg, ,75

Mrs. J. P. Farwell, Fitchburg, .50

L. W. RUSSELL, *Chairman of the Committee.*

SHEEP.

It seems to be an established fact that the the pastures in this vicinity are not as good as they were once. In them bushes and briars more easily take the places of some of the best grasses; they need plowing oftener and require larger applications of manure to make them hold good, and it is said they need almost constant care and labor to keep them from running out.

As this is a matter in which all farmers are more or less interested, your Committee deemed it of sufficient importance to consider what bearing sheep husbandry had on this subject, and therefore they made the following inquiries of the principal sheep-raisers of their acquaintance :

1st. Is it better for pasture lands to have sheep kept on them than any other kind of stock ?

2d. Do you know from your own experience that sheep will eradicate bushes or in any way improve the pastures in which they are kept ?

The answers which were received to the above questions were prompt and sufficient, and as they contain the views of practical men who have had long experience in the business, your Committee are pleased to place them before the Society.

Hosea M. Caswell, says : " I notice sheep always rest on the highest parts of the pasture, and spend more of the time on the hills than cattle, consequently the manure is more evenly distributed. Sheep also require such a variety of food they will even kill out hardhacks and thistles."

James McIntire, says : " There is no stock like sheep to renew old pastures. I know clover to come in and

bushes to die out in pastures where they have been kept."

Joel Hayward, says: "I am well satisfied that sheep do materially improve pasture lands, not only from my own experience but from what I have observed of pasture land where they have been kept in this vicinity. I have had sheep for nearly twenty years in one pasture and am confident that it will keep one-third more and keep them equally well, as when first used for that purpose. I remember an instance near here where a piece of land had become quite thickly covered with a growth of white birch; these were cut close with a scythe and then sheep were turned in which (perhaps for want of better feed) kept the young shoots fed down and cleared the pasture of brush."

Mr. Hayward does not believe in compelling sheep to become "bush exterminators," but says "give them clover and other sweet grasses, give them as good as you have, and if you have used proper judgment in the selection of your flock, you are well insured of a good profit."

George Fox, says: "I believe in a mixed stock for a pasture; used to think it would not do to have sheep and cattle go together, but now I am satisfied both will do better, provided you give them plenty of feed. It is cruel and unprofitable to keep sheep so short as to compel them to eat bushes, but adds there is scarcely a bush or plant, (except a few poisons) which sheep do not love to eat. I have many times seen sheep turn from white clover, they like so well, to brakes and bushes. My idea of sheep raising is this: A few graded kinds of sheep, with as wide a range of pasture as possible, and let the sheep be kept well enough to raise twin lambs which will weigh 100 pounds each."

William G. Wyman, says : "You ask for my "views, experience and "observation" in Sheep Husbandry, in reference to the effect upon pasture lands of keeping sheep upon them, as compared with that of other stock ; whether they "will keep down bushes, or in any way improve the pasture in which they are kept?"

In reply permit me to say that while I do not think all pastures would be improved by keeping sheep upon them, or that pastures generally would be benefitted by sheep to the exclusion of all other stock, my own experience and observation lead me to believe that most of the pastures in our county, and in the vicinity, would be greatly enriched, their productiveness largely increased, and their real value enhanced if sheep were fed in them in very much larger numbers than they now are, either in immediate connection with horned cattle and horses, or by occupying the pastures alternately with other cattle.

The effect upon bushes is very quickly observed. In my own pasture bushes which cows, oxen and horses would not "keep down," have been entirely eradicated by sheep ; when once cut down the sheep eagerly nip the fresh leaves and tender shoots of almost all bushes, shrubs and weeds, as fast as they appear, and thus prevent their full development, so that they soon die from sheer exhaustion, and give place to the finer grasses. I find that my sheep relish many plants which other stock will not eat, so that if kept with other stock a pasture will afford sufficient nourishment for more animals, in number and weight, than it would of cows or horses alone. In other words, two pastures will support more cows and sheep if they are permitted to feed together, or in each pasture in alternate weeks or

months, than if the sheep were confined to one pasture and the cows to the other, through the entire season.

But the greatest benefit which our worn out pastures derive from sheep is from their droppings. And in this connection, perhaps, I may be permitted to allude to the peculiar structure of the sheep's foot, and to some of his habits, which, in my opinion, induce an extensive, and more equal distribution of this valuable fertilizer than of that from any other animal, and which also leads to the deposition of the largest quantity of it just where it is most needed.

The delicate and sensitive arrangements of the internal portion of the sheep's foot are protected by a hard horny substance, somewhat resembling the nail on one's fingers, which extends in a thin layer around the outside of each division of the foot, past the toe and turning inward nearly half way to the heel. This nail-like substance, in its natural condition, is worn down nearly even with the bottom of the hoof, and presents an impervious outside coating for the foot and a firm blunt edge for it to rest upon. But this horny substance or edge is constantly growing, as the thumb nail grows, and if the growth is not removed, will project below, and usually turn under the rest of the foot, causing great inconvenience in locomotion, and serving as a receptacle for earth, gravel, or filth which is uncomfortable and unhealthy and liable to work through openings that may be formed within the hoof to the more sensitive portions, producing ulcers, or other sores which ultimately lead to the dreadful disease known as "foot rot," or the edges may be broken off irregularly to the quick, as one's nails are sometimes broken to the tender flesh, producing similar sores and tending to the same result.

I have known a sheep, when confined in narrow limits, on straw bedding, and the feet neglected, to have a growth of nearly an inch in length, of this substance, in a single winter, which almost "upset her understanding."

When confined in soft marshy pastures, or in rich fertile pastures which are very smooth and free from stones, there is little opportunity for sheep to keep their hoofs worn down to the natural condition, and if not regularly trimmed or pared by hand, inflammation, ulcers and foot-rot frequently follow as a natural consequence. Such pastures, therefore, being unsuitable for sheep, will not be improved by them, unless the sheep are fed upon them only a few days at a time, while they have access to a more congenial range most of the season.

Our rough, rocky, hilly pastures, on the contrary, afford the most natural and agreeable summer feeding places for most kinds of sheep, and here their naturally active and playful habits lead them to skip about from rock to rock, upon every knoll, through every hollow, prying into every nook and corner, scattering fertility wherever they go, while the natural inclination to keep their feet clean, bright and well scoured, leads them to shun, as permanent stopping places, all wet, swampy or marshy spots, and to seek for repose only in the highest and driest parts of the pasture; hence they almost invariably congregate during the heat of the day and at night on the least fertile portions, naturally, of the lot, where the subsoil is most porous, and the ground hardest on the surface, whence their droppings wash down in all directions, bringing in new grasses, and giving an appearance of fertility even to what were previously almost barren, sandy or gravelly knolls.

Pastures of this description, therefore, may be very greatly improved by being stocked in part or wholly with sheep, and the more the pastures have been previously exhausted, or "run out" with other stock, the more immediate and the more apparent the improvement.

My advise to farmers who keep sheep on soft, moist lands, or on rich smooth pastures free from stones, would be to examine their feet frequently and pare the outer edge of the hoof carefully, and so often as to keep it nearly even with the bottom of middle, by taking off only a little at a time. Similar advice will apply to those who keep their sheep enclosed and constantly bedded during the winter; while with a wide range and stony pastures in summer they will take care of their own feet, and very rarely be troubled with foot-rot or any other disease of the foot."

We find these practical and intelligent men agree that sheep are better for a pasture than any other kind of stock. But Mr. Fox of New Ipswich, and Mr. Wyman of Fitchburg, advise keeping sheep and cattle together in the pasture. One reason is they can keep more stock in this way, as the sheep will eat grasses, plants and bushes which the cattle refuse. Another reason is, the sheep will have a wider range of pasture, and thus gratify its strong love for a great variety of food, and perhaps another and more important reason, is, that the sheep by its habit of continually cropping the tender shoots of brakes, and bushes (even where the best grasses are abundant,) must exhaust and eradicate them.

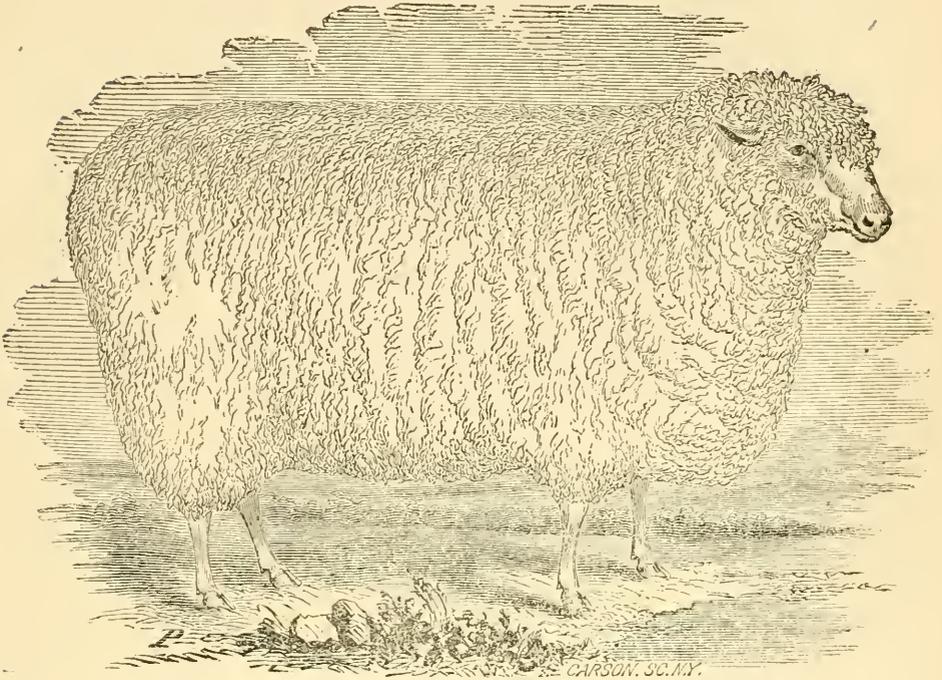
"We cannot afford to keep sheep just for their wool," says one sheepraiser, and this idea seemed to be fully

carried out at the fair, as none but the larger and hardier breeds of sheep, viz : The South Downs, Cotswold, Leicester, and native, which furnish the best mutton were represented there. The farmers in this vicinity show good judgment in selecting their breeds of sheep because they not only furnish more and better mutton than other breeds, but the wool which they produce can be sold at comparatively better prices than formerly. There is a demand for these combing wools which must increase for years, as new machinery involving a large amount of capital is being put in operation for the purpose of manufacturing these long combing wools, the production of just the breeds of sheep exhibited at the fair. Now it would be folly to doubt of our success in the manufacture of worsted goods and to show how great a demand there may be for the manufactured articles, we quote from a writer in the *United States Economist*, who says : “ We imported into this country last year \$17,367,672 of worsted and cotton and worsted fabrics,” and urges us to produce the wool. The manufacturers are doing their part in introducing the machinery necessary for its manufacture, and it only remains for the farmer to supply the raw material, (and a vast quantity it will take,) and thus save this needless expenditure of money for foreign goods.

The Committee feel under obligation to Messrs. Fox of New Ipswich and White of Framingham for the interest they so generously gave to this department of the exhibition.

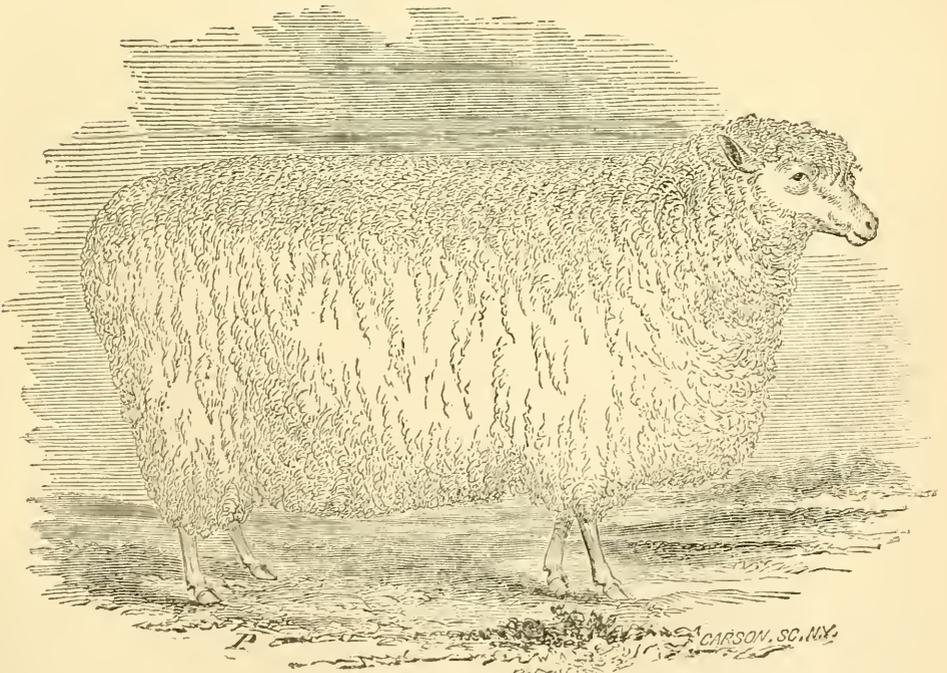
COTSWOLD RAM, PILGRIM,

The property of H. G. WHITE, South Framingham, Mass.



COTSWOLD EWE, LADY GAY,

The property of H. G. WHITE, South Framingham, Mass.



The Committee on Sheep award the following premiums :

FLOCKS.

1st, Messrs. A. C. & J. G. Wood, Millbury, for a flock of pure blood South Downs,	\$6,00
2d, Wm. G. Wyman, Fitchburg, flock Cotswolds,	4,00
3d, Jas. McIntire, Fitchburg, Leicester and Native,	2,00

COSSETTS.

1st, Jas. McIntire, Fitchburg, Cossett,	2,00
2d, Otis Flagg, Westminster, Cossett,	1,00

GRATUITIES

George Fox, New Ipswich, flock Cotswolds,	6,00
H. G. White, Framingham, Leicester,	4,00

BLOOD STOCK.

To the President and Members of the Worcester North Agricultural Society :—

Your Committee on Blood Stock have attended to their duty and present the following report :

We find thirty-six entries on the books of your Society—eight for premium and twenty-eight for exhibition—consisting of twenty-eight Short Horns, four Devons, one Jersey, and one Dutch. All of which did great credit to their respective races, with perhaps one exception. But owing to the rules of your Society, requiring "*Authentic Pedigrees*," we are sorry to say, we were obliged to rule out of competition all the animals except the Short Horns, the others not *any* of them presenting documentary evidence of purity of blood, and in several instances *nothing* was put before

us to establish the claim except the bare entry "*full blood.*"

We would here say that we felt extreme delicacy in ruling out the animals referred to, but felt in duty bound so to do, with the vote of your Society in view. For with the best of intent on the part of the contributor, unless he can substantiate his claim of purity of blood, by a carefully kept record of pedigrees, how can we or any one else *know* whether the animal in question is of the race claimed or with a sprinkling of some other blood of very different form and characteristics, whereby the breeder will surely, sooner or later, be disappointed with his calves, they showing other than the points of a thoroughbred of the claimed race? and would state that if the restriction is too severe the rules whereby your future Committee is to be governed must be made more lenient, a course which we would *not* be understood as *recommending by any means*. For in these modern days when breeders are forming associations to guard against spurious pedigrees, and the demand of the public is for *well authenticated* pedigreed animals, this Society should be slow to aid either designing or undesigning parties in palming off animals with doubtful pedigrees, as thoroughbreds.

The following is the award of your Committee :

BULLS.

- | | |
|--|--------|
| 1st, to A. O. Cummins of Millbury, for his Bull Major,
five months old, | \$5,00 |
| 2d, to Joseph Upton of Fitchburg, for his bull
Red Rover, fifteen months old, | 3,00 |

The fine young bull Prince of Wales, (No. 4275 Am. Herd Book,) owned by A. O. Cummins, of Millbury, would have been, in the minds of your Committee,

entitled to the first premium, had he not taken it last year thereby disqualifying him for competition.

We also recommend a gratuity of \$5,00 to Mr. Nathan Caswell, of Fitchburg for his promising Devon bull calf and two heifers, they not competing for the Society's premiums owing to a lack in the authenticity of their pedigrees, all of which were admired by your Committee, and considered beautiful specimens of that noted race. Also a gratuity of \$3,00 to Mr. Lorrison Stockwell, of Fitchburg, for his fine Devon bull, being deficient in a pedigree also. We also notice with pleasure the Dutch bull presented by Mr. Downe, Sup. of Town Farm in Fitchburg. As the Chairman of all Committees is in duty bound to express the sentiments of the majority of the Committee, we shall make no apology for stating that your Committee also take pleasure in mentioning the very fine herd of ten thoroughbred female Short Horns exhibited by Messrs. A. C. & J. G. Wood, and A. O. Cummins, of Millbury. Prominent among which was "Lady Chesterford," an imported cow, bred by the late Jonas Webb, Cambridge-shire England, also Lady Chesterford, 2d, 3d and 4th, the offspring of the cow. Also Lady Sale, 5th, a very superior dairy cow, combining form also, and recommend a gratuity of \$15,00 to them and would be glad to have given more had the funds of the Society warranted it.

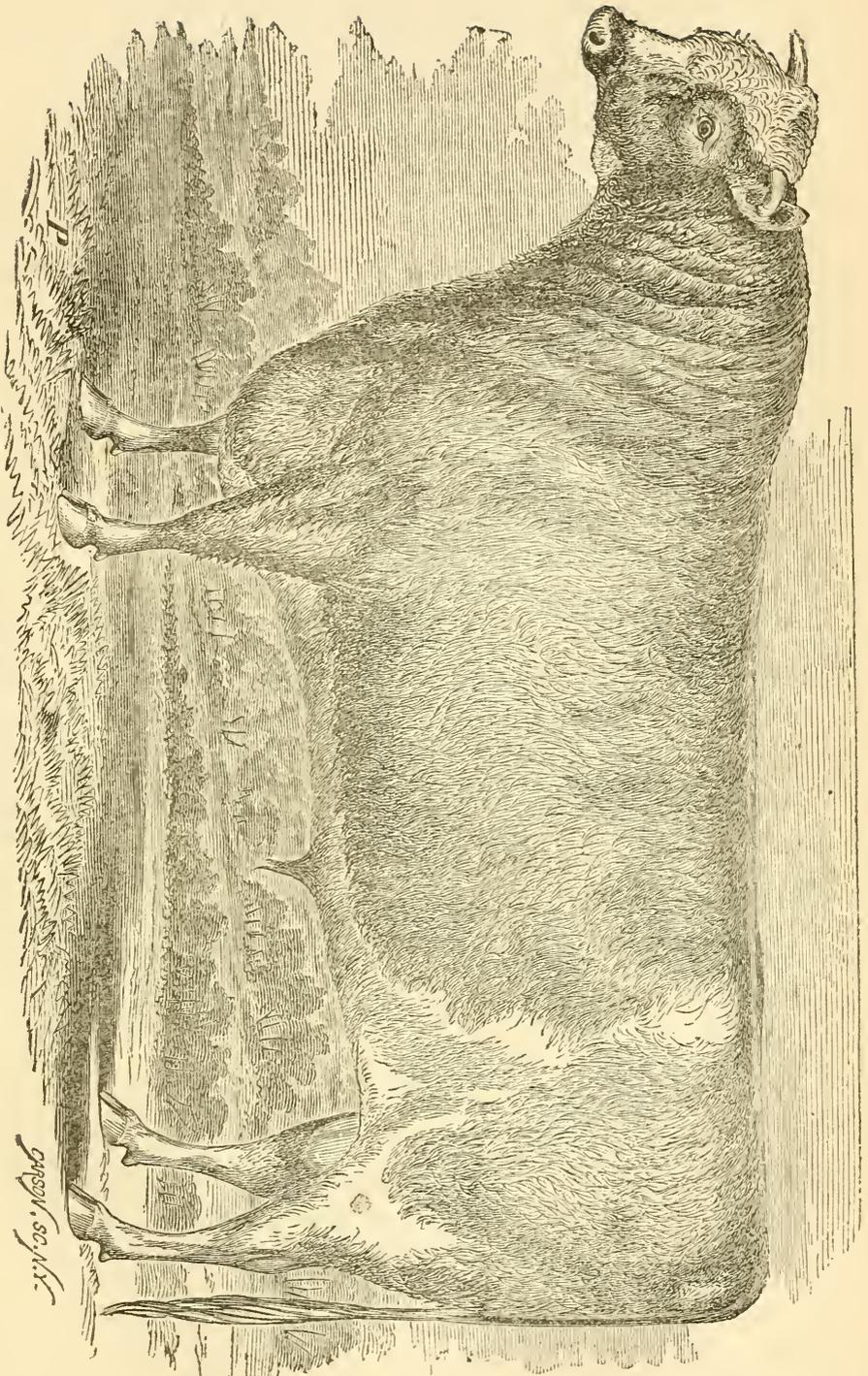
We also viewed with admiration, and mention with pleasure, the superior herd of fourteen Short Horns, presented by H. G. White, Esq., of South Framingham. Conspicuous among which was his Bull Monitor, bred by Mr. Samuel Thorne of Duchess County, New York, an animal of fine form and great *length of carcass*. Also, his fat cow Aba, as perfect a specimen of a cow

fitted for the shambles as is often met with. Also Lady Lathrop, a very superior heifer, being of nearly perfect symmetry, and bidding fair to be one of the deepest milkers. Also Dora Haynes, a fine heifer, together with Highland Maid, 2d, and other noteworthy heifers and cows. And we recommend \$25,00 as *milage* to Mr. White as a *partial* token of our appreciation of his fine stock which we are fully aware has added very materially to our show.

Were we to close this report without alluding to the lesson which this day's show has taught, we should fail of discharging our duty to other members of this Society and the farmers of this vicinity.

Has any man carefully examined the stock in the pens and the steers at the posts, to-day without coming to the inevitable conclusion that "Blood will tell?"

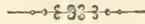
Lay aside the beauty, the pleasure to the eye, which, by the way, to a person with an eye in his head and a soul in his body is very pleasing, and take the *economical* view, we have seen thoroughbred cows and cows of high grade, the get of pure bred bulls, which show the unmistakable marks of being great producers of milk, many of which having from one to four of their offspring on the ground, all of which have inherited the characteristics of their respective breeds, and with an anatomy so skillfully arranged that they readily take on flesh in the most desirable points, thereby making a *greater percentage* of high priced or valuable flesh, which is readily appreciated by the butcher, in proof of which you have but to visit Cambridge, Brighton, or New York markets and see with what ready sale animals, high up in "blood" meet, while the poor, flat ribbed, heavy offed "scrubs" are sold late in the day and at prices that never pay the feeder, if in fact they



MONITOR.

W. H. P. sculp.

SHORT HORN BULL, MONITOR.

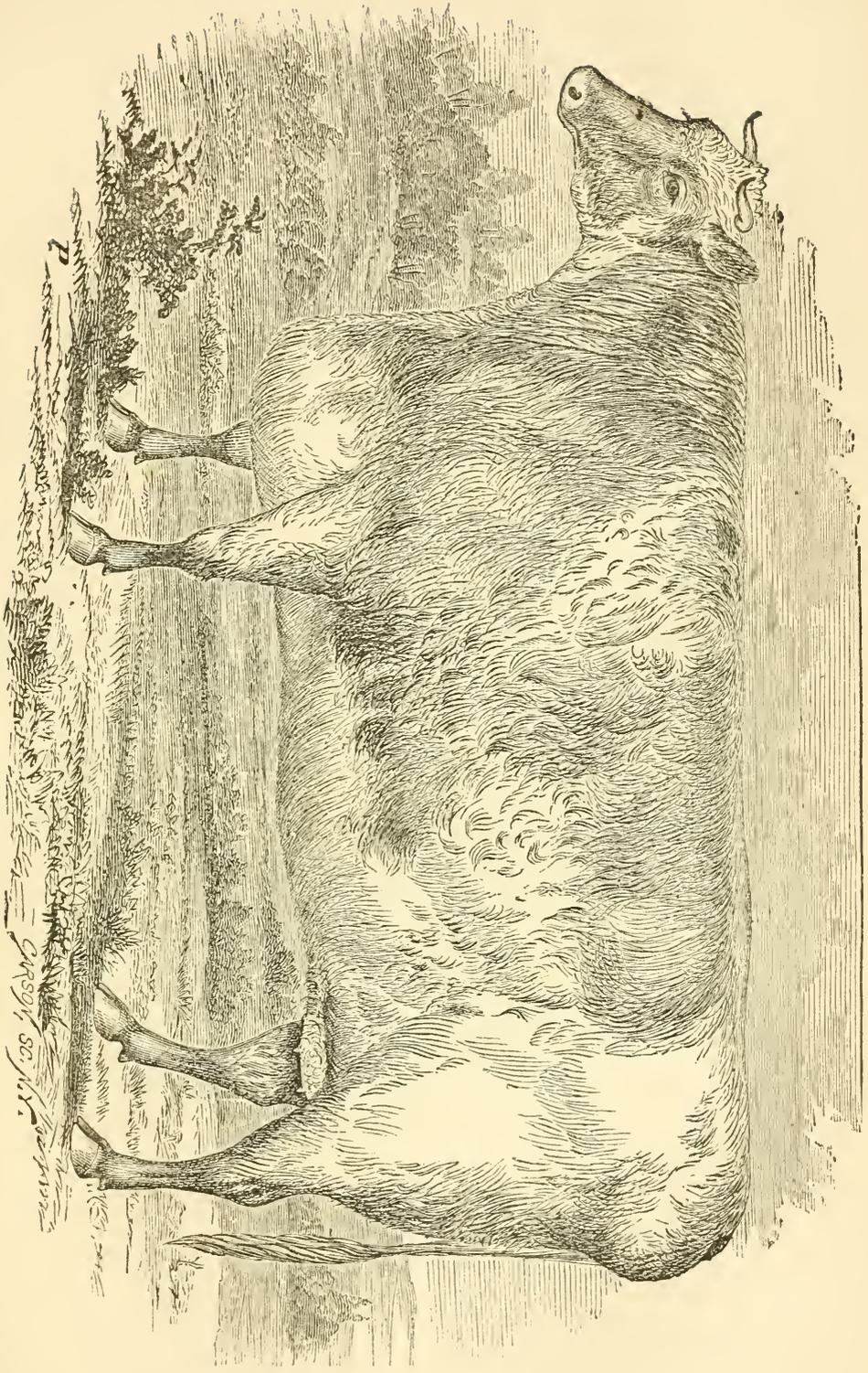


Pedigree recorded Vol. 6, American Herd Book.

RED AND WHITE, bred by Sam'l Thorne, Thorndale, Washington Hollow, Dutchess Co., N. Y., the property of H. G. WHITE, South Framingham, Middlesex Co., Mass. Calved January 26, 1860. Got by 2d Duke of Thorndale, 2788 (vol. 4, p. 89, A. H. B.)—out of Accacia (bred by Mr. Thorne,) by 2d Grand Duke, 2181 (12961) (vol. 3, p. 222)—Aurora (bred in Eng. by G. D. Trotter,) by 3d Duke of York (10166)—Allspice by 2d Duke of Northumberland (3646)—Young Amazon by Crusader (934)—Amazon by Sultan (1485)—Bellona by Mars (411)—Rolla by North Star (458.)



The sire of Monitor—2d Duke of Thorndale 2788, vol. 4, p. 88 A. H. B., color red roan. Calved April 5th, 1858—bred by Sam'l Thorne, (and sold by him to go to England for \$3000) got by 2d Grand Duke, 2181 (12961) (vol. 3, p. 222, bred by Earl Ducie, Tortworth Court, Eng.,) out of Duchess 71st by Duke of Gloster, 2763 (11382) (vol. 4, p. 83 A. H. B.) (bred by Earl Ducie)—Duchess 66th, (sold at the sale of the herd of the late Earl Ducie for \$3500, her calf at the same time bringing \$1500—making \$5000 for cow and calf,) by 4th Duke of York (10167)—Duchess 55th by 4th Duke of Northumberland (3694)—Duchess 38 by Norfolk, 2377)—Duchess 33d by Belvedere (1606)—Duchess 19th by Second Hubback (1423)—Duchess 12th by the Earl (646)—Duchess 4th by Ketton 2d (710)—Duchess 1st by Comet (155)—by Favorite (252)—by Daisy bull (186)—by Favorite (252)—by Hubback (319).



A B A.

CARSON SC. N.Y.

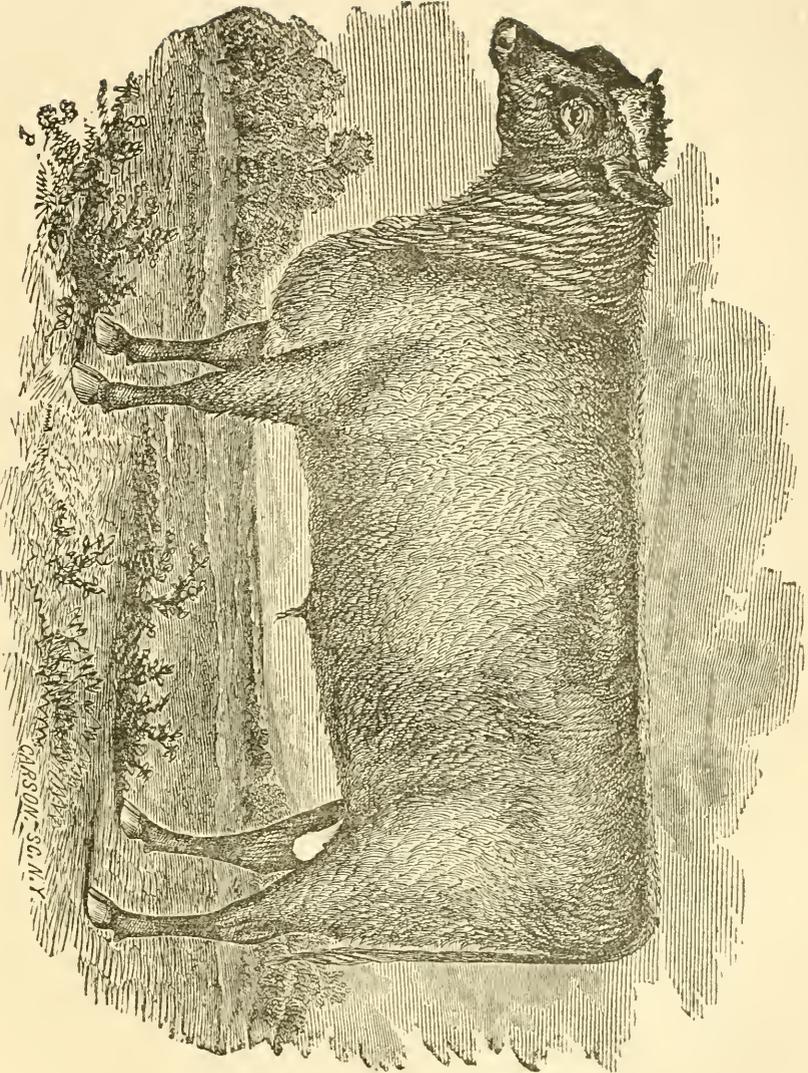
ABA.

BRED BY S. T. TABER, CHESTNUT RIDGE, N. Y. THE PROPERTY
OF H. G. WHITE, SOUTH FRAMINGHAM, MIDDLESEX
COUNTY, MASS.

CALVED, JUNE 23, 1857.

COLOR, ROAN

	Got by Earl of Warwick.	465.	
Dam,	Atlanta 3d by Logan, 2,		652
“	Atlanta by Enchanter,		(3729)
“	Adeline by Young Comet,		(3437)
“	Emma by Wellington,		(683)
“	Annabella by Major,		(398)
“	Ada by Denton,		(198)
“	Aurora by Comet,		(155)



PRINCE ALTENBERG. Taken at 8 months.

W. H. CARSON - SC. N. Y.

PRINCE ALTENBERG.

BRED BY, AND THE PROPERTY OF, H. G. WHITE, SOUTH
FRAMINGHAM, MIDDLESEX CO., MASS.

CALVED OCT. 7, 1862.

COLOR, RED.

Pedigree recorded Vol. 5, p. 147.

Got by Prince of Wales. 4275.

Dam, Lady Lathrop by Young Monarch,	3605
“ Lady Sale 5th by Red Jacket,	890
“ Lady Sale 3d by Imp. 3d Duke of Cambridge,	(5911)
“ Imp. Lady Sale 2d by Earl of Chatham,	(10176)
“ Lady Sale by General Sale,	(8090)
“ Clara by Napier,	(6238)
“ Maid of Orleans by Mameluke,	(2258)
“ Helena by Waterloo,	(2816)
“ Moss Rose by Baron,	(58)
“ Angelina by Phenomenon,	(491)
“ Anna Boleyn by Favorite,	(252)
“ Princess by Favorite,	(252)
“ Brighteyes by Favorite,	(252)
“ Brighteyes by Hubback,	(319)
“ Brighteyes by Snowdon's Bull,	(612)
“ Beauty by Masterman's Bull,	(422)
“ Duchess of Athol by Harrison's Bull,	(292)
“ Tripes by the Studley Bull,	(626)
“ —bred by Mr. Stephenson of Ketton in 1739.	

find a sale at all. Will any one after viewing the fat cow *Aba*, shown by Mr. White, tell us that the "native" stock of New England possess all the characteristics desirable in stock? We have it from undoubted authority that she never ate *but very little* extra feed with the exception of roots, and that she is a *small* consumer, substantiating the fact often stated that an animal consumes in proportion to their *offal* not *weight*. Or will they fail to see the effect of judicious breeding for milk when they see *Lady Sale, 5th*, a cow which has given over seventeen quarts of milk per day in March, 1862, from which was made one pound of butter from *eight* quarts of milk; or the heifer *Lady Lathrop*, three years old, having calved last October and given milk through the winter and then giving twelve quarts of milk per diem. in the month of June, and that of a quality nearly equal to her dam, *Lady Sale, 5th*?

In further proof of the transmission of blood we would mention *Highland Maid*, a two year old heifer, out of *Lady Sale, 5th*, she having calved in last March, has given twelve quarts per day on an average during the month of June, and of a quality which gives credit to a heifer of her age. Also *Florence*, two years old, having calved last March, has given as much as the last named heifer and of good quality.

Likewise the high grade cows, many of which are the produce of thoroughbred sires, presented by Abel F. Adams, Joel Page and Mr. Vose, of Winchendon, two of which belonging to the latter named gentleman, not only being "the best of milkers," but having two pair of steers, their calves, the one two years old, the other six months, all of which were easily distinguished by their resemblance to their dames, add but another proof that "Like begets like" in a high bred animal.

Will any one answer by saying this is the effect of judicious breeding and that our "natives" can be bred up to equal perfection? Let us answer by saying, it is the effect of great care on the part of eminent breeders in the old country continued through a *series of years* sufficient to weed out the undesirable points and *firmly establish* the desirable qualities, and who will attempt to rear a race of thoroughbreds here in New England when at a comparatively small sum animals can be procured of any of the acknowledged breeds which contain the same qualities you would strive to obtain? It is true that thoroughbred animals are as yet so scarce that all cannot avail themselves of thoroughbred cows, but all or nearly all can use pure bred bulls, and no man can *afford* to patronize a native, so called, when he intends to rear his calves, certainly, and where the services of a pure bred can be had for a reasonable advance from natives or grades, it will pay the farmer when he intends his calves for veal, as the increased weight with the form will generally insure a sufficient remuneration for the extra outlay. Before closing, lest any undervalue a pedigree, allow us to state that the value of a pedigree consists in its *guarantee* that the animal *is* of the race or breed claimed and has in its self the power of transmitting the qualities for which it is itself noted, and that the longer the pedigree, the quality being the same, the more sure your animal is to transmit its qualities. As the object of all Agricultural Societies is to improve our agricultural interest, it becomes a question of importance whether we offer premiums for grade or mongrel bulls at all, for by so doing we are encouraging the rearing of inferior animals.

All of which is respectfully submitted,

A. O. CUMMINS, *Chairman.*

GRADE OR NATIVE BULLS.

The Committee on Grade Bulls having attended to their duty, report:

There were entered for premium on the Society's books, eleven bulls of all ages, though there were on exhibition only ten present. There were no very superior bulls, though a number very fair, and one or two so coarse and homely that the unanimous opinion of the Committee would be, that if put to any cow, they would be unable to beget any other trait than an imitation of their own ugliness. All breeders of cattle cannot be too careful to select good shaped bulls, to which to put their cows, and the nearer the bull approaches to pure blood, the more careful should they be, as all blooded bulls are more likely to beget their own likeness than native or low grades. The Committee are unanimous in making the following awards:

BULLS TWO YEARS OLD AND UPWARDS.

1st, to J. Wilker,	\$5,00
2d, to Joseph Upton,	3,00

YEARLING BULLS.

1st, to Joel Page,	4,00
2d, to John Cutter,	2,00
3d premium not awarded.	

BULL CALVES.

1st, to Edwin D. Works,	4,00
2d, to J. P. Reed,	3,00
3d premium not awarded.	

For the Committee,

J. T. EVERETT, *Chairman.*

MILCH KINE.

The Committee on Milch Kine make the following awards :

HERDS OF COWS.	
2d, to Joseph Upton, of Fitchburg	\$7,00
COWS.	
1st, to Samuel Burnap, of Fitchburg,	5,00
2d, to J. P. Reed, of Princeton,	4,00
3d, to David Battles, of Fitchburg,	3,00
GRATUITIES.	
H. M. Caswell, of Fitchburg,	2,00
Wm. B. S. Drew, of Fitchburg,	2,00
Reuben Vose, Jr., Winchendon, (4 cows,)	4,00
James Markham, of Fitchburg,	1,00
Joseph Upton, of Fitchburg,	2,00
HEIFERS—THREE-YEARS-OLD:	
H. M. Caswell, of Fitchburg, gratuity,	3,00
HEIFERS—TWO-YEARS-OLD.	
1st, T. B. R. Dole, of Fitchburg,	4,00
2d, I. B. Woodward, of Fitchburg,	3,00

For the Committee;

D. C. MILES, *Chairman.*

 JOSEPH UPTON'S STATEMENT.

To the Committee on Cows—

Gentlemen: I offer for premium a herd of four Cows; which I have owned and kept agreeable to the rules and regulations of the Society, the past season. They have been kept in a herd of thirteen cows. In June

they had nothing to eat but what they got in the pasture with the other cows, except the deep red cow had two quarts meal per day. In September they had nothing but grass.

The deep red cow is of the native breed and is ten years old. She calved one year ago last June, and is expected to calve again next December, so that her trial in June was one year after her calving. She gave in June an average of $18\frac{1}{4}$ pounds per day, and Sept. $15\frac{1}{2}$ pounds, and in one week made $7\frac{1}{2}$ pounds of butter.

The bughorn cow, eight years old, calved in July and was tried in September; she gave an average of $23\frac{1}{2}$ pounds; she is a grade Durham.

The yellow cow is a grade Durham and is eight or nine years old; she calved last March, and gave in June an average of $20\frac{1}{4}$ pounds per day, and in Sept. 18 pounds per day.

The star heifer is four years old, seven-eighths Durham; she calved last April and is with calf again to calve the latter part of winter. She gave in June an average of 20 pounds per day, and in September 17 pounds per day.

I offer one single cow, four years old, seven-eighths Durham, raised by Joel Page of Fitchburg. She calved the first of September, 1863, and has had but one trial, and she gave an average of 35 pounds per day. The cows that I have offered are quiet and orderly.

SAMUEL BURNAP'S STATEMENT.

Gentlemen: This cow that I offer for premium is eleven years old, part Durham and part Native. She had a calf on the 24th of March last. I commenced

weighing the milk the first Monday in April. For six days she gave $279\frac{1}{2}$ pounds, averaging 46 7-12 pounds per day. The keeping she had was dry hay and two quarts of meal and the same of shorts once a day. I weighed the milk again the first of September. For six days, she gave $175\frac{3}{4}$ pounds, averaging 29 7-24 pounds per day. Her keeping was a very poor pasture, with Southern corn night and morning, and one quart of meal and three of shorts once a day.

JOSEPH P. REED'S STATEMENT.

To the Committee on Milch Kine—

Gentlemen: The cow I offer for premium is five years old, Holderness and Native breed, calved in April. Her keeping has been nothing but pasture to Sept. 3d; since then corn fodder once a day. The following is the weight of her milk for the six days in June: $252\frac{1}{4}$ pounds of milk; the six days in Sept. $222\frac{3}{4}$ pounds of milk. We have tried her milk and found her to be one of the best of butter cows.

DAVID BATTLES' STATEMENT.

To the Committee on Milch Kine—

Gentlemen: The cow I offer you for a premium is ten years old, is half Native and half Durham. For the first six days in June she gave $234\frac{1}{2}$ pounds. Her feed was a poor pasture with a foddering of hay night and morning. For the first six days in Sept. she gave 186 pounds; went in the same pasture as in June, with a foddering of green corn night and morning.

HOSEA M. CASWELL'S STATEMENT.

To the Committee on Milch Kine—

Gentlemen: The heifer which I offer for premium is three years old. Her milk weighed 203 pounds for the six days in June, commencing the first Monday, making an average of 33 5-6 pounds per day; for six days in September, 183 pounds, making an average of 30½ pounds per day.

THOMAS R. B. DOLE'S STATEMENT.

To the Committee on Milch Kine—

Gentlemen: The heifer which I enter for premium was two years old the 20th day of June last. She dropped her calf the 25th of last March. She gave the first six days in June 172 pounds of milk, averaging 28½ pounds per day. She gave the first six days in September, 131 pounds of milk, averaging 21 5-6 lbs. She was pastured with other cows. I commenced feeding her the last of August with corn fodder twice a day.

ISAAC B. WOODWARD'S STATEMENT.

To the Committee on Milch Kine—

Gentlemen: The two years old heifer which I enter for premium came to milk the last of June. In six days, commencing the first Monday in July, she gave 160½ pounds of milk, which is an average of 26¾ lbs. per day. In six days, commencing the first Monday in September, she gave 108 pounds, which is an average of 18 pounds per day. She is three-eighths Durham and five-eighths Native; had no extra keeping, nothing but short pasture feed.

HEIFERS.

The Committee on Heifers make the following awards :

TWO-YEARS-OLD.

1st, to N. B. Reed, of Princeton,	\$4,00
2d, to Joel Page, of Fitchburg,	3,00
3d, to J. P. Reed, of Princeton,	2,00

GRATUITIES.

G. S. Beaman, of Princeton,	1,00
M. D. Lyman, of Lunenburg,	1,00

YEARLINGS.

1st, to J. E. Merriam, of Princeton,	3,00
2d, to A. F. Adams, of Fitchburg,	2,00
3d, to Joseph Upton, of Fitchburg,	1,00

BENJAMIN WYMAN, *Chairman.*

HEIFER CALVES.

The Committee on Heifer Calves more than four months old, having attended to that duty, report as follows :

HEIFER CALVES MORE THAN FOUR MONTHS OLD.

1st to Joel Page, of Fitchburg,	\$3,00
2d, to J. Kinsman, of Fitchburg,	2,00
3d, to H. M. Caswell, of Fitchburg,	1,00

RAISED BY HAND.

1st, to G. M. Gregory,	3,00
2d, to N. B. Reed, Princeton,	2,00
3d, to A. F. Adams, of Fitchburg,	1,00

All of which is submitted by your Committee,

HARLOW SKINNER, *Chairman.*

FAT CATTLE.

The Committee on Fat Cattle award the following premiums:

COWS.

1st, J. T. Everett, Princeton,	\$6,00
2d, J. T. Everett, Princeton,	3,00
3d, J. T. Everett, Princeton,	2,00

OXEN.

1st, James Puffer, Westminster,	8,00
2d, James Puffer, Westminster,	5,00
3d, James Puffer, Westminster,	3,00

EZRA KENDALL, *Chairman.*

WORKING OXEN.

The Committee on Working Oxen award the following premiums:

1st, Joel Page, Westminster,	\$6,00
2d, J. E. Merriam, Princeton,	5,00
3d, Silas Pratt, Fitchburg,	4,00
4th, Silas Pratt, Fitchburg,	3,00
5th, Silas Pratt, Fitchburg,	2,00

LUKE WELLINGTON, *for the Committee.*

STEERS MORE THAN TWO YEARS OLD.

The Committee on Steers more than two years old, award the following premiums:

THREE-YEARS-OLD.

1st, Thomas Gibson, Fitchburg, 3 yrs. old steers,	\$5,00
---	--------

There were no other competitors for premiums on three year old steers.

TWO-YEARS-OLD.

1st, Sewall G. Mirick, Princeton,	\$4,00
2d, Israel Everett, Princeton,	3,00
3d, Geo. W. Houghton Princeton,	2,00
S. H. Sprague, Westminster, gratuity,	2,00

TRAINED STEERS—TWO-YEARS-OLD.

1st, Alfred Marshall, Fitchburg,	4,00
2d, J. P. Reed, Princeton,	2,00

GRATUITIES.

Avery Stockwell, Fitchburg,	2,00
G. S. Beaman, Princeton,	2,00

For the Committee,

CYRUS KILBURN, *Chairman.*

STEERS—LESS THAN TWO YEARS OLD.

The Committee on Steers less than two years old, award the following premiums, to wit :

YEARLING STEERS.

1st, to Reuben Vose, of Winchendon,	\$3,00
2d, to N. B. Reed, of Princeton,	2,00
3d, to Israel Everett, of Princeton,	1,00

TRAINED STEERS.

1st, to S. B. Reed, of Princeton,	3,00
2d, to Lyman W. Merriam, of Fitchburg	2,00

STEER CALVES.

1st, to Paul M. Mirick, of Princeton,	5,00
2d, to Thomas Billings, of Lunenburg,	3,00
3d, to Sewall G. Mirick, of Princeton,	1,00

CALVES RAISED BY HAND.

1st, to Reuben Vose, of Winchendon,	\$5,00
2d, to N. B. & J. P. Reed, of Princeton,	2,00
2d, to James H. Laws, of Westminster,	1,00

TRAINED CALVES.

1st, to Paul M. Mirick, of Princeton,	2,00
2d, to N. B. & J. P. Reed, of Princeton,	2,00

For Committee,

E. GRAHAM, *Chairman.*

STALLIONS.

The Committee on Stallions having attended to their duty make the following report :

We find entered for exhibition only two stallions which produced specimens of their stock, although eleven were entered and exhibited, which we believe was the largest number entered for a number of years. Your Committee regret that so few produced specimens of the stock of their horses, for we believe that this is the only sure basis upon which to decide the true value of the stock horse, the qualities of stallions have been too often based upon the having had a good parentage, having rarely if ever themselves sired a good colt ; therefore we see the necessity of strictly adhering to the rules of the Society by exhibiting specimens of the horse in order to judge correctly of his blood and true value as a stock horse. We believe the time has passed to talk of importing stallions from foreign countries ; it is believed that as good horses are raised in this country as there is in any part of the world. Your

Committee feel justified in urging upon those engaged in raising colts to select the best stock horse, one that has proved himself so by his stock that there is in the vicinity, although it may cost them a little trouble and expense to find one that is worthy of their patronage, as it will cost no more to raise a good colt than a poor one, and often not so much—a thing started right generally ends well.

The Committee award the following premiums:

STALLIONS, FIVE YEARS OLD.

1st, Warren Simonds, Templeton, Grey Eagle, producing specimens of stock,	\$10,00
---	---------

GRATUITIES.

H. H. Brown, Fitchburg,	6,00
Lewis Ware, Lunenburg,	4,00

STALLIONS, FOUR YEARS OLD.

First premium not awarded.

2d, Adam Thompson, 2d, Littleton,	2,00
-----------------------------------	------

STALLIONS, THREE YEARS OLD.

1st, J. A. Harwood, Littleton,	4,00
Second premium not awarded.	

STALLIONS, TWO YEARS OLD.

First premium not awarded.

2d, John Wilker, Ashburnham,	2,00
------------------------------	------

For the Committee,

WARREN SIMONDS, *Chairman.*

MARES AND SUCKING COLTS.

Your Committee on Mares and Sucking Colts beg leave to make the following report :

BREEDING MARES.

1st premium, not awarded.	
2d, to E. Houghton, of Lunenburg,	\$4,00

GRATUITIES.

E. Bird, of Leominster,	2,00
Mrs. Mary Miles, of Westminster,	2,00

SUCKING COLTS.

1st, to E. Houghton, of Lunenburg,	3,00
2d, to Michael Cotton, of Lunenburg,	2,00
3d, to W. A. Mandell, of Lunenburg,	1,00

GRATUITIES.

Barach Whitney, of Gardner,	1,00
E. Bird, of Leominster,	1,00

H. H. BRIGHAM, *Chairman.*

COLTS.

Your Committee of Colts award the following premiums :

THREE YEAR OLD GELDINGS.

1st, Ohio Whitney, Jr., Ashburnham,	\$4,00
Second premium not awarded.	

GRATUITIES.

T. S. Eaton, Fitchburg,	2,00
E. T. Farwell, Fitchburg,	2,00

THREE YEAR OLD FILLIES.

1st, Asa Holden, Shirley,	4,00
---------------------------	------

GRATUITIES.

E. H. Frost, Fitchburg,	2,00
-------------------------	------

DRAUGHT AND FAMILY HORSES.

TWO YEAR OLD GELDINGS.

1st, Levi Kendall, Fitchburg,	\$4,00
2d, John Cutter, Winchendon,	2,00

GRATUITIES.

Geo. Miles, Westminster,	2,00
James Devine, Fitchburg,	1,00

TWO YEAR OLD FILLIES.

First premium not awarded.	
2d, Barack Whitney, Gardner,	2,00

YEARLING COLTS.

1st, A. & M. A. Everett, Princeton, (Filly)	4,00
2d, Josiah Page, Westminster,	2,00

For the Committee,

GEO. F. VOSE, *Chairman.*

DRAUGHT AND FAMILY HORSES.

The Committee on Draught and Family Horses award the following premiums :

DRAUGHT HORSES.

J. P. Putnam, Fitchburg, best pair draught horses,	\$6,00
E. A. Goodrich, Fitchburg, best draught horse,	5,00
Silas Pratt, Fitchburg, 2d best,	3,00

FAMILY HORSES.

Augustus Whitman, Fitchburg, best,	7,00
GRATUITY.	
Henry Smith, Templeton,	5,00

JOHN K. GOING, *Chairman.*

SWINE.

The Committee on Swine report as follows :

BOARS MORE THAN ONE YEAR OLD.

1st, to Silas Pratt, of Fitchburg,	\$4,00
2d, to George Miles, of Westminster,	3,00

FAT PIGS.

1st, to Isaac B. Woodward, of Fitchburg,	3,00
2d, to George Miles, of Westminster,	2,00
3d, to E. Caldwell, of Fitchburg,	1,00

BREEDING SOWS.

1st, to George Miles, of Westminster,	3,00
2d, to G. B. Hagar, of Gardner,	2,00

WEANED PIGS.

1st, to James McIntire, of Fitchburg,	3,00
---------------------------------------	------

GRATUITY.

Nathan Caswell, of Fitchburg,	2,00
-------------------------------	------

J. M. HARRIS, *Chairman.*

POULTRY.

The Committee on Poultry award the following premiums :

TURKEYS.

1st, I. B. Woodward, Fitchburg,	\$2,00
2d, Addison Howe, Ashburnham,	1,00

BARNYARD FOWLS.

1st, N. C. Day, Lunenburg,	2,00
2d, Jabez Fisher, Fitchburg,	1,00

DUCKS.

1st, A. Crocker, Fitchburg,	2,00
-----------------------------	------

GRATUITIES.

Charles Brigham, Fitchburg, barn-yard fowls,	\$1,00
Edwin Monroe, Fitchburg, barn-yard fowls,	,75
Lilley B. Caswell, Fitchburg, chickens,	,75
Mary Miles, Westminster, chickens,	,75
L. J. Brown, Fitchburg, Chinese fowls,	,50
L. Stockwell, Fitchburg, turkey,	,50
Edwin Monroe, Fitchburg, doves,	,25
Aubrey Stockwell, Fitchburg, fowls,	,25
Herbert Goodrich, Fitchburg, fowls,	,25

WM. WOODBURY, *Chairman.*

PLOWING—HORSE TEAMS.

The Committee on Plowing with horse teams, report as follows :

1st, to James P. Putnam, of Fitchburg,	\$7,00
2d, to Edwin D. Works, of Fitchburg,	5,00

The plowmen worked well. If they had changed lands the premiums in all probability would have been changed.

E. D. Works' horses were the lightest, and in my opinion the best for farmers to keep. They will consume less food and do the work on a farm just as well.

JOHN BROOKS, *Acting Chairman.*

PLOWING—SINGLE TEAMS.

The Committee on plowing with single teams make the following awards :

1st, to Levi Downe, of Fitchburg,	\$7,00
2d, to Hubbard B. Fuller, of Fitchburg,	5,00
3d, to J. E. Merriam, of Princeton,	3,00
1st premium to Minors, Alfred A. Marshall and Aubrey Stockwell, of Fitchburg,	6,00

THOMAS BILLINGS, *Chairman.*

PLOWING—DOUBLE TEAMS.*

Your Committee on Plowing with Double Teams were hardly able to decide whether to give a premium to Edwin A. Goodrich and Charles Farwell or not, as the oxen on their teams took the first premium last year, but as part of the members thought they would be allowed to compete and also the President and Secretary of the Society ; therefore we award to Edwin A. Goodrich and Charles Farwell the first premium of \$7,00 ; and to Joel Page and S. S. Shattuck the second premium of \$5,00 ; and to Alonzo P. Goodrich the third premium of \$3,00. Your Committee were of the opinion that where the oxen have taken the highest premium with one horse that they ought not to be allowed to compete with another horse.

Your Committee regret much that their Chairman, Nathaniel Wood, Esq., was not present.

G. S. BEAMAN, *For the Committee.*

*This Report was not adopted at the business meeting on the day of the Exhibition, but referred to the Trustees for their action. At a meeting of the Trustees held Oct. 26, voted "That the board of Trustees sanction the awards of the Committee on Plowing with Double Teams."

GRAIN.

Mr President:—Your Society has placed in the hands of the Committee on Grain twenty premiums to be disposed of according to the rules and regulations of said Society. They, with the entries claiming said premiums, are as follows: Premiums on Corn 4, entries 3; premiums on Wheat 4, entries 2; premiums on Rye 2, entries none; premiums on Barley 2, entries 1; premiums on Oats 2, entries none; premiums on Beans 2, entries 1; premiums on Grass Seed 4, entries 1. Total, 20 premiums, entries 8. Other than these there were 4 entries, but soon after were withdrawn, and 1 ruled out for not complying with the rules of the Society. This shows a state of things which ought not to be; but whether the fault lies with the Committee, the Society, or with the grain growers, it is not in our province to determine. But of one thing we are sure, we have seen many rich and beautiful fields of grain in the locality of Worcester North, and some of them at least might have taken premiums had they been entered for the same, and added much to the interest of the Society. We would suggest to our grain raisers that the rather oppressive rule of causing the whole acre to be weighed is dispensed with, and the requirements of a single rod is sufficient.

Grain is one of the most important articles that comes under the notice of our Agricultural Societies, especially in the New England States. In the broad lands of New York, Pennsylvania, and the more Western States, where manuring is unnecessary, and the plowing, sowing, planting, hoeing, harvesting and threshing, is all done by horse power, and yielding a crop of eighty or ninety bushels per acre, experiments

are useless, we have but to take the abundance from the Dispenser of all good and convert it to our enjoyment and welfare. But upon the hard lands of Massachusetts, where plowing, manuring, cultivating and experimenting are necessary, for a crop of fifty or sixty bushels per acre, the raising of grain has become almost an art, and requires the strictest attention of every farmer in the community.

Many experiments might be referred to, to advantage, did space and time allow, but we have neither at our command, and therefore will leave it to others who have both at their control.

The growth and cultivation of the several fields which were entered for premiums we have witnessed through the season, although differing somewhat in mode, have been well managed and give credit to their owners.

By the statement of Joseph Goodrich, it will be seen that his acre of corn produced eighty-three bushels, and the cost of raising \$53,00; that of Samuel Ware gives seventy-four bushels, cost \$77,80, the difference in cost arising from appraising the manure. Mr. Ware allows \$58,00 for twenty-three loads, while Mr. Goodrich allows but \$40,00 for twenty-eight loads. If we allow one-half of the manure for the next crop, either is a profitable investment. The field entered by A. P. Goodridge, stood prominent in the minds of the Committee through the season and when examined appeared well. The average rod when gathered weighed thirty-nine pounds; in eighteen days from the gathering it weighed but twenty-eight and three-fourths pounds. Twenty-seven pounds per rod as the required standard, and the Committee were unani-

mous in the opinion that when the corn is in a marketable condition, it will fall below the required point, hence no premium.

Perhaps we may be excused if we intimate here that the Society has imposed a duty on the Grain Committee, they are unable to perform. They require our returns to be made by the tenth of November, and the corn to be in a marketable condition; that corn should be in that condition at the time specified is out of the question. We were invited by L. Downe, the master of the almshouse in Fitchburg, to visit his field of corn on said farm. It is a beautiful field of four acres, and the Committee were unanimous in recommending a gratuity of two dollars to him; would that there were many such fields in this community. We were also invited to visit Benjamin Safford's field. It was a fine field of corn, and reflects credit to its owner; but as nothing was asked, nothing was given. We hope to see his name on the list of entries another year.

The two fields of wheat entered were of good growth, and the wheat itself of fine quality. Both were somewhat adulterated with *Chess*, an article of which much has been said, and the origin hard to determine; but suffice it to say, it very much resembles the Bible tare which Satan sowed among the ancient wheat, and we should do well to keep as clear from it as possible. A specimen of bread was presented from one of the fields, which was well worthy attention, but whether it was from the superiority of the wheat, or the superiority of the cook we will not decide.

Rye, Barley and Oats. From these three there is but one entry, and of course but one premium.

Beans, there were but two entries; one is referred to

in the accompanying documents, one was ruled out for not complying with the rules of the Society.

Grass seed, there was but one entry, it was a splendid specimen, and we cheerfully give the first premium.

In closing, we would say to the farmers of Worcester North, that they give the succeeding Committee, a wider range of entries, and a heavier demand on the funds of the Society.

The premiums as awarded stand thus :

CORN.

1st, to Joseph Goodrich, of Lunenburg,	\$8,00
2d, to Samuel Ware, of Fitchburg,	6,00
3d and 4th premiums not awarded.	

GRATUITY.

L. Downe, of Fitchburg,	2,00
-------------------------	------

WHEAT.

1st, to Joseph Goodrich. of Lunenburg,	8,00
2d, to Ephraim Graham, Lunenburg,	5,00

BARLEY.

1st, to Joseph Goodrich, of Lunenburg,	3,00
--	------

BEANS.

1st, to Joseph Goodrich, of Fitchburg,	2,00
--	------

HERDS GRASS SEED.

1st, to George Kendall, of Ashby,	2,00
-----------------------------------	------

All of which is respectfully submitted,

LEVI DOWNE, *Chairman.*

JOSEPH GOODRICH'S STATEMENT.*

CORN.

I offer one acre of corn for a premium. The crop of the land in 1861 and 1862 was grass, without manure, each year. The soil is a strong clay loam, was plowed once, May 1st ten inches deep, harrowed, manured with twenty-eight loads barn manure, part spread, the remainder put in the hill, furrowed and planted the second week in May with Carter corn, and hoed three times, using the cultivator twice. The corn was topped the fore part of September, and harvested about the middle of October.

Cost of plowing, harrowing &c.,	-	-	-	-	-	-	-	-	\$6,00
Manure,	-	-	-	-	-	-	-	-	40,00
Seed and planting,	-	-	-	-	-	-	-	-	3,00
Cultivation,	-	-	-	-	-	-	-	-	10,00
Harvesting,	-	-	-	-	-	-	-	-	10,00
Total,	-	-	-	-	-	-	-	-	<u>\$69,00</u>

Produce, 5960 lbs. of ears of corn, ascertained Oct. 24th, and three tons of stover.

SAMUEL WARE'S STATEMENT.

CORN.

Land one acre. Crop of 1861 hay without manure ; that of 1862 potatoes and fodder corn with two barrels phosphate of lime—soil reddish—plowed once six inches deep, harrowed, thirteen loads manure spread, ten loads put in the hill, planted May 20th in hills

*The grain statements are prepared by the Secretary, from the returned forms sent to the several competitors. The loads of manure are, in all cases, understood to contain thirty bushels each. The weight of the crop is estimated by the Committee, who select and weigh an average rod for the purpose.—SEC.

three feet apart, four and five kernels in a hill, common eight rowed yellow corn; plowed and hoed twice.

Cost of plowing, harrowing, etc.,	- - - -	\$3,00
Manure, - - - -	- - - -	58,00
Seed and planting,	- - - -	5,30
Cultivation, - - - -	- - - -	4,50
Harvesting, - - - -	- - - -	7,00
Total, - - - -	- - - -	<u>\$77,80</u>

Corn, 5360 lbs. Oct. 26, stover, \$15 worth.

JOSEPH GOODRICH'S STATEMENT.

WHEAT.

Field one acre. Crop of 1861 and 1862 grass without manure, each year—soil clay loam, plowed Sept. 1862, six to eight inches deep, manured with twenty-two loads, harrowed; seed two bushels white Flint wheat, washed, limed, sowed about the middle of Sept. and harvested about the first of August.

Cost of plowing and harrowing,	- - - -	\$5,00
Manure, - - - -	- - - -	35,00
Seed and sowing, - - - -	- - - -	7,00
Harvesting, - - - -	- - - -	6,00
Total, - - - -	- - - -	<u>\$53,00</u>

Wheat, 1986 lbs., Oct. 24th, straw, 2500 lbs.

EPHRAIM GRAHAM'S STATEMENT.

WHEAT.

The quantity of land one acre. Crop of 1861 and 1862 grass, without manure, each year; the soil black subsoil clay; plowed once August 25th, about seven

inches deep, rolled and harrowed, twenty-six loads of manure applied; seed two bushels, called Blue Stem, sowed broadcast, Sept. 3d, harvested Aug. 1st; cut with sickles, bound and stooked for one week or so, carted to the barn and stowed.

Cost of plowing and other preparation,	-	-	-	\$20,00
Manure,	-	-	-	27,50
Seed and sowing,	-	-	-	4,25
Harvesting, storing and threshing,	-	,	-	12,00
Total,	.	.	.	<u>\$63,75</u>

Product, 1700 lbs. of wheat, or $28\frac{1}{2}$ bushels, and about one ton of straw.

REMARKS.—“The manure used was taken from the barn cellar, made from four cows, two oxen and two hogs from the 1st of January to the 25th of August, incorporated with loam, sand and 100 bushels leached ashes; the furrows rolled down smooth before spreading the manure, and in all similar cases should be cultivated with the cultivating harrow, after which bushed and rolled.

It appears that the whole expense of plowing, cultivation, manure, harvesting and threshing equals \$63, and that the value of the product, including the straw is about the same, so that the gain must be in the grass crops. Now this acre of land will probably, the next four years, produce seven tons of hay, equal to \$100, cost of making the hay about \$14, leaving a balance of \$84 in four years, or \$21 net gain in one year, interest of the land, \$7 to be deducted, equal \$14.

Sixty lbs. of the wheat produced $40\frac{1}{2}$ lbs. of flour.

JOSEPH GOODRICH'S STATEMENT.

BARLEY.

One acre. Grass without manure in 1861, corn in 1862, with 25 loads of barn manure. Soil, clay loam, plowed, twice in April, six inches deep; seed, three bushels; sowed last of April; mowed and raked the first of August.

Cost of plowing,	-	-	-	-	-	-	-	-	\$5,00
Seed and sowing,	-	-	-	-	-	-	-	-	3,00
Harvesting,	-	-	-	-	-	-	-	-	6,00
Total,	-	-	-	-	-	-	-	-	<u>\$14,00</u>

Product, 1600 lbs. barley, and one ton straw.

JOSEPH GOODRICH'S STATEMENT.

BEANS.

Land, 40 rods. Crop of 1861, grass without manure, that of 1862, potatoes with three loads; soil gravelly loam, plowed twice in April and May, six inches deep; manure three loads in the hill; seed marrow beans, planted last of May; cultivated three times; harvested in September.

Cost of plowing,	-	-	-	-	-	-	-	-	\$1,00
Manure,	-	-	-	-	-	-	-	-	3,00
Seed and planting,	-	-	-	-	-	-	-	-	1,00
Cultivation,	-	-	-	-	-	-	-	-	2,00
Harvesting,	-	-	-	-	-	-	-	-	2,00
Total,	-	-	-	-	-	-	-	-	<u>\$9,00</u>

Product, 415 lbs. beans.

FANCY ARTICLES.

The Committee on Fancy Articles award the following premiums :

Ellen R. Whitney, Ashburnham, two chair backs,	\$1,00
Mrs. J. F. D. Garfield, wrought skirt,	,75
Mrs. J. B. Proctor, wrought skirt,	,50
Mrs. E. E. Safford, wrought skirt,	,50
Lucy A. Lowe, wrought handkerchief and skirt,	,50
Miss Emily Gardner, knit crib spread,	1,00
Mrs. Tamar Sheldon, lot woolen yarn and mittens,	,50
Mrs. Jane P. Stone, wrought skirt,	,75
Mrs. N. A. Tufts, wrought skirt and night dress yoke,	,75
Minnie J. Carey, embroidered skirt,	,50
Mrs. J. W. Middleton, yoke and sleeves in crochet,	,25
Sarah E. Miller, Westminster, wrought skirt.	,33
Edna M. Lowe, crochet and fancy work,	,25
Mrs. L. A. Dix, three pairs fancy hose,	,50
Mrs. Trees, bonnets,	1,00
Mrs M. C. Jaquith, fancy hose,	,20
Mrs. Thomson, one pair woolen hose,	,20
Sarah Wright, two bead collars,	,20
Rachel Wetherbee, thread tidy,	,25
Mary A. Osborn, two thread tidys,	,25
Mrs. T. C. Walker, two crochet tidys,	,33
Mrs. Betsey Merriam, (91 years of age) one pair woolen hose,	,25
Helen A. Woodward, worsted and patch work,	,50
Hattie D. Upton, worsted crochet work,	,50
Mary A. Wright, worsted tidy,	,25
Mrs. Holmes, (85 yrs. of age,) 1 pair woolen hose	,25

Hattie Gerry, one doll,	,25
Abbie Younglove, one pair wrought slippers,	,25
Miss Hattie Friar, (gratuity) crochet vase and lamp mats,	,50
Abbie Meserve, bead box and chrochet work,	,25
Anna S. Dickinson, ottoman,	,33
Nellie M. Smith, one pair embroidered slippers,	,25
Mrs. Mary M. Downer, needle work,	,33
John Marble, (blind boy,) bead work,	,50
Laura Bridgeman, (deaf, dumb and blind,) crochet work,	,50
M. A. Jewett, cone frame,	,25
Mrs. J. Burnap, worked rug,	,50
Mrs. S. G. Frost, bed quilt,	,25
Mrs. L. W. Cooledge, bed quilt,	,50
Mr. Charles Prichard, Townsend, rug,	,25
Mrs. N. S. Boutelle, (gratuity) embroidered skirts,	,50
Mrs. Dunsmore, Lunenburg, bed quilt,	,25
N. Louisa Smith, butternut basket,	,20
Emily A. Boutelle, tidy and chrochet work,	,25
A. Brooks, shell basket,	,25
Mrs. Charles P. Deane, woolen hose,	,25
Mrs. Dorcas Frost, bed quilt,	,25
Clara E. Eames, book-mark and harp,	,25
Mary Hale and Myra Richardson, box of butterflies,	,38
Mrs. E. B. Rockwood, bead work,	,25

J. E. MANNING, *For the Committee.*

MECHANICS AND MANUFACTURES.

The Committee on Mechanics and Manufactures, found about the usual assortment of articles in their department, awaiting the inspection, which at the appointed time, they proceeded to bestow.

They found several varieties of clothes wringers, for which they awarded premiums as follows :

L. J. Warren, of Fitchburg,	\$,50
A. J. Stone, of Fitchburg,	,50
C. L. Fairbanks, of Fitchburg,	,50

Each differed from the other in its construction, and each no doubt possessed its peculiar advantages ; but there was no one to point them out, and no one of the Committee wanted his clothes wrung, so we had no practical test of their respective merits. We accordingly awarded the premiums, on the general ground that clothes wringers were good things, and ought to be encouraged.

To Waldo Wallace, we awarded \$1,00, for ploughs of very superior workmanship and shape.

Henry J. Lowe, exhibited two fishing rods, so exquisitely fashioned and finished, that it seemed impossible to the Committee, that any trout of right feeling, could refuse to "come in out of the wet," when such implements are waved over the stream, by an angler worthy of wielding them. It was believed that they would be irresistible unless to a fish utterly depraved, and lost to all moral sense. We awarded for the rods, \$2,00.

To Thomas Sheldon, for a substantially made and well shaped ox yoke, \$1,50.

One of the Committee thought such a yoke would go far to obviate the inconvenience of being an ox, but

his indiscretion was properly rebuked by an indignant silence from the rest.

J. F. & E. P. Monroe, displayed a bewildering assortment of egg beaters, apple parers and pickers, milk pans, &c. &c. The Chairman of the Committee, in the absence of the rest induced Mr. Munroe to "secede" an apple from the table and pare it. But before he could rescue it from the furious paring to which it was subjected by the enthusiastic proprietor, there was so little left, that the Chairman gained nothing by the absence of the others. The Committee were much struck by the ingenuity displayed in the invention of all these things, and awarded to Messrs. Monroe a premium of \$5.

To Frank W. Wallace of Ashburnham, for articles turned from wood, \$3.

Many of these articles were remarkable specimens of what may be accomplished by patience and skill. One which formed a cone when complete, was composed of a large circular box at the base, the cover of which formed another box, covered in turn by another, and so on till the top was reached. An acorn was found upon opening it, to contain another, which upon being also opened, revealed another, and so on, as far as the unaided fingers and naked eyes of the Committee could go. Undoubtedly a magnifying glass, and proper tools, might have revealed a never ending series of acorns, continually diminishing in size.

B. F. Proctor, also furnished a display of various turned articles, for which we awarded, \$1.

To Pratt & Stocking, for spring bed and exquisitely carved furniture, we awarded \$5.

The bed was of a novel construction, and looked as

though it might "lie easy," and thus sell itself; but surrounding circumstances forbade the idea of going to bed, and thus we lacked the actual test, which would have enabled us to speak from personal knowledge.

To S. D. Willis, for spring bed,	\$1,00
To S. G. Frost, for harness work,	2,50

In tenderness to the feelings of one of the Committee, who once lost one horse by death, and another by "swopping," the too commemorative harness work was passed by, more hastily than its merits deserved.

Dr. T. Palmer, showed a case of artificial teeth, which were cunningly placed in such close juxtaposition to certain jars of pickles, loaves of bread and boxes of butter, that they could not help looking natural. Still the doctor's skill was so plainly manifest, that no one destitute of them, (we mean the teeth, not the bread and butter,) could hesitate to place himself in his hands. We awarded to the doctor, \$4.

Sylvanus Sawyer, exhibited an assortment of the various description of projectiles invented by him, for which we awarded \$5.

Possibly a few words, based upon the personal knowledge of the Chairman, with reference to what was perhaps the most interesting feature of the show, may not be amiss. Some ten years since, during a chance interview, Mr. Sawyer mentioned to the Chairman that the idea of an explosive shell or projectile had occurred to him, and partially explained its construction. Since that period, he has labored persistently, devoting his whole time and means, to perfecting his invention. With an energy that nothing could tire, with faith and pluck almost superhuman. He has toiled on, in the face of discouragements, which would have crushed

almost any man but himself. Meeting and turning aside obstacles thrown in his way, by rivals and jealous competitors, patiently modifying and improving those features in his invention, shown to be faulty by the severe tests to which his invention has been subjected, he has at length forced a recognition of its merits, and on many a hard fought field, his projectiles have flown on their errand of pacification, and carried confusion and dismay to the rebel soldiery. To one conversant with all the circumstances, there was ample food for reflection, in those grim looking lumps of metal, as they lay there in strange contrast with the peaceful trophies scattered in profusion in the hall, and representing, as they did, years of thought, untold care, anxiety and patience, and an expenditure of dollars, which might be reckoned by tens of thousands.

To George Gough, for miniature tools, \$2,00

A vast deal of patience, skill and time, was evidently expended in their manufacture, and the Committee could only regret their entire want of any practical utility.

To S. Sawyer, for aquarium, ,50

To Wade H. Jewett & Co., for a piano forte of very superior workmanship, easy action, and remarkable purity of tone, \$10.

The upper notes in particular, were wonderfully clear and brilliant.

To Clark & Swan, for shaker bonnets, \$1,00

To S. D. Willis, for casket, ,50

To F. L. Ruggles, boots and shoes, 2,00

To Partridge, Sawyer, & Co., boots and shoes, 1,50

To Warren Simonds, for dressed leather, 2,00

To Joseph Pierce, for dressed leather, 2,00

To Levi Stevens, for case of brass work, 5,00

These comprised steam valves and fittings, bells, steam whistles, &c., so finely polished, that to eyes long un wonted to the sight of any but the common metals, such as iron, nickel and postage currency, they were most grateful, in their resemblance to the article used in the middle ages, called gold.

To John Choate, for case of medicine, \$2,50

While the Committee would not be understood as endorsing medicine and drugs generally, they see no harm in praising him who puts them up neatly. A blue pill may roll down the throat all the easier for being dexterously whipped out of an elegantly shaped box, while a dose of castor oil might be quite appetising if produced from a bottle of graceful shape, ornamented with a neat and tasty label. Still, on the whole, would it not be as well, to consign the whole lot to Mr. Sawyer, to be used in charging his shells? Nothing could be more destructive. Undoubtedly something of the kind was used in some of the earlier battles in Missouri, fought by General Price.

To C. A. Emory, for furs, gloves, &c., \$2,00

To F. W. & F. A. Whitney, for baby carriage, 4,00

They only lacked occupants. They were elegant in shape, and most tastily trimmed and mounted; but alas, there was not a baby in the neighborhood, that could be had on any terms; so we missed seeing the carriages complete. If it had been a church service or a lecture, or some such place, to which babies never should be carried, we could have picked up a dozen. We recommend our bachelor friends, each to purchase one of these carriages, as we can assure them "they are a handy thing to have in the house, in case of accident."

Royalston Woolen Mill, for cloths, \$5,00

In these days of shoddy cloths, which dissolve and become pulp in the first rain

Like Dead Sea fruits that tempt the eye
But turn to ashes on the lips,

it seemed really refreshing, to see some real cloth, made from real wool; and it would seem still more so, if the proprietors would send to each one of the Committee, a suit of clothes, just to satisfy them that their cloths will wear, as well as they look.

H. J. Lowe, for watch work, \$5,00

Again the Chairman begs leave to add personal to official knowledge. One of the watches exhibited, was made for him by Mr. Lowe, and has been in operation some months. Every part, each tiny piece, each screw and spring, everything, in short, is the work of the exhibitor's own hands. Even the drilling and adjustment of the jewels for the bearings was performed by him; and so nicely has he done his work, that the monthly variation might be reckoned by very small fractions of a second. This testimony in behalf of the maker's skill, seems due, and is cheerfully rendered.

N. U. Lyon, for a very simple and ingenious apple quarterer and corer, 50 cents.

J. E. Manning, for a case of Clothing, \$2,50

The same want of personal knowledge to which we have before referred, embarrassed the Committee in this instance, and they would repeat the suggestion made in the case of the Royalston cloths.

To L. J. Brown, Ladies Cloak, \$1,50

To Charles B. Sawyer, for an ingenious combination

of gearing and windlasses, by means of which great weights may be easily lifted, \$1.

Two Mowing Machines were exhibited on the Common; the Buckeye and the Union. Each was driven around the enclosure; each was fully explained, each looked as though it might cut grass, and neither did cut it; for there was none to cut. The common furnished about the same test of their cutting qualities, that the face of a boy of fourteen, might for those of a razor. Under such circumstances, we could not undertake to judge between two machines of excellencies so nearly balanced as were these, and we awarded to each \$3.

Mr. Levi Stevens entered a new steam apparatus for heating, which he is putting into the house of Mr. Rodney Wallace. We examined it and are indebted to Mr. Stevens for a full explanation of its construction. We can but feel however, that an expression of opinion from the Committee, based upon the little they actually know about it would be of no real value, and they accordingly think it best to confine themselves to the Jack Bunsby like expression, that if it works well, it will be a good thing.

Respectfully submitted, for the Committee,

GEO. E. TOWNE, *Chairman.*

COMMITTEES REPORTS.

For the purpose of inducing the Chairman of the several Committees to take upon themselves more labor and care in preparing their reports, the Society offered several premiums, to be decided by their President, Vice Presidents and Secretary, and they having carefully attended to that duty, submit the following awards, viz :

1st, E. Foster Bailey, report on pears and grapes,	\$6,00
2d, Stephen Shepley, on sheep,	5,00
3d, Charles W. Carter, assorted fruits and flowers,	4,00
4th, L. W. Russell, bread, butter, cheese, &c.,	3,00
5th, Jacob Haskell, vegetables,	2,00
A gratuity to Levi Downe, for report on grain,	1,00

L. H. BRADFORD, *for the Committee.*

ANALYSIS OF PREMIUMS AND GRATUITIES AWARDED.

Amount awarded for	Plowing at the Exhibition	-	\$48,00
“	“ Fancy Articles	- - - -	20,00
“	“ Fine Arts	- - - -	20,00
“	“ Committees Reports	- - - -	21,00
“	“ Poem	- - - -	10,00
“	“ Neat Stock	- - - -	213,00
“	“ Other Stock	- - - -	40,50
“	“ Horses	- - - -	101,00
“	“ Sheep	- - - -	25,00
“	“ Swine	- - - -	23,00
“	“ Poultry	- - - -	13,00
“	“ Grain	- - - -	34,00
“	“ Grass Seed	- - - -	2,00
“	“ Root Crops	- - - -	36,00
“	“ Fruits,	- - - -	55,50
“	“ Flowers	- - - -	7,50
“	“ Butter and Cheese	- - - -	19,50
“	“ Bread	- - - -	12,00
“	“ Mechanics and Manufactures	- - - -	88,00

Premiums and gratuities were paid to two hundred and fifty-three different persons, and the amounts distributed as follows :

Fitchburg	-	-	.	-	-	-	-	-	-	\$419,92
Princeton	-	-	-	-	-	-	-	-	-	80,00
Lunenburg	-	-	-	-	-	-	-	-	-	56,00
Framingham	-	-	-	-	-	-	-	-	-	29,00
Millbury	-	-	-	-	-	-	-	-	-	26,00
Westminster	-	-	-	-	-	-	-	-	-	25,25
Ashburnham	-	-	-	-	-	-	-	-	-	18,00
Leominster	-	-	-	-	-	-	-	-	-	17,75
Ashby	-	-	-	-	-	-	-	-	-	17,00
Winchendon	-	-	-	-	-	-	-	-	-	16,00
Sterling	-	-	-	-	-	-	-	-	-	11,25
Templeton	-	-	-	-	-	-	-	-	-	10,00
Royalston	-	-	-	-	-	-	-	-	-	5,00
Littleton	-	-	-	-	-	-	-	-	-	5,00
Gardner	-	-	-	-	-	-	-	-	-	2,50
Shirley	-	-	-	-	-	-	-	-	-	2,00
Townsend	-	-	-	-	-	-	-	-	-	,25

1863.	{	Amount of premiums offered	-	-	-	1165,75
	{	Amount of premiums and gratuities awarded	-	-	-	815,75
	{	Amount of premiums and gratuities paid	-	-	-	740,92
	{	Amount of permanent fund	-	-	-	5161,95

NEW MEMBERS.

FITCHBURG.

Day, William F.
 Warren, L. W.
 Conn, Reuben R.
 Heard, Jared M.
 Aldrich, Lucius
 Leverett, James W.
 Patch, Lyman
 Delahanty, Charles J.
 1st Universalist Society
 Stevens, Levi
 Gilbert, Ivar R.
 Stone, Alanson J.
 Colony, George D.
 Brooks, Kendall
 Kimball, Herbert W.
 Emerson, Alfred
 Younglove, T.
 Mason, Charles
 Mason, Caroline A.
 Gibson, Thomas
 Pratt, Silas
 Sawyer, Alvin M.
 Brown, Horace H.
 Ware, Samuel
 Ball, S. B.
 Choate, John
 Brown, L. J.
 Whitman, Augustus
 Monroe, James F.
 Stearns, Daniel
 Pierce, Joseph 2d.
 Drew, William B. S.

ROYALSTON.

Bullard, Ebenezer

BOSTON.

Tilden, William P.

PRINCETON.

Mirick, Paul M.
 Everett, Abram

LUNENBURG.

Ware, Lewis

FRAMINGHAM.

White, Henry G.

WINCHENDON.

Vose, Reuben Jr.

LEOMINSTER.

Bird, Ebenezer
 Jewett, Wade H. & Co.

ALBANY, N. Y.

Tucker, Luther H.

MARYSVILLE, CAL.

Haskell, Henry W.

in account with Worcester North Agricultural Society, Cr.
1862.

Dec. 16.	By cash paid	Litch & Sawtell, for nails and tacks,	,41
1863.			
Feb. 5.	" "	E. Garfield, printing report &c.,	136,75
" 12.	" "	R. Wallace & Co., envelopes &c.,	18,44
" 24.	" "	Dr. A. N. Arnold, for address,	5,00
May 12.	" "	for interest on U. S. 5-20 bond,	,43
Sept. 10.	" "	Fitchburg Post Office, for stamps,	19,00
Oct. 2.	" "	J. D. Holden, meals for band,	9,50
" 7.	" "	C. C. Curtis, for printing,	9,50
" 13.	" "	S. Shattuck, for casks of water	1,25
" 19.	" "	for thirty-eight certificate stamps	1,90
" 19.	" "	Tyler Younglove and others, services,	28,75
" 20.	" "	L. W. Warren, repairing frame	1,25
" 21.	" "	L. Sprague & Co., use of crockery,	1,25
" 22.	" "	W. G. Wyman, sundry bills paid,	15,00
" 26.	" "	A. Marshall, for setting and remov- ing pens. &c.,	25,00
" 26.	" "	A. M. Sawyer, for services	6,00
" 28.	" "	W. Whitney, for moving cattle pens from and to Leom'r,	5,25
" 29.	" "	L. H. Tucker, address Sept. 30,	20,00
" 3.	" "	A. F. Adams, straw for cattle pens,	1,50
" 7.	" "	S. Haws, hay for cattle at show,	7,00
" 7.	" "	S. B. Ball, services at show,	5,00
" 10.	" "	J. T. Farwell and son services at shows 1862 and 1863,	4,00
" 12.	" "	J. A. Wheeler, cleaning church,	5,00
" 13.	" "	Town of Fitchburg keeping cattle and man,	8,00
" 23.	" "	F. Hotel, entertainment &c.,	22,00
" 24.	" "	J. J. Piper, for advertising,	7,75
" 27.	" "	E. Garfield, printing and adv'g,	26,62
" 27.	" "	Fairbanks & Parkhurst, weighing,	1,00
" 28.	" "	W. G. Wyman, services as Sec'y 48½ days,	50,00
" 28.	" "	W. G. Wyman, express and postage,	5,19
" 28.	" "	J. F. Stiles, repairing batons, &c.,	4,75
" 30.	" "	premiums awarded Sept. 30th, Oct. 26th, and Nov. 28th,	731,92
Dec. 3.	" carried to new account to balance,		4961,95
			<hr/>
			\$6146,26

SECRETARY'S REPORT.



In offering the report of the Transactions of the Worcester North Agricultural Society, for the year ending Nov. 30th, 1863, the Secretary would embrace the opportunity to present certain facts connected with the organization and management of the association, a part of which do not seem to be fully understood by its members, and some suggestions with regard to the future conduct of its affairs, and its prospective operations, which his deep interest in its welfare, and his past six years familiarity with the action of its internal machinery induce him to believe will not be altogether inappropriate.

On the importance, to the farmers and others in the vicinity of its location, of sustaining the society; of continuing its exhibitions; of increasing and extending its influence, I need not dwell at length. Suffice it to say, there seems to be no present danger of overestimating the value of the society in its influence on the agricultural, manufacturing or mercantile interests of Fitchburg, as the center of its operations, nor upon those interests of the other towns, near or remote, whose inhabitants most actively and efficiently aid in prosecuting the main objects of the organization.

The magnitude of the Society, territorially, is not well understood. Its limits are supposed, even by many of its members, to be very narrow, and its operations it is thought by some, are, or ought to be, confined to a very few towns in the immediate vicinity of its central point of influence, and any attempt to interest the inhabitants of other, or more remote towns

in its affairs, especially if they are inclined to compete for its premiums, is considered, by such persons, an inexcusable innovation, and an attempt to curtail their privileges; and they would have a policy pursued by the society which will correspond with its *supposed* limits. The real limits of the Society are very much broader than thus represented. As I am not aware that the original act of incorporation of our Society has ever been published in its "Transactions," and as that instrument, in connection with two subsequent acts of the Legislature, will set at rest this question, I propose to give them in full, in this connection.

Be it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same as follows:

Nathaniel Wood, Ivers Phillips and Abel F. Adams, their associates and successors, are hereby made a corporation by the name of the FITCHBURG AGRICULTURAL SOCIETY, for the encouragement of agriculture and the mechanic arts, by premiums and other means, in the Town of Fitchburg, in the County of Worcester, with all the powers and privileges, and subject to all the duties, liabilities and restrictions set forth in the forty-second and forty-fourth chapters of the Revised Statutes, and in all subsequent acts concerning Agricultural Societies; and said corporation may hold and manage real estate not exceeding in value fifteen thousand dollars, and personal estate not exceeding the same sum, for the purposes aforesaid. (Approved by the Governor, March 30th, 1852.)

"An Act concerning the Fitchburg Agricultural Society. Be it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same, as follows:

SEC. 1. The Fitchburg Agricultural Society shall, after the passage of this act, be called and known by the name of the Worcester North Agricultural Society, and they are hereby authorized to admit members from the towns in the west part of Middlesex County.

SEC. 2. The said Society shall be entitled, on the same terms as other incorporated Agricultural Societies to receive annually, out of the Treasury of the Commonwealth, such sums as any other Agricultural Society may receive, under the provisions of Chapter 42, of the Revised Statutes, notwithstanding the restrictions of Section seven of that Chapter.

House of Representatives, May 21, 1853.

Passed to be enacted.

C. H. WARREN, *President.*

May 23, 1853. Approved.

JOHN H. CLIFFORD."

“General Laws, Chapter 180. An Act concerning Agricultural Societies. Be it enacted, &c., as follows :

SEC. 1. The premiums offered by any Agricultural Society receiving bounty from the Treasury of the Commonwealth under the provisions of the 66th Chapter of the General Statutes, shall be subject to the competition of every citizen of the County in which such Society is established. And every such Society shall admit as members, upon equal terms, citizens of every town in the County in which the same is located. (Approved April 10, 1861.”)

It will be seen by the preceding acts that the Society not only has the right, but is positively required to *“admit as members, upon equal terms, citizens of every town in the County,”* and is *“authorized to admit members from the towns in the West part of Middlesex County,”* thus extending our limits beyond, even those of the original Worcester County Society. And the question recurs with force, would it not be wise for the Society to adopt, and pursue a policy corresponding in liberality and extent with its *real*, rather than its supposed limits? If so, then efforts should be constantly made to obtain new life members, not only from Fitchburg, and its immediate vicinity, but also from the more remote towns of the county, and from Middlesex county, and any reasonable inducements offered to such citizens to join the Society and help on its exhibitions, should not be discouraged. There is room enough for all who will, to labor together, and labor effectually, and to continue their united labors for many years, before the agricultural, and horticultural, and mechanical interests of these two counties will have attained such a degree of superiority as to require no further efforts in their behalf.

To get up a really good agricultural exhibition, in these times, when cattle shows have become an old story, and when the public interest in them is supposed to be on the decline, and to prepare and publish even a

passable Report of such an exhibition, requires a deal of labor, physical and mental, and no small amount of forethought, and consultation, and correspondence, and careful planning. And this labor and care should not be allowed to devolve upon one individual, or two; but should be shared by many.

It may be supposed to be a small matter to accomplish all this. A few premiums offered; a few Committees chosen; a few advertisements published, may be supposed to create the exhibition; to bring the people together; to raise the necessary funds; to prepare the material for the "Transactions," and give general satisfaction to every body. And the more perfect this illusion, ordinarily, the greater the success of the whole affair; for all this labor, and care, and study, and anxiety should be out of sight, and only the results of it seen. And those results should roll out in the proper time, and in the proper place, smoothly, regularly, in good order and to the entire satisfaction of everybody. But if any one portion of the whole programme fails of accomplishment, precisely at the time, and in precisely the manner intended, in consequence of—no matter what unforeseen circumstances, and so somebody is dissatisfied,—why then the real author of this labor and care, should step from behind the curtains and assuming the fault to be all his own, should humbly and quietly receive whatever chastisement the offended ones please to inflict upon him.

To help avoid this latter result, which, however pleasing it may be to one party, is never entirely so to the other, permit me to suggest some slight changes in the little arrangements, not usually deemed of importance. In appointing judges, and other Committees, great care should be taken to select not only persons well quali-

fied to award the various premiums judiciously, but reference should be had to the published results, and men selected to act as chairmen, who are known to possess the ability, leisure and inclination to prepare and present promptly, good and appropriate reports, and they should be made to understand that this is one important object of their appointment. If men of this stamp can be occasionally found who have never before served in that capacity, all the more variety and interest may be attached to their productions. These committees, thus selected, should be made to understand that it is their duty, either to serve as appointed, or to notify the officers timely of their inability to do so, that the vacancy may be filled before the time of meeting; and the time and place of meeting should be distinctly stated in the notice of appointment. In order to have this done understandingly, all the arrangements for the different parts of the exhibition should be carefully planned in good season, and the various officers should act in concert, with a full understanding of each others movements. The several Committees on articles exhibited in the Hall have usually been notified to meet there at precisely the time specified for closing the reception of articles. With the best possible arrangements, some time must elapse before these articles can be assorted and prepared for the action of the Committees. Would it not be well, therefore, to avoid confusion and haste, that these Committees should be notified to meet half an hour, or an hour later than the time specified? Then by meeting punctually and acting promptly, their duties could be performed more satisfactorily and quite as early, and thus their presence during the first half hour, or hour

would not interfere with the marking and arrangement of the articles.

The Committee on plowing have been requested to meet at the time and place of plowing. The field is frequently extensive; the different departments not well defined, and often a large crowd gathered to witness the performance; the different members of the several Committees unknown to each other, and thus delay occasioned in organizing. Would it not be well for them to report to some officer, at least fifteen minutes before the commencement of the performance? The Chief Marshal is always prominent. Let him be present at the time specified, and let them report to him. They can then be quickly organized, and their place and duties assigned them without delay.

The Committees on drawing have been informed that their place of meeting would be at the chapel, with other Committees on stock, at precisely the time for their performances to commence in another place. Let them also report to the Chief Marshal, at the place for the trial, at least fifteen minutes before the time for commencing it, and they too can be easily organized, and proceed to the discharge of their duties without delay. Some one or more other officers should act with the Marshal in organizing these Committees, and filling the vacancies.

Care should be taken that all the more prominent departments of the exhibition be well filled. For instance, if, as the time for receiving entries is about to expire, it is seen that there will not be a passable exhibition of fat cattle, as was the case this year, then some one should make an especial effort to have that class of animals represented, as was kindly done by an officer in the present instance, who rode several miles in

a severe storm, merely to secure a more full exhibition in that department. So of plowing—for the past two years it has only been by the especial effort of an officer, that the representation has been as good as it has been. Five of those who plowed this year, did so only on the pressing invitation of that officer, to help fill the gap, and one other accidentally failed to comply with one of the regulations, and on account of the distance at which he resided, the mistake could not have been rectified in season, but for the responsibility assumed by that officer. Thus only five of those who did plow, would, in all probability have done so but for those efforts. These are only illustrations of what should be done, if occasion requires in other departments, in doors and out. And this leads to the suggestion that if any regulation, however proper in itself, has been adopted, that is not appreciated, or that gives offence to a considerable extent, it may not be wise to insist on retaining that regulation, unless the objections can be overcome.

The duties of all the Committees should be so plainly specified that there need be no misunderstanding about them, and the various rules and regulations should be clearly and fully expressed, so that at least the *officers* need not give conflicting interpretations of them; and thus their orders and actions conflict with one another. The plan of operations being formed, as few changes as possible should be made; and if any are absolutely necessary, all interested in them should be notified at the earliest practicable moment. In short, let there be a time and a place for everything, and let everything appear in its appropriate time and place.

The Annual Exhibition, the fourteenth of the Society, (the eleventh under its present organization) held at

Fitchburg, September 29th and 30th, was a complete success. The weather was delightful throughout; the attendance very large, and nearly all the departments well filled. The officers and most of the Committees were prompt and faithful in the discharge of their duties. The President and Chief Marshal, especially, labored with untiring zeal, not only on the days of the exhibition, but during the preceding days of preparation, and very much of the success of the exhibition is the direct result of their labors.

The entries in the departments of stock were as follows: Blood Stock, 40 animals, all pure bred; Grade and Native Bulls, 14; Working Oxen, 34; Milch Kine, 20; Fat Cattle, 8; Heifers, 51; Steers, 66; Total of Horned Cattle, 233; Horses and Colts, 79, Sheep, 73; Swine, 60. Total number of animals entered, exclusive of Poultry, 445; Poultry, 113. For plowing 12 teams were entered; for Draught 43 animals. In the Hall the entries were not as numerous as last year, particularly in the line of Apples and Pears, and yet, considering the scarcity and imperfection of fruit generally, in this vicinity, this year, the exhibition was a good one, and was entirely satisfactory. I have not at hand the exact number of entries in this department.

The address was delivered in the Unitarian Church by Luther H. Tucker, of the *Country Gentleman*, of Albany, New York. It was a practical and exceedingly useful and interesting production, given in the very best style, and is published herewith. An original hymn, prepared for the occasion, by Mrs. Caroline A. Mason, was sung by a full choir, with the most excellent effect, and after the delivery of the address a poem, also by Mrs. Mason, was read by Levi W. Russell, A. M. This was admirably adapted to the occasion, and was read in a manner calculated to give a

life-like presence, and a reality to its beautiful pictures. These, the hymn and poem, were prepared by Mrs. Mason, on very short notice, at the especial request of the Society, with a degree of promptness and ability which should be appreciated and remembered by its members and friends.

After the exercises in the church, a business meeting of the Society was held in the Lower Town Hall, at which interesting and instructive remarks were made by Mr. Bradford, the President; Mr. Tucker, the Orator; and Hollis Tidd, Esq., of New Braintree, the Delegate from the State Board of Agriculture; and the awards of the various Committees were announced.

The offer of premiums for Committee's Reports has called forth several very excellent ones, which have aided much in preparing the published "Transactions" for the year. H. G. White, Esq., of South Framingham, has also rendered us especial service by granting the free use of new plates of five of the pure bred animals which he exhibited at the show. The plates were obtained at great expense to him, and he kindly gives us the first use of them, to illustrate our Report.

Forty-three new members have joined the Society during the year, making the total number at present, 609. The funds of the Society have also increased by the amount of \$331,64. It should be stated however, that the expense of publishing the annual "Transactions" which always goes into the next year's account will be very much larger than usual, owing to the increased cost of publishing materials and labor, and the increased size and number of copies published.

WILLIAM G. WYMAN, *Secretary.*

FITCHBURG, Nov. 30, 1863.

COMMITTEES AND PREMIUMS
FOR THE
TWELFTH ANNUAL EXHIBITION,
TO BE HELD AT FITCHBURG,
Tuesday, Wednesday & Thursday, Sept. 27, 28 & 29, 1864.

No person will be allowed to become a competitor for any of the Premiums herein offered, unless he shall have made an entry for the same, with the Secretary, within the time prescribed for each class, nor unless he shall also have furnished all required statements relating thereto within the specified time.

For the convenience of those who live at a distance, entries may be made by Mail; and all entries so made must be delivered at some Post Office one day previous to the expiration of the time specified, and must bear proof of having been so delivered either by Post-mark, or a certificate of registry from the Postmaster.

S T O C K .

All entries for premiums under this head, must be made on or before the Friday previous to the show, except Horses for exhibition, and Poultry, which may be as late as the day previous, and all stock must be owned by the person who enters it.

All persons who are required to furnish a statement, must do so to the Secretary at the time of making the entry.

All live stock must have been raised by the person entering the same, or owned by him for at least three months next previously.

No animal that has heretofore in part or alone taken the highest premium for Draft, Plowing or Dairy herds, shall ever again be entitled to compete for any premium of the Society, unless for an entirely different quality.

Each entry of stock for the pens must specify the breed of the animal if known, and the age.

Fat cattle, working cattle, draught horses and swine must be weighed on the same scale, in Fitchburg, and will be weighed free of expense.

The weight of all other stock will not be required.

BLOOD STOCK.

Committee.—Abel F. Adams, of Fitchburg; J. G. Wood, of Millbury; Solon Carter, of Leominster; Anan Stockwell, of So. Royalston; Nathan Caswell, of Fitchburg.

Authentic pedigrees will be required.

Durham Bulls,	- - - -	1st premium,	-	\$5,00
		2d premium,	-	3,00
North Devon,	- - - -	1st premium,	-	5,00
		2d premium,	-	3,00
Ayrshire,	- - - -	1st premium,	-	5,00
		2d premium,	-	3,00
Alderney,	- - - -	1st premium,	-	5,00
		2d premium,	-	3,00
Any other breed, pure blood,	- -	1st premium,	-	5,00
		2d premium,	-	3,00

The Committee may award gratuities for superior specimens of cows, heifers or calves, of either of the breeds named.

GRADE OR NATIVE BULLS.

Committee.—Wm. Woodbury, Jr., of Fitchburg; Asaph Wood, of South Gardner; Gamaliel S. Beaman, of Princeton; Joseph Upton, of Fitchburg; J. B. Willard, of Still River.

More than two-years-old,	- -	1st premium,	-	\$5,00
		2d premium,	-	3,00
Yearlings,	- - - -	1st premium,	-	4,00
		2d premium,	-	2,00
		3d premium,	-	1,00
Calves,	- - - -	1st premium,	-	4,00
		2d premium,	-	3,00
		3d premium,	-	2,00

These may be of any breed, more than four months old.

MILCH KINE.

Committee.—J. T. Everett, of Princeton ; N. C. Day, of Lunenburg ; Benj. Safford, of Fitchburg ; Elliot E. Boyden, of Leominster ; Stephen Wood, of Ashburnham.

Herds of four Cows or Heifers each,	1st premium,	-	\$10,00
	2d premium,	-	7,00
	3d premium,	-	4,00

The person receiving these premiums will not be allowed to compete for any other, with the same animals.

The Committee will regard age, quality and quantity of milk, expense of keeping, &c.

Cows,	-	-	-	-	1st premium,	-	\$5,00
					2d premium,	-	4,00
					3d premium,	-	3,00
Heifers, three-years-old,	-	-	-	-	1st premium,	-	5,00
					2d premium,	-	4,00
					3d premium,	-	3,00
Heifers, two-years-old,	-	-	-	-	1st premium,	-	4,00
					2d premium,	-	3,00
					3d premium,	-	2,00

Competitors for premiums on milch cows, whether for herds or single animals, and milch heifers, will be required to certify in writing, at the time of entry, to the weight of the milk, also to the weight of butter, if butter is made, during the six days commencing with the first Monday in June, and the corresponding six days in September ; and to the manner of keeping, and general management. Cows that calve near or after the first Monday in June, may be tried at another time.

HEIFERS.

Committee.—Ezra Kendall, of Sterling ; Aaron Jones, of Royalston ; Geo. M. Gregory, of Princeton ; Daniel Messinger, of Fitchburg ; Thomas Whitney, of Shirley.

Intended to be kept for the Dairy.

Two years-old,	-	-	-	-	1st premium,	-	\$4,00
					2d premium,	-	3,00
					3d premium,	-	2,00
Yearlings,	-	-	-	-	1st premium,	-	3,00
					2d premium,	-	2,00
					3d premium,	-	1,00

HEIFER CALVES.

Committee.—George O. Skinner, of Princeton; J. T. Dunsmore, of Lunenburg; Edward Powers, of Phillipston; Asa Raymond, Edward Bacon, of Westminster.

Calves, more than four months old,	-	1st premium,	-	\$3,00
		2d premium,	-	2,00
		3d premium,	-	1,00
Calves, more than four months old, raised				
by hand,	-	1st premium,	-	\$3,00
		2d premium,	-	2,00
		3d premium,	-	1,00

WORKING OXEN.

Committee.—Charles K. Sawyer, of Fitchburg; Porter Piper, of Leominster; Hosea M. Caswell, of Fitchburg; A. W. Benjamin, of Westminster; Antipas Maynard, of Ashburnham.

Working Oxen,	-	1st premium,	-	\$6,00
		2d premium,	-	5,00
		3d premium,	-	4,00
		4th premium,	-	3,00
		5th premium,	-	2,00

The working oxen will be tried, attached to loads weighing, including the cart, one-third more than themselves.

STEERS MORE THAN ONE YEAR OLD.

Committee.—Abel Marshall, Fitchburg; Porter Page, Aaron Wood, of Westminster; Levi Kendall, of Fitchburg; Benjamin Wallis, of Ashby.

Three-years-old,	-	1st premium,	-	\$5,00
		2d premium,	-	4,00
		3d premium,	-	3,00

The three-years-old steers will be attached to carts, and tried like the oxen, on the same ground; the cart and load to equal the steers in weight.

Two-years-old,	-	1st premium,	-	\$4,00
		2d premium,	-	3,00
		3d premium,	-	2,00
Trained, two-years-old,	-	1st premium,	-	4,00
		2d premium,	-	2,00

YEARLING STEERS AND STEER CALVES.

Committee.—Josiah Puffer, of Still River ; Charles H. Brown, of Ashburnham ; Edwin Sawyer, of Baldwinville ; Timothy D. Wood, of Westminster ; John M. Forristall, of Winchendon.

Yearlings, - - - - -	1st premium, -	\$3,00
	2d premium, -	2,00
	3d premium, -	1,00
Trained Yearlings, - - - - -	1st premium, -	3,00
	2d premium, -	2,00
Calves, - - - - -	1st premium, -	5,00
	2d premium, -	3,00
	3d premium, -	1,00
Calves, raised by hand, - - - - -	1st premium, -	5,00
	2d premium, -	3,00
	3d premium, -	1,00
Trained Calves, - - - - -	1st premium, -	3,00
	2d premium, -	2,00
	3d premium, -	1,00

FAT CATTLE:

Committee.—Cyrus Kilburn, of Lunenburg ; Ephraim Turner, of Phillipston ; John Lowe, of Fitchburg ; Leonard Burrage, of Leominster ; Abel Derby, of Fitchburg.

Oxen, - - - - -	1st premium, -	\$8,00
	2d premium, -	5,00
	3d premium, -	3,00
Cows, - - - - -	1st premium, -	6,00
	2d premium, -	3,00
	3d premium, -	2,00
Three-year-old Steers or Heifers, - - - - -	1st premium, -	6,00
	2d premium, -	4,00

All competitors with fat cattle or swine, must furnish a statement to the Secretary, of the mode and expense of feeding.

SWINE.

Committee.—John P. Sabin, of Fitchburg ; John L. Cummings, of Ashburnham ; W. H. Brown, of East Princeton ; C. W. Morse, of Gardner ; Caleb S. Merriam, of Westminster.

Must be entered like other stock.

Boars, more than one year old,	-	1st premium,	-	\$4,00
		2d premium,	-	3,00
Less than one year old,	- -	1st premium,	-	3,00
		2d premium,	-	2,00
Fat Hogs, more than eight months old,		1st premium,	-	4,00
		2d premium,	-	3,00
		3d premium,	-	2,00
Fat Pigs, less than eight months old,		1st premium,	-	3,00
		2d premium,	-	2,00
		3d premium,	-	1,00
Breeding Sows	- - - -	1st premium,	-	3,00
		2d premium,	-	2,00
		3d premium,	-	1,00
Weaned Pigs, not less than four	-	1st premium,	-	3,00
		2d premium,	-	2,00
		3d premium,	-	1,00

STALLIONS.

Committee.—James O. Parker, of Shirley ; Jonas Brown, of East Princeton ; Levi Smith, of Ashby ; Warren Marble, of Ashburnham ; Leonard Day, of Fitchburg.

All persons offering Stallions, five years old and upwards, will be required to exhibit specimens of their stock.

Stallions, five years old and upwards,		1st premium,	-	\$10,00
		2d premium,	-	6,00
		3d premium,	-	4,00
Four-years-old,	- - - -	1st premium,	-	6,00
		2d premium,	-	4,00
Three-years-old,	- - - -	1st premium,	-	4,00
		2d premium,	-	2,00
Two-years-old	- - - -	1st premium,	-	4,00
		2d premium,	-	2,00

MARES AND SUCKING COLTS.

Committee.—S. W. A. Stevens, of South Gardner ; John K. Going, of Shirley ; L. P. Comee, of Fitchburg ; Joseph Whitcomb, of East Princeton ; F. W. Wright, of Ashby.

The mares must be four years old and upwards, accompanied with their colts.

Breeding Mares, - - - -	1st premium, -	\$6,00
	2d premium, -	4,00
	3d premium, -	2,00
Colts, less than one year old, - -	1st premium, -	3,00
	2d premium, -	2,00
	3d premium, -	1,00

DRAUGHT AND FAMILY HORSES.

Committee.—Lewis Ware, of Lnnenburg ; John Brooks, of Princeton ; W. W. Comee, S. F. Atherton, of Fitchburg ; Warren Simonds, of Templeton.

Draught Horses will be tried, attached to a stone boat, loaded to weigh one-third more than the horses.

The same draught horse cannot receive a premium as a single horse and also as one of a pair, but a draught horse may compete as a family horse.

These must be four years old and upwards.

Draught horses and mules, pairs, -	1st premium, -	\$6,00
	2d premium, -	4,00
Draught horses, single, - -	1st premium, -	5,00
	2d premium, -	3,00
Family horses, pairs, - - -	1st premium, -	7,00
	2d premium, -	5,00
Family horses, single, - - -	1st premium, -	5,00
	2d premium, -	3,00

COLTS.

Committee.—John M. Sawtelle, of Fitchburg; Gardner Merriam, of Leominster; J. H. Temple, of Princeton; Mirick Willard, of Ashburnham; Levi Burr, of Ashby.

Three-years-old Geldings,	-	-	1st premium,	-	\$4,00
			2d premium,	-	2,00
Three-years-old Fillies,	-	-	1st premium,	-	4,00
			2d premium,	-	2,00
Two-years-old Geldings,	-	-	1st premium,	-	4,00
			2d premium,	-	2,00
Two-years-old Fillies,	-	-	1st premium,	-	4,00
			2d premium,	-	2,00
Yearling Colts,	-	-	1st premium,	-	4,00
			2d premium,	-	2,00

SHEEP.

Committee.—Ephraim Graham, of Lunenburg; John G. Woodward, of Ashburnham; Joseph Smith, of Fitchburg; Amos Miller, of Westminster; John Fairbanks, of Lunenburg.

Flocks not less than ten, owned by one					
person,	-	-	1st premium,	-	\$10,00
			2d premium,	-	5,00
Bucks,	-	-	1st premium,	-	5,00
			2d premium,	-	3,00
Cossetts,	-	-	1st premium,	-	2,00
			2d premium,	-	1,00

POULTRY.

Committee.—Ward M. Cotton, of Leominster; Henry A. Willis, Thomas Sheldon, of Fitchburg; Geo. W. Houghton, of Princeton; C. S. Greenwood, of South Gardner.

Must be entered like other stock.

Barn-yard Fowls, not less than six,			1st premium,	-	\$2,00
			2d premium,	-	1,00
Turkeys, not less than six,	-	-	1st premium,	-	2,00
			2d premium,	-	1,00
Geese, not less than six,	-	-	1st premium,	-	2,00
			2d premium,	-	1,00
Ducks, not less than six,	-	-	1st premium,	-	2,00
			2d premium,	-	1,00

TOWN TEAMS.

Committee.—J. M. Sawyer, of Sterling; Geo. Wood, of Leominster; Levi Downe, of Fitchburg; Daniel Putnam, of Lunenburg; Ohio Whitney, of Ashburnham; Henry Chase, of Templeton; Silas Pratt, of Fitchburg.

For the best Town Team, not less than fifteen yoke of oxen from any one town.

1st premium,	-	\$25,00
2d premium,	-	10,00

PLOWING MATCH.

All entries for plowing must be made on or before the Wednesday previous to the exhibition, and one dollar must be deposited with each entry, to be returned to the competitor if he plows, otherwise forfeited to the Society.

No teams or parts of teams will be allowed to compete for more than one premium on plowing.

DOUBLE TEAMS.

Committee.—Alvin M. Sawyer, E. D. Works, of Fitchburg; Moses H. Mirick, of East Princeton; Gilman Day, of Baldwinville; E. A. Goodrich, of Fitchburg.

Double Teams,	- - - -	1st premium,	-	\$7,00
		2d premium,	-	5,00
		3d premium,	-	3,00

SINGLE TEAMS.

Committee.—James P. Putnam, John Smith, of Fitchburg; E. W. Raymond, of Westminster; Geo. G. Sampson, of Ashburnham; John Wood, of East Princeton.

Single Teams,	- - - -	1st premium,	-	\$7,00
		2d premium,	-	5,00
		3d premium,	-	3,00
Minors with Steers,	- - -	1st premium,	-	6,00
		2d premium,	-	4,00
		3d premium,	-	2,00

HORSE TEAMS.

Committee.—Stephen Shepley, Lewis G. Tuttle, L. P. Comee, Loring Wheeler, of Fitchburg; Daniel North, of Westminster.

Horse or Mule Teams,	-	-	1st premium,	-	\$7,00
			2d premium,	-	5,00
			3d premium,	-	3,00

CROPS.

All entries for Premiums, in this department must be made with the Secretary, on or before June 1st, with the exception of English turnips and cabbages, which must be entered on or before August 1st. Immediately after these dates the Secretary will transmit to all competitors a copy of the following blank form adopted by the Trustees, to correspond with the requirements of the Board of Agriculture.

In pursuance of authority delegated to the Board of Agriculture, by Chap. 24, of the Acts of 1862, Agricultural Societies receiving the bounty of the State, are required to make use of the following form, and be governed by its conditions, in the mode of ascertaining the amount of crops entered for premium.

Worcester North Agricultural Society.

Statement concerning a crop of _____, raised by Mr. _____ in the town of _____, 1864.

What was the crop of 1862?

What manure was used, and how much that year?

What was the crop of 1863?

What manure was used, and how much that year?

What is the nature of the soil?

When, and how many times plowed, and how deep, for the present crop?

What other preparation for the seed?

Cost of plowing and other preparation?

Amount of manure, in loads of thirty bushels, and how applied, for the present crop?

Value of manure upon the ground?

When and how planted, and the amount and kind of seed?

Cost of seed and planting?

How cultivated, and how many times?

Cost of cultivation, including weeding and thinning?

Time and manner of harvesting?

Cost of harvesting, including the storing and husking or threshing?
 Amount of straw, stover, or other product?

REMARKS.

Signed by

Competitor.

From actual measurement, I hereby certify that the land which the above crop of covered, contained rods, and no more.

From personal observation, we hereby certify that the above answers are true.

I hereby certify that the weight of the above crop, as ascertained by me, on the day , was pounds.

In ascertaining the weight of a crop, an average rod shall be selected, harvested, and weighed, by one or more members of a committee, and the whole estimated by multiplying it by the number of rods.

The certificate shall state the weight of all crops only when in a merchantable state.

RULES OF MEASURE.

Practiced and adopted by the State Board of Agriculture.

Wheat, Potatoes, Sugar Beets, Mangel Wurzel, Ruta-	
Baga, White Beans, and Peas,	60 lbs. to bushel.
Corn, Rye, Onions, - - - - -	56 " "
Oats, - - - - -	32 " "
Barley, Buckwheat, - - - - -	48 " "
Cracked Corn, Corn and Rye and other meal except	
Oat, and English Turnips, - - -	50 " "
Parsnips, - - - - -	45 " "
Carrots, - - - - -	55 " "

These forms must be returned to the Secretary on or before November 10th, with each question concerning the crop answered, and the certificates properly signed.

No person will be allowed to compete for more than one Premium, with a crop raised upon the same field, however large, with the same treatment.

Committees should not encourage *the irregular* entry of *accidental* good crops.

GRAIN.

Committee.—J. A. Marshall, Joel Page, Ira Carleton, Loriston Stockwell, of Fitchburg; J. T. Everett, of Princeton.

The Committee may award gratuities for valuable new varieties of grain.

For the most profitable crops of Corn, Wheat, Rye, Barley and Oats, one acre each; of Cabbages and Beans one-eighth acre each; the product of Corn to be not less than 4320 lbs. on the cob; that of Wheat, Rye, Barley and Oats, not less than 1200 lbs. of grain each.

Corn,	-	-	-	-	-	1st premium,	-	\$8,00
						2d premium,	-	6,00
Wheat,	-	-	-	-	-	1st premium,	-	8,00
						2d premium,	-	5,00
Rye,	-	-	-	-	-	1st premium,	-	3,00
						2d premium,	-	2,00
Barley,	-	-	-	-	-	1st premium,	-	3,00
						2d premium,	-	2,00
Oats,	-	-	-	-	-	1st premium,	-	3,00
						2d premium,	-	2,00
Field Beans,	-	-	-	-	-	1st premium,	-	2,00
						2d premium,	-	1,00

ROOT CROPS AND CABBAGES.

Committee.—Abram S. Dole, Thomas Gibson, of Fitchburg; Wm. Baker, of Lunenburg; H. C. Hill, of Gardner; J. E. Merriam, of Princeton.

For the most profitable crops of Potatoes, one-fourth acre each; of Carrots, Onions, Beets and Turnips, one-eighth acre each.

Potatoes, not less than 3000 lbs.,	-	1st premium,	-	\$4,00
		2d premium,	-	3,00
Carrots, not less than 5500 lbs.,	-	1st premium,	-	4,00
		2d premium,	-	3,00
Onions, not less than 2000 lbs.,		1st premium, <i>Harris on Insects</i>		
		2d premium,	-	2,00
Sugar Beets,	-	1st premium,	-	2,00
		2d premium,	-	1,00
Mangel Wurzels,	-	1st premium,	-	2,00
		2d premium,	-	1,00

PREMIUMS.

153

English Turnips, - - -	1st premium, <i>Harris on Insects</i>	
	2d premium, -	2,00
Turnips of any other variety,	1st premium, <i>Harris on Insects</i>	
	2d premium, -	2,00
Cabbages, - - - - -	1st premium, -	2,00
	2d premium, -	1,00

FARMS.

Committee.—Jabez Fisher, Joseph Upton, of Fitchburg ; George Chandler, of Shirley.

All competitors must make their entries on or before the first day of May. Each farm will be open to the inspection of the Committee during the entire season. A detailed statement of the general management, together with the income and expenses for the year previous to November 1st, must be furnished on or before November 10th.

For the best cultivated and managed

Farm, - - - - -	1st premium, -	\$15,00
	2d premium, -	8,00

GARDENS.

Committee.—Geo. E. Towne, Oliver Kendall, Abel F. Adams, of Fitchburg.

No person having received a premium for a kitchen or mixed garden shall be allowed to compete for another with the same land within five years, except for a higher one.

Entries must be made on or before June 1st.

Kitchen or mixed Gardens, - -	1st premium, -	\$6,00
	2d premium, -	4,00
	3d premium, -	2,00
Flower Gardens, - - - -	1st premium, -	2,00
	2d premium, -	1,00

EXPERIMENTS.

Committee.—L. H. Bradford, Cyrus Thurston, of Fitchburg ; Thomas Pratt, of Lunenburg.

All entries must be made at least one week before commencing the Experiments.

There will be placed at the disposal of the Committee for the best and most reliable Agricultural Experiments, made in 1864, the sum of \$50,00.

EXPERIMENTS WITH MANURES.

Committee.—Loriston Stockwell, I. B. Woodward, Abel Marshall, of Fitchburg.

In accordance with the requirements of the Board of Agriculture, there will be paid for the most thorough, exact, and reliable experiments, upon the proper depth of applying manures, three premiums, as follows :

1st premium,	-	\$25,00
2d premium,	-	20,00
3d premium,	-	15,00

These experiments must have been commenced in 1862, and continued through a rotation of three years.

TOWN HALL.

No article intended for the Hall will be entitled to a premium, unless it shall have been deposited by one o'clock, P. M., on Tuesday, from which time the Hall will be occupied by the Committees exclusively until half-past six o'clock, when it will be opened to the public for the evening. Admission fee, 10 cents ; Season tickets, 25 cents.

All articles must have been grown, manufactured or produced by the person entering the same for premium, and should be plainly marked with the name and residence of the exhibitor.

A strict compliance with these regulations will be absolutely necessary.

APPLES, PEACHES, PLUMS AND QUINCES.

Committee—Thomas R. Boutelle, Norman Stone, of Fitchburg ; E. W. Bullard, of Royalston ; Ephraim Murdock, of Winchendon ; Levi Heywood, of Gardner.

APPLES.

For the best and largest exhibition of named varieties, of three specimens each, - - - -	1st premium, -	\$4,00
	2d premium, <i>Harris on Insects</i>	
For twelve varieties, of five specimens each, 1st prem. <i>Harris on Insects</i>	2d premium, -	2,00
	3d premium, -	1,00
For six varieties of five specimens each, 1st premium, -	2d premium, -	1,50
	3d premium, -	1,00
For three varieties of five specimens each, 1st premium, -	2d premium, -	1,50
	3d premium, -	,50
For the best exhibition of twelve specimens of one variety, - - - -	1st premium, -	1,50
	2d premium, -	1,00

No person will be allowed to compete for a premium in more than one of the above classes, with the same specimens of fruit ; and if the number of specimens exhibited does not correspond with these regulations, the fruit will be excluded from competition for the premiums.

PEACHES.

For the best collections, - - - -	<i>Harris on Insects</i>	
For the best dishes or baskets, - -	1st premium, -	\$2,00
	2d premium, -	1,00
	3d premium, -	,50

PLUMS.

For the best collection, - - - -		\$2,00
For the best plates, - - - -	1st premium, -	1,00
	2d premium, -	,50

QUINCES.

For the best dishes or baskets, - -	1st premium, -	1,00
	2d premium, -	,50

In addition to the above premiums, there will be placed at the disposal of the Committee for gratuities, \$10,00.

PEARS AND GRAPES.

Committee.—J. C. Allen, of Leominster ; B. Snow, Jr., of Fitchburg ; Simeon Merritt, of Ashburnham ; Charles J. Billings, J. E. Manning, of Fitchburg.

PEARS.

For the best and largest exhibitions of named varieties, of three specimens each, - - - -	1st premium, -	\$4,00
	2d premium, <i>Harris on Insects</i>	
For twelve varieties, of five specimens each,	1st premium, <i>Harris on Insects</i>	
	2d premium, -	2,00
	3d premium, -	1,00
For six varieties of five specimens each,	1st premium, -	2,00
	2d premium, -	1,50
	3d premium, -	1,00
For three varieties of five specimens each,	1st premium, -	1,50
	2d premium, -	1,00
	3d premium, -	,50
For the best exhibition of twelve specimens of one variety, - - - -	1st premium, -	1,50
	2d premium, -	1,00

No person will be allowed to compete for a premium in more than one of the above classes, with the same specimens of fruit ; and if the number of specimens exhibited does not correspond with these regulations, the fruit will be excluded from competition for the premiums.

GRAPES.

For the best displays of Foreign Grapes,	1st premium, -	\$3,00
	2d premium, -	2,00
	3d premium, -	1,00
For the best displays of Native Grapes,	1st premium, <i>Harris on Insects</i>	
	2d premium, -	2,00
	3d premium, -	1,00

In addition to the above premiums, there will be placed at the disposal of the Committee for gratuities, \$10,00.

ASSORTED FRUITS AND FLOWERS.

FRUIT.

Committee.—Geo. E. Towne, Mrs. Charles Mason, Mrs. Stephen Shepley, of Fitchburg; Mrs. D. L. Abercrombie, of Lunenburg; Mrs. O. Whitney, Jr., of Ashburnham.

For the best dishes or baskets, - -	1st premium,	-	\$2,00
	2d premium,	-	1,00

FLOWERS.

For best displays of named Plants in pots,	1st premium,	-	2,00
	2d premium,	-	1,00
For the best displays of cut Flowers, -	1st premium,	-	2,00
	2d premium,	-	1,00
	3d premium,	-	,50

In addition to the above premiums, there will be placed at the disposal of the Committee for gratuities, \$10,00.

VEGETABLES.

Committee.—John M. Harris, Aaron Wilkins, John Prichard, J. T. Farwell, Hale W. Page, of Fitchburg.

Of Squashes, Pumpkins, Cabbages and Celery, there should be six specimens in each lot; of Cauliflower, three; of Onions, Beets, Turnips and Tomatoes, one peck in each lot; of Field Beans, one-half peck and of Lima Beans, two quarts.

For the best collections of Kitchen Vegetables, - - - - -	1st premium,	-	\$7,00
	2d premium,	-	5,00
	3d premium,	-	3,00
Best collections of Garden Seeds, -	1st premium,	-	5,00
	2d premium,	-	3,00
Collections of Potatoes, - - -	1st premium,	-	2,00
	2d premium,	-	1,00
	3d premium,	-	,50
Marrow Squashes, - - - -	1st premium,	-	1,00
	2d premium,	-	,50

Hubbard Squashes,	-	-	-	1st premium,	-	\$1,00
				2d premium,	-	,50
Crookneck Squashes,	-	-	-	1st premium,	-	1,00
				2d premium,	-	,50
Pumpkins,	-	-	-	1st premium,	-	,75
				2d premium,	-	,50
Cabbages,	-	-	-	1st premium,	-	,75
				2d premium,	-	,50
Cauliflowers,	-	-	-	1st premium,	-	,75
				2d premium,	-	,50
Celery,	-	-	-	1st premium,	-	,75
				2d premium,	-	,50
Onions,	-	-	-	1st premium,	-	,75
				2d premium,	-	,50
Turnip Beets,	-	-	-	1st premium,	-	,75
				2d premium,	-	,50
English Turnips,	-	-	-	1st premium,	-	,50
				2d premium,	-	,25
Tomatoes,	-	-	-	1st premium,	-	,50
				2d premium,	-	,25
Field Beans,	-	-	-	1st premium,	-	,50
				2d premium,	-	,25
Lima Beans,	-	-	-	1st premium,	-	,50
				2d premium,	-	,25
Seed Corn, in Traces,	-	-	-	1st premium,	-	1,00
				2d premium,	-	,75
				3d premium,	-	,50

In addition to the above, there will be allowed for gratuities, 10,00

No person will be allowed to receive more than one copy of *Harris on Insects*; if more than one is awarded, cash will be paid instead, at the rate of \$3,00 per copy; and if any person to whom a copy is awarded already has one, he may receive the copy awarded, or the cash as above, at his option.

BREAD, BUTTER, CHEESE, PICKLES, PRESERVES AND JELLIES.

Committees.—Nathan Upham, Mrs. S. M. Caswell, L. Sprague, Mrs. J. Fisher, Joseph Baldwin, Mrs. L. H. Bradford, Mrs. Abram Osborn, 2d, of Fitchburg,

All Bread must have been baked on the Monday previous to the exhibition by unmarried ladies.

Competitors will be required to furnish a detailed statement in writing of the process of manufacturing Butter, Cheese and Pickles.

White Bread, - - - -	1st premium, -	\$2,00
	2d premium, -	1,00
	3d premium, -	,50
Unbolted Wheat Bread, - - - -	- - - -	1,00
Bolted Rye Bread, - - - -	1st premium, -	1,00
	2d premium, -	,50
Rye and Indian Bread, - - - -	1st premium, -	2,00
	2d premium, -	1,00
	3d premium, -	,50
Lump Butter, not less than 12 lbs., -	1st premium, -	4,00
	2d premium, -	3,00
	3d premium, -	2,00
	4th premium, -	1,50
June Tub Butter, not less than 25 lbs.,	1st premium, -	3,00
	2d premium, -	2,00
	3d premium, -	1,00
Cheese, not less than 50 lbs., - -	1st premium, -	2,00
	2d premium, -	1,50
	3d premium, -	1,00
Pickles, - - - - -	1st premium, -	,75
	2d premium, -	,50
	3d premium, -	,25
Virgin Honey in the comb, - -	1st premium, -	2,00
	2d premium, -	1,00
	3d premium, -	,50

In addition to the above, there will be allowed for gratuities, 10,00

MECHANICS AND MANUFACTURES.

Committee.—E. F. Bailey, R. Wallace, S. W. Putnam, E. T. Miles, C. T. Crocker, of Fitchburg; Amos Whitney, of Ashburnham; F. Wyman, of Westminster.

For the best specimens of Mechanic and Manufactured articles, exclusive of ladies' home manufacture, there will be placed at the disposal of the Committee, the sum of \$100,00.

FINE ARTS.

Committee.—A. Emerson, Mrs. L. P. Comee, Mrs. N. A. Tufts, Mrs. J. A. Marshall, Miss Mary L. Adams.

For the best specimens of Paintings, Drawings, or other kindred productions in the Fine Arts, there will be placed at the disposal of the Committee the sum of \$30,00.

FANCY ARTICLES.

Committee.—T. K. Ware, of Fitchburg; Mrs. M. T. Gardner, of Shirley; Mrs. Abel Marshall, Mrs. Fannie A. Towne, of Fitchburg; Mrs. Giles H. Whitney, of Winchendon.

For the best specimens of Ladies' Useful and Fancy Articles, of their own manufacture, including specimens of nice mending and darning, there will be placed at the disposal of the Committee, the sum of \$30,00

ESSAYS.

Committee.—Kendall Brooks, Alvah Crocker, Abel F. Adams, of Fitchburg.

All persons competing for these premiums must file their Essays with the Secretary on or before the 1st of September. Each Essay is to be marked with a motto or design, and accompanied with a sealed envelope containing a corresponding motto or design, and also the name of the author.

The envelopes of the successful competitors will be opened on the day of the exhibition, immediately upon the announcement of the awards.

For the best Essays on some practical subject connected with Agriculture, deemed worthy of publication in the Society's "Transactions,"

1st premium,	-	\$15,00
2d premium,	-	10,00

COMMITTEES' REPORTS.

Committee.—The President, two Vice Presidents and Secretary.

For the purpose of inducing the Chairmen of the several Committees

to take upon themselves more labor and care in elaborating their reports, the following premiums will be paid :

1st premium,	-	\$10,00
2d premium,	-	6,00
3d premium,	-	4,00

Reports in connection with awards made on the day of exhibition, must be delivered to the Secretary on or before October 25th. All others on or before November 15th.

VINEYARDS.

Committee.—Cyrus Thurston, Charles A. Emory, Wm. H. Vose, Charles Mason, of Fitchburg ; E. S. Merrill, of Winchendon.

For the best Plantations of Native Grapes, containing not less than fifty vines, all having been set since January 1st, 1861,

1st premium,	-	\$20,00
2d premium,	-	10,00

Total amount of premiums offered for 1864, - \$1223,75

PROSPECTIVE.

EXPERIMENTS WITH MANURES.

Committee.—Solon Carter, of Leominster ; Ephraim Graham, of Lunenburg ; Isaac B. Woodward, of Fitchburg.

In accordance with the requirements of the Board of Agriculture, there will be paid for the most thorough, exact and reliable experiments upon the proper depth of applying manures, three premiums, as follows :

1st premium,	-	\$25,00
2d premium,	-	20,00
3d premium,	-	15,00

A circular containing full directions for the performance of these experiments, which were to be commenced in 1863, and continued through a rotation of three years—the premiums to be paid in 1865—will be supplied to all persons wishing to compete, on application to the Secretary.

Entries must be made on or before July 1st, 1864.

APPLES.

For the best Orchards of not less than fifty trees, all having been set after January 1st, 1861, to be awarded in 1865, - - 1st premium, - \$25,00
2d premium, - 10,00

PEARS.

For the best Orchards of not less than fifty trees, all having been set after January 1st, 1861, to be awarded in 1866, - - 1st premium, - \$25,00
2d premium, - 10,00

POTATOES.

For the best seedling Potatoes, to be tested for not less than three successive years, - - - - - \$25,00

 FOREST TREES.

Entries must be made on or before the first day of June.

For the best Plantation of any kind of Forest Trees, suitable for fuel or timber, raised from the seed, not less than five hundred in number, which shall be in the most flourishing condition in the fall of 1868, - - - - 1st premium, - \$25,00
2d premium, - 15,00
3d premium, - 10,00

 LIVE FENCE.

Committee.—A. F. Adams, of Fitchburg; Daniel Putnam, of Lunenburg; J. A. Marshall, of Fitchburg.

For the best experiment demonstrating the feasibility of substituting live farm fence for those in common use; the entries to be made on or before May 1st, 1863, or whenever afterwards planted, and the premiums to be paid in 1868:

1st premium, - \$25,00
2d premium, - 15,00
3d premium, - 5,00

 ICE HOUSES.

For the best constructed Ice House for family purposes, to be tested at least twelve months, - - - - - \$5,00

OFFICERS OF THE SOCIETY FOR 1864.



ELECTED AT THE ANNUAL MEETING, WEDNESDAY, DECEMBER 2, 1863.

OHIO WHITNEY, JR., of Ashburnham, *President*.

J. A. MARSHALL, of Fitchburg,
 GEORGE E. TOWNE, of Fitchburg, } *Vice Presidents*.

L. H. BRADFORD, of Fitchburg, *Secretary*.

T. C. CALDWELL, of Fitchburg, *Treasurer*.

JOEL HAYWARD, of Ashby, S. W. A. STEVENS, of South Gardner, W. B. HOSMER, of Leominster, SOLON CARTER, of Leominster, THOMAS BILLINGS, of Lunenburg, DANIEL PUTNAM, of Lunenburg, JOHN BROOKS, of Princeton, J. T. EVERETT, of East Princeton, ANAN STOCKWELL, of So. Royalston, JAMES O. PARKER, of Shirley, EZRA KENDALL, of Sterling, J. M. SAWYER, of Sterling, WARREN SIMONDS, of Templeton, BENJAMIN WYMAN, of Westminster, DANIEL C. MILES, of Westminster, JOHN CUTTER, of Winchendon, A. F. ADAMS, of Fitchburg, T. R. BOUTELLE, of Fitchburg, JABEZ FISHER, of Fitchburg, LEVI KENDALL, of Fitchburg, ABEL MARSHALL, of Fitchburg, JOEL PAGE, of Fitchburg, JOSEPH UPTON, of Fitchburg, I. B. WOODWARD, of Fitchburg, WM. WOODBURY, Jr., of Fitchburg,	} <i>Trustees</i> .
--	---------------------

ABEL F. ADAMS, of Fitchburg, *Member of the State Board
 of Agriculture, elected Dec. 3, 1862.*

R U L E S .

All teams entered for plowing and for draught, must have been owned by the person entering the same, for at least three months next previous, and the team must be driven, and the plow managed by him or by some one usually in his employ.

Any person competing for a premium, who shall serve on the Committee having charge of the department in which he competes, shall retire from the Committee, while his own competition is in question.

The several Committees will not consider themselves bound by the terms of the above offers, to award a premium for anything which they shall deem inferior.

Any person to whom a premium shall have been awarded, in consequence of any deception or misrepresentation used by him, shall not only forfeit such premium, but afterward be incapable of competing for the Society's premiums.

All persons, (ladies and minors excepted,) not members of the Society, to whom may be awarded a premium or premiums amounting to \$5,00 or upwards, shall receive a certificate of membership for \$5,00, and the balance in cash. If the amount shall be less than \$5,00, a deduction of fifty per cent will be made, unless the individual chooses to make the amount up to that sum, and receive a certificate of membership.

All premiums not demanded on or before November 30th, will revert to the Society.

An extract from the "General Statutes of the Commonwealth of Massachusetts," Page 376, Chapter 66.

SEC. 4. "No society receiving the bounty, shall distribute any part thereof for an animal or article for which a premium is awarded, unless it was produced within the limits of the society, or the animal has been owned and kept within its limits, by the person to whom the premium is awarded, for three months next preceding the award. And no animal or article for which a premium has been awarded to the owners by any such society, shall be considered subject for any further premium of the society, except for qualities different from those for which the former premium was awarded, or for a higher premium, and no animal or article shall be offered for a premium at more than one such society in the same year." * * * *

SEC. 6. "A society which neglects in any year to comply with the laws relating thereto, or with the regulations of the board of agriculture, shall not be entitled to the bounty of the state the year next succeeding."

TRANSACTIONS

OF THE

WORCESTER NORTH

Agricultural Society,

FOR 1864.

PREPARED BY THE SECRETARY.



FITCHBURG:
PRINTED BY E. & J. GARFIELD.
1864.

SECRETARY'S REPORT.



The Twelfth Annual Exhibition of the Worcester North Agricultural Society commenced on the evening of Tuesday, Sept. 27th, in the Town Hall, in Fitchburg. The usual plowing match and show of cattle, sheep, swine, and poultry, was held on Wednesday, the 28th, and being a fine autumnal day a large number of visitors from the neighboring towns thronged our streets. The exhibition and trial of horses took place on Thursday, the 29th, the weather threatening rain, with a strong north-east wind, but few except the admirers of this noble animal were present.

The plowing match took place on land of Capt. David H. Merriam, on River Street. The contest was an animated one, and done in a workmanlike manner, being so central, it was witnessed by a large number of spectators.

The trial of working oxen and steers came off at the usual place near the Unitarian Meeting House, some thirty teams contending for the premiums.

But one string of town teams were present and that from Leominster, and those were creditable to any community, and received the highest premium of the Society.

The show of fruit, flowers and vegetables in the Hall were never exceeded, the works of art on exhibition were numerous, and showed a decided and commendable improvement from the past, and several labor saving machines were on exhibition, all of which found their admirers.

After dinner on Wednesday, the Society met at the lower Town Hall to hear the Reports of Committees, and to listen to remarks of several eminent gentlemen from abroad, who graced the occasion with their presence. The President of the Society, the Hon. Ohio Whitney, Jr., opened the exercises by remarking that the pleasure derived from such exhibitions was mainly owing to the fact of their being home pleasures, and the different objects brought our minds to the loved ones, around our own hearthstones. He congratulated the members on the success which had attended their efforts, and although the sound of war was heard in our beloved land, he believed that there was a prospect of an early peace, and that the interests of agriculture would not in the end materially suffer. He concluded his remarks by introducing PHINEAS STEADMAN, Esq., of Chicopee, delegate of the State Board of Agriculture, who said that he believed farmers were anxious to cultivate too much land, and not careful enough to keep themselves from debt, and to economise in labor and fertilizers. He referred to the careless manner of too many farmers who were not systematic enough to succeed in any kind of business; it was easy to accumulate wealth and become more independent and noble. He urged farmers to carefully watch the stable and poultry yard, and to save everything that would enrich the land, and thought that thirty hens properly kept would make

enough to fertilize two acres of corn. He urged that our animals should be improved in breed, that labor saving machines should be used, that farmers should encourage their sons to remain on their farms by adopting more enterprising methods of agriculture.

CHARLES L. FLINT, Esq., Secretary of the State Board of Agriculture, spoke in regard to the location of the new agricultural college, and stated the action of the Trustees in relation to locating the same at Amherst. He believed the decision of the trustees was correct, and given after the most careful consideration of the matter, and appealed to farmers to more carefully develop their farms, in the introduction of new crops and labor saving implements, as the surest means to improve and increase agricultural interests.

Interesting remarks were also made by N. S. HUBBARD, Esq., of Brimfield, President of the Worcester South Agricultural Society; CHARLES E. MILES, Esq., President of the Worcester Agricultural Society; COL. IVERS PHILIPS, of Worcester, and C. C. ESTY, Esq., of Framingham. After which reports were made from the different committees.

On the second day of the exhibition the Society met again at the Hall, and were congratulated by the President on the fine display of horses and colts on exhibition, the best by far ever made by this Society.

MR. STEADMAN said he made a slight omission in his remarks yesterday to the Society, viz: that he was very much gratified with the exhibition, particularly the articles in the Hall, and with the order and regularity of all of our arrangements.

No public address, as formerly had been provided for but arrangements had been made for the reading of the

Essay, written by our young townsman MR. GEORGE F. WORKS, which received the highest premium of the Society, but for want of time this was deferred and is published in our transactions.

The attendance from abroad exceeded all former exhibitions, our thoroughfares being crowded with strangers, and the attendance in the Hall surpassing all like occasions. The receipts for tickets sold amounted to more than on any previous year.

The Ashburnham Band discoursed sweet music on both days, and thus added to the interest of this our anticipated annual holiday.

Great credit is due to the President of the Society, for the success of the exhibition, and to Col. JOHN W. KIMBALL, Chief Marshall, and his assistants, for the prompt manner in which all of the arrangements were carried forward to completion.

ESSAY.

BY GEORGE F. WORKS.

MOTTO—"The Earth is not yet finished."—T. S. KING.

THE SOIL OF NEW ENGLAND.

OUR farms are becoming tenantless. The lung tissues of society supplying fresh blood to the throbbing heart-centres, the cities, are becoming fewer. Almost whole hamlets slough away and leave bad cavities, in which the life-blood is not eliminated. We seek the homes of our ancestors; their roof-trees fell long ago; a few straggling rosebushes still blush beside the old garden wall; an aged pear, or plum, sprung from a seed in the old Colonial times, still yields to the blandishments of the Blossom-Week; but desolation reigns around and kine quietly crop the herbage around the old hearth-stone. Many of the wind-swept hills were inhabited of old. Is the race less hardy now? Old cellar places meet one at every turn; places where the roots of civilization had fastened themselves and died out. Their toppling chimneys are monuments which bear sad evidence of the scattering of home circles.

Small farms are absorbed in large. The tendency is toward the aggregation of estates; toward turning tilled into grazing land. The hills of Scotland were formerly peopled with an industrious and loyal peasantry. Now

they are but a broad sheep-pasture ; the large landed proprietors have uprooted the small farmers ; sent them into the cities, into other business, and beyond the seas.

When Winthrop was governor of Massachusetts, he sent out a party of explorers into the interior of the State. They returned saying that the land was not susceptible of settlement beyond the falls* of the Charles River. But when the guns began to rattle at Bunker Hill, towns far to the west of the falls, had whole companies behind the breast-works on that memorable morning; and now descendants of those men have homes beyond the Falls of St. Anthony. Spreading over New England they reared houses, the sills of too many of which rotted long ago.

If we take our stand on a hill; here, there, beyond, and everywhere, we see the work of their hands. There is hardly a foot of land but has been cleared by their axes. Those Cyclopean Walls stretching over the land, binding the Earth in strong bonds of civilization, are the results of their labor. But they had farm-houses where now we see none. Saplings have overgrown fields, subdued so painfully with the toilsome wooden plough. Brambles grow in the garden of the old homestead. Houses which sent men to Bunker Hill, we should not dream ever existed. Fields which supplied iron and albumen for the red blood of our ancestors, are overgrown with thistles. To-day we cut our fire-wood on what was once a garden.

We look forth upon the landscape thinking how little of the soil of New England is under cultivation. Though the furnaces of factories and work shops are insatiable ; though the devouring steam engine sweeps

*Newton Falls.

the land in every direction ; there is more wooded land in Massachusetts to-day, than there was fifty years ago. If all these signs indicate that the fewer acres are tilled better, or by the application of more science, as great products are obtained from less land, it might be well; but they speak of the identification of Massachusetts with manufactures ; of swarms that have overspread the West, pouring from the New England hive, and of the abandonment of agriculture for other pursuits.

Manufactures cannot furnish a basis for a perfect state. In the World's History those states which have been founded principally on Agriculture, have been alone enduring. Agricultural Rome lived long, and hardened her muscles by war, until overcome by fresher agricultural nomadic blood, and the back-bone of the Southern Rebellion has been southern-corn. Any other states lack the deep roots, which can alone give them long existence. A merchant state is subject to the shifting caprices of trade. England owes her freedom from invasion more to her agriculture, than to the fleets which cruise the British Channel ; and the shores of the Mediterranean are studded with ephemeral merchant states. In no two centuries has the political conformation of the world been the same. It has been continually shifting through growth, decay, conquest and diplomacy. A move on the political chess-board ; the rise, or the overthrow of a nation ; the discovery of a passage ; the cutting a ship canal ; a little jostle, making new avenues of trade, dry up the old channels of commerce, and leave the states through which they flowed, high and dry upon their margins. When goods were transferred from the backs of camels to the holds of ships, the cities of the East, through which the commerce

of India had flowed instead of going around Cape Good Hope, were ruined. A limb is lopped off, the sap flows elsewhere supplying new shoots.* The commerce of Salem has been drawn off by Boston, while Massachusetts is to-day boring the Hoosac to keep New York from sucking the life-blood of her own metropolis. If the arteries of trade are cut off, and from these alone the nation is supplied, it dies. If the sinews of a state are its manufactures, and its markets are destroyed by a ruinous competition, it no less withers. Material has been brought two thousand miles and has been made into cloth in Lowell, to be worn out by laborers in Southern cotton-fields; Missouri with her Iron Mountain, has gone to the East for her iron ware; and the West, with coal and iron inexhaustible, has from time immemorial cut her grain-fields with Eastern sickles, and now cuts them with Eastern reapers. The citizen of New Orleans sweetens his coffee with sugar refined in Boston or Portland; while New England does not raise wheat enough to sustain herself a month. We do not wish to enter into any politico-economical discussion, except as to points bearing upon this subject; but the regeneration of the South by free labor may make it more self-dependent. The West may yet turn her wondrous resources to account, and manufacture much of what is, or has been bought of New England. She only waits for skilled mechanics. We have not yet felt what changes this war may bring upon us. Labor has been turned from the requirements of peace, to the

* The shape of a tree depends upon the flow of sap. Pinch the end of a limb and we send the sap from the production of wood to the formation of fruit spurs. We cut an incision in a vine, below the cluster, the descending sap turns aside and the cluster doubles in size, but the branch is paralyzed.

production of the munitions of war ; and the hammer rings upon the sword, instead of the scythe. The long results we cannot foresee. But should New England lose her markets of the South and West, or a ruinous competition be instituted with the laborers of Europe, then nothing could save the manufacturing cities of New England from ruin, but a population clustered thickly upon her soil, feeding their manufacturers, and buying their manufactures.

The soil of New England is thin, but underlying our fields and farms, we have others which we never saw. The rootlets of our cultivated plants wait patiently and silently, for the riches so long shut away from them to be unlocked ; for the salts, the phosphates, the sulphates, and silicates to be disintegrated by the action of the weather. They are waiting for the deep plough to expose them to the decomposing influence of heat, frost, air and rain-water. The plough, for centuries has been coming nearer and nearer ; increasing the size of bulb, root and tuber ; giving more range and food to the rootless, which forming little voltaic batteries, do their share toward preparing their own food ; admitting air to the soil, aiding thus in the decomposition of humus. First came the anchor-shaped hook of wood, which we see on Roman coins, and which Cincinnatus was using when called off to defend Rome against the Gauls. But the progress was slow ; and two thousand years after, the plough which Israel Putnam left in furrow, when called off to defend Boston, bore too great a resemblance to it. It is true that the decaying vegetation of cycles of years, has spread the Western fields with humus apparently inexhaustable, but who would seek there what he might find in his own vineyard by digging. It would be a

concession to ignorance and indolence ; and in future years, that which seems inexhaustible wealth of soil, will be exhausted by the spendthrift style of agriculture followed there. Already have the worn-out fields of Virginia, come begging to New England for agriculturists to restore their fecundity ; agriculturists, with the science and industry which a hard rocky soil engenders ; with industry, produced by surmounting difficulties ; science, called in to supply natural deficiencies. Not those who have the most means, have accomplished the greatest ends. The prisoner, who with a knife and bit of box-wood made a perfect watch, accomplished more than he might under less painful difficulties. Not that country with the finest agricultural advantages, has produced the best farmers. The South Sea Islander has but to stretch forth his hand, and the overladen bough satisfies his wants. If the soil and climate do all, men do nothing, like spoiled children of fortune.* Those stones useless as they seem to be, have called forth much mechanical skill. The lever and fulcrum are thrown aside, and powerful engines lift ponderous boulders from their bed of centuries, upon which the plough-points have been blunted so long. In pulverizing the soil, in exposing its particles to the action of the elements, the agriculturist becomes a chemist. Whether he knows it or not, he is a chemist, with the fields for his crucible, the sun and winds for a furnace and blow-pipe. He mixes the soil with ingredients in such proportions as the plants he cultivates requires, trusting to the weather to form the proper disintegrations and

* LIEBIG speaks of a place in Europe where the inhabitants live on milk and sweet chestnuts ; the ease in the production of which, is the cause of their INTELLECTUAL WEAKNESS.

combinations. He feeds his plants as he feeds his animals. A pigeon, fed on food in which there is no phosphate of lime, dies; its bones become too frail. The stalks of grain, grown on land where silicate of potash is wanting, break down under the weight of their own ears. Oats grown on sand treated with nitric acid, will not blossom; and an oak is dwarfed to the size of a fern by starvation.

The soil of New England is stony; but our ancestors reared whole families on the stoniest of it. The plough of the son glides smoothly through soil from which those double walls and huge moles of innumerable cobblestones have been taken, at the expense of the strength of the ancestor. Should we and those who come after us, practice their patient industry, our soil might get rid of the reputation of being stony. It is rough; but the Swiss peasants build like eagles on the heights of the Alps, and bring up their children on giddy cliffs where none beside, but the chamois, climb; and in some places in Italy, the women carry up soil in baskets placed on their heads, to form terraces on the sides of the mountains. It embraces sandy plains; but the plains of Belgium were sandy, but by the application of agricultural science, this sand, once almost as unpromising as Cape Cod, now sustains a population sufficient in numbers to quash the theory of Malthus.

In draining a marsh, we add to the available surface of the world. The Duke of Devonshire, who drained the Bedford Level, and the Emperor of France, who* drained the marshes of Salone, were public benefactors.

*While in exile, the Emperor was asked why he paid so much attention to the study of books on DRAINING. "I am fitting myself to become Emperor of France," said he, "and one of my first acts shall be to drain the marshes of Salone," and so it was.

Much of the soil of New England is undrained, cold, unproductive, wet, insoluble. But these marshes are magazines of humus; rich mines which the rivulets have carried there from the decaying leaves of centuries of vegetation, rich as the most fertile soil of the West, but now the abode of reptiles, bearing nothing but coarse grass, and none of the constituents of the blood, to produce which, Liebig says, is the true object of agriculture; nothing to support animal life; nothing of the iron, phosphorus and gluten of the human frame-work; nothing to support the brain which moves the world. It is in this, that "Man may be called to be a co-worker with the Infinite Mind;" a promoter of the great plan, which was commenced when God separated the waters from the land. The noble consciousness of this power over the soil, which is little short of that of creation; the feeling that one has made land do its share toward the support of civilization, renders the making of soil thus easily, infinitely better than the seeking it ready made.

The soil of New England is hilly and stony, thin and sandy, but it has done its fair share toward the agricultural reputation of the nation. There are better farmers in New England to-day, than in more favored portions of the country. They are not generally men of one idea. The various kinds of crops their farms produce, drive them out of that, and they generally know more or less of the theory of Rotation of Crops, deep and shallow ploughing, application of fertilizers, underdraining &c. These things are of very little interest to the farmers of the West, who cultivate their specialties, and whose soil *will* produce a crop, provided the seed is sown.

The hills of Worcester County produce better butter and cheese than the hills of Ayr. The soil of Cambridge, better pears than France the home of pears. Hovey's Seedling, the result of careful horticultural science, originated there to be known beyond the Atlantic; and the Hubbardston Nonesuch, Roxbury Russet, and Rhode Island Greening are household words. There is no better latitude than that from Boston through to the lakes, for the growth of apples. Exporters say that apples produced there are less liable to decay. Very much farther north, the seasons are too short, and much farther south, they are too long. The trees grow to wood, form too few fruit spurs, and store too little starch, gum and sugar, for the support of blossoms the ensuing year. Thoreau says in the Atlantic Monthly: "The trees of New England embrace all the most valuable kinds on the continent. I never have a Botanical specimen sent to me, but I am sure to find something like it in my rambles; and I even expect to find the *victoria regia*, on Concord River."

But what must be done to arrest the decay which in many places is going on; which, while the land around our cities is becoming a garden, is blighting some country neighborhoods. What must be done to keep the sons of New England on their native soil; who now yield to the allurements of the fertile West; pour into cities, or adopt any other pursuit rather than cultivate their native fields.

In farming there has been too great a strain upon the muscles, and too little upon the brain; too much physical, and too little intellectual labor. The muscles have become stiffened, while the brain has suffered by inactivity. Says Channing: "Manual labor is a great good,

but in so saying I must be understood to speak of labor in its just proportions. In excess it does great harm. It is not as good when made the sole work of life. It must be joined to high means of improvement, or it degrades instead of exalting. Man has a various nature which requires a variety of occupations and discipline for its growth. Study, meditation, society, relaxation should be mixed up with his physical toils. He has intellect, heart, imagination, taste, as well as bones and muscles, and he is grievously wronged when compelled to exclusive drudgery for bodily subsistence." We have had too much art and too little science. Farming has been too empirical. We have been guided by a sort of independent empiricism, rather than by enlightened science. Not that a well instituted experiment for deciding any particular point should be disparaged, but life should not be *all* experiment. Too many of our farmers toward the close of life, look back upon their earlier efforts as having been guided by a policy essentially bad. "Time and capital," says Liebig, "are wasted in experiments." A few successful results, cannot establish a reliable rule. We have decried the long experience of scientific men, called it "book knowledge," "impractical," forgetting that these very theories are the result of practice, and that our own practice has a theory to it. The mechanic, receiving the data and formulæ of forces and agencies as true, works straight forward to a result, the truth of which he does not doubt. The farmer, though the laws governing the growth of a blade of corn, more impalpable perhaps, but not more unreal, are old as the world, is slower to receive them—the laws of motion are no more certain and fixed than those of chemical affinities; the bino-

mial theorem no more a fixed fact, than that gypsum (sulphate of lime,) when sown upon land, will react upon the ammonia in the air.—Therefore Agriculture, which supports all, has been slow to take its stand among the sciences.

Boys, deeming agriculture the lowest of arts, the meanest of vocations, have sought the professions; the ministry, and have been forced to turn to the woods and fields for their noblest, sublimest lessons; the study of medicine, and in their study of chemistry, have come to find themselves better farmers than ever, and that a better remedy than any in the whole *pharmacopœia*, is the healthful exercise which out-door labor gives.

It is a pity that the beauties of farming should be better seen from other stand-points, than the one the farmer himself occupies; that they who are shut up inside four walls of city brick, should know more of chemistry, botany, mineralogy, entomology, than those whose daily occupation brings them so much in contact with these sciences; that through their distant and casual glimpses, they should know more of the book of nature, than those before whom its pages lie constantly open.

The agricultural college will do something toward remedying this. It will be a guiding light, a starting point, a repository where all that is known of tillage shall be embalmed; which shall elevate the mind to its proper sphere in farming; which shall be a place where men may make sure use of the experience of the past, as stepping stones toward something higher. It is not our purpose to enter into any argument for agricultural colleges, but it seems that New England with her mixed crops, her soil so undeveloped and so capable of

development, will absorb them into her educational system with alacrity. They may educate men away from the plough, but they *need* not do so. If a boy is to become a merchant, he prepares himself not only practically, by an education gained in the counting room, but also in the broad principles of the law, and political economy. The lawyer must become versed in jurisprudence, ere he dares trust himself at the bar. The physician must get deep into pharmaceutics and pathology; and one by one almost all civilians have been dropped, during this war, from the roll of high officers. To-day, what men seemed to doubt at first, is plain, that men who have studied the theory of war deeply, are best military leaders. But the agriculturist has generally been forced to pick up his knowledge as best he could, at the plough, in the newspapers, and by dear experience.

Scientific farming has been brought into great disrepute by its votaries, or those who pretend to be such. Some of these might be called amateurs, anything but scientific farmers. Many of these try to till the soil on the strength of theory alone, and fail. The large expenses incurred, and the small results obtained by these, have caused men to shun anything which savored of science. Many of these having large fortunes, have tilled the soil for show, pleasure and experiment, rather than profit. There are others who have farmed for a livelihood but, ignorant either of the theory or practice of farming have seized upon a hobby, and in following it, have set at naught the rules of economy and judgment. These hobbies have led them to cultivate crops unsuitable to their localities. Grass is the principal crop in New England; the cattle, beef and grain we raise, are accessaries; and any departure from a policy

favoring the production of grass, except in localities warranting a change, is a loss. We sow our grain, that the land may become regenerated for the ensuing crop of grass. We cannot compete with the West in raising corn. A pound of beef raised here costs more than a pound brought from there; and a horse, raised in Massachusetts, costs twice what one costs raised in Vermont. Investing in fancy fertilizers, has almost ruined the fortunes and the farms of some. Our bogs lie much nearer than Peru, and by adding alkalies their humus becomes soluble. It is a pity, besides being a proof of bad judgment, to let our resources run to waste. A farmer who lets his manure heaps dry up in air, the ammonia fly off to benefit another man's growing crops, while he incurs heavy expenses in buying fancy fertilizers, must make up his mind to poor success. Guano is the opium of tillage, producing illusive and dazzling results, but exhausting the productive capacity of the soil, by means of its alkalies—We have in mind a farmer scientific, and yet economical and practical, who tills the soil scientifically and profitably; who culls from the jarring evidence of the experience of others, all that is worth preserving; who makes the rules of nature his own, gathering up all so that nothing is lost, and into whose business the capital of thought enters largely—The agricultural college cannot, it is true, give men common sense where that is wanting; but it may help give an impulse, a zest to a pursuit, which has been so unattractive to so many; teach the farmer to appreciate the dignity of his position, as owner of his domain in fee simple; keep the sons of farmers upon their native fields, and tend to stanch this hemorrhage. But not to colleges alone

must we look for a remedy. The majority of our farmers must serve out a long apprenticeship at the plough and the hoe. *Thought* must be called in to our aid. "Labor becomes a new thing when thought is thrown into it, when the mind keeps pace with the hands." We must learn the *why*, as well as the *how*. We are acquainted with the plough as an implement of art; it also has a scientific aspect. The sons of farmers must be fascinated with beauties surrounding their toils, of which they never dreamed. The fields must be tilled intelligently, and not blindly. The more we know of how God works, the better will be our own success and delight. Let the farmer become a man of taste; let his house contain a library; let him become familiar with the microscope and the wonders it unfolds; let his grounds be tastefully laid out—taste, like civility, costs little.—Even laying stone-wall might be pleasant, and we might forget our thin-worn fingers, when it will contribute toward adorning our homesteads. We know a tasteful farmer, who is laying a fine face-wall in front of his house. An awkwardly shaped cavity in it remains unfilled, until a nicely fitting stone is dug from his fields. He fulfills a double purpose; his wall becomes beautiful and his fields smooth.

We are influenced imperceptibly by our surroundings. The face of the country, whether hilly or flat, has a vast influence on the character of its inhabitants.* The manner in which our homes are adorned, has a great influence on their inmates. The child commences its education before it can talk; and unattractive surroundings bear a strong, early and constant influence, toward

*A writer says that a flat country produces FLAT HEADS. Byron is said to have owed his poetical proclivities to a residence in youth among the Scottish Mountains.

educating boys away from the plough. The farmer stamps his character upon his fields and home, in unmistakable hand-writing. By the arrangement of his hedges, orchards, shrubbery and shade trees, he makes landscape. He is a painter in living colors. He has a pleasant or an unpleasant home, almost as he pleases. Taste is consistent generally with good judgment; and the practice of it does not require wealth, or a high education. Smooth fields are more productive than rough ones, and a tastefully arranged farm will sell for much more, than one upon which less taste has been shown. There has been very little expense incurred in making this difference; a little *thought* has been expended; a plan worked out, formed perhaps, while others were idle. We are idle for an hour; we might have planted a tree which would have made us happier for a life-time. Not every tree is useless which does not bear tangible fruit. We admire the taste of our ancestors, who planted the elms before our doors. They have been bearing the fruit of joy and beauty a hundred years. The cherries and apples please our coarser tastes; these our more *refined* sensibilities. The Washington Elm has borne as much fruit as the Stuyvesant Pear tree. Let the farm be a place to live upon and not a machine to run for a limited period, out of which to wring a living. Let it be such a place, with such attractions that its sons when called off to other pursuits, may look back upon the time spent in the old homestead as the happiest part of their lives; that the ship-wrecked sailor may cling more hopefully to his plank remembering it; that the merchant may keep a vision of it before his mind, unobscured by those of wealth and gain, and in the evening of his life may wander back to beautify with his fortune his early home.

ESSAY.

ON THE EDUCATION OF THE OX.

BY A. B. DAVIS, OF SHIRLEY.

“Their strength, or speed, or vigilance, were given
In aid of our defects.”—[COWPER.]

The employment of the term “Education,” I am aware, implies Mentality and a certain capability of moral progression; but it might as well be at once understood that while taking issue with this position I recognize and accept the implication of truth, in the remark attributed to Sidney Smith, that “there is no other animal but man to whom mind appears to be given for any *other* purpose than the preservation of the body.” Twenty years’ experience with beasts of burden, has put me in possession of facts which prove them susceptible of education and moral improvement to a degree considerably outrunning the popular apprehension. To elucidate these facts and call attention to a new source of good and pecuniary wealth to the Agriculturist, is the object of this paper. Of course it is not practicable to give the full *modus operandi* of training upon the basis of the positions assumed, but I hope by originality of treatment to awaken interest in a science which must, I am persuaded, form no unimportant branch of the practically progressive farmer’s education.

Much of the mal-treatment to which Domestic Animals are subject, is owing to ignorance of the true conditions of successful management; but I propose to urge the discipline of animals solely on the score of *economy*, leaving out of view, for the present, the *moral* aspect of the case. *Pecuniary profit* we suppose to be the farmer's object in the breeding and rearing of animals. Let us see; a man breeds and rears a pair of steers for ordinary farm work. Other things being equal, a pair "trained up in the way they should go" would not attain greater *size* than if left in natural and lawless freedom; but symmetrical development and ease of management being *desiderata* with New England teamsters, early and judicious training becomes a pecuniary consideration.

The *sine qua non* of successful ox-training involves the following conditions: 1st, Likeness of temperament and disposition; and 2d, Equality of size, strength, and age. These conditions are placed in the order of their importance. Many a poor beast is made to suffer a kind of martyrdom from being "unequally yoked" by his ignorant master. And, as a teamster of some experience, I feel warranted in affirming my belief that no small number of our class become martyrs to the ignorance above mentioned. The hired teamster being required to perform a certain amount of work he is not at liberty to correct any vices or defects in the team given him, but must worry through his time, often under the most trying circumstances. "It is hard learning old dogs new tricks," and none are more likely to appreciate the significance of this proverb than teamsters placed in situations where they have to deal with ill-bred, mis-matched, and vicious animals. Where the standard of "education" is unworthily low, people are wont to

regard all reformatory efforts as utopian and not likely to promote their interests in any direction. But what are the facts? Comparing trained with untrained cattle the former will command, in the general market, from five to twenty-five dollars more per yoke than the latter. And in localities where beauty and facility of management go at their maximum price the difference is greater. The common remark with intelligent buyers is—“Money is no object—we are willing to pay for cattle that are well matched, smart, and handy.” But there are minor advantages growing out of judicious discipline which are not so readily apprehended, and which are not so easily made appreciable. I will notice a few of the most prominent. One fair resultant—and which will be readily granted—is the *facility of movement* acquired in the process of training. One of the most common wheel conveyances in use upon the farm is the Ox-cart; and it is no inconsiderable point of economy to be able to change cattle off and on to this vehicle easily and rapidly. In busy seasons, what is the advantage of smartness and dexterity in a hired man, if the farmer cannot make it available through his team, with which the man is so constantly required to operate? Among all the varied positions in which wagons and carts require to be placed, there often exists the necessity of “backing;” and none but the best trained cattle are able to execute this maneuver with facility. Indeed, an acquaintance with working cattle extending over a period of twenty years has failed to furnish a single instance of a pair perfect in this respect, who were not the subjects of constant and persistent training and use, *from calves upward to four-years-old*. Almost every farm barn thirty years ago was constructed so that “backing

in" was often necessary, and yet few oxen of that day were capable of doing it. In the majority of cases where such a maneuver became necessary the oxen were taken off the "spear" or tongue and brought "right about face," to push or shove the load in. This is always a difficult operation, requiring considerable time, and one can readily perceive the economy of discipline, which enables the farmer to back any load his cattle are able to draw. But the advantages of discipline in draft are not less apparent, whether in cases where "a long pull, a strong pull, and a pull altogether" is requisite, or where an ox's entire strength is needed for a single spring or lift, (as in turning a large stone,) the superiority of the trained ox is so marked as to impress every impartial and unprejudiced witness. With such there is no "baulking"—the common causes of it being removed. Cattle properly mated will generally pull together, and generally *all they can*, if their driver so signifies; and though his judgment may be at fault, it is very seldom, indeed, that they would get abused, or be required to pull a third time. With mis-mated cattle it often happens that one is spirited and ambitious, while the other is "slow moulded" and easily discouraged in a bad place. Such a pair in the hands of a hasty-tempered, injudicious man soon becomes worthless for most kinds of labor. The energetic, "high strung" ox after a time gets discouraged from having to receive much of the whipping which his mate deserves, and much ill-treatment which neither of them deserves. But perhaps the most marked distinction between trained and untrained oxen is observable upon the *road*. Speed and endurance are qualities valued in cattle designed for hauling and "holding back" upon New

England roads. All the varied minutiae of superior training are requisite here, and some of them may be seen in the best light. But perhaps I have made the desirableness of thorough, judicious training sufficiently apparent without further illustration; and, grasping at the hope lodged in that "perhaps," I take courage to assert that a yoke of educated oxen, (other things being equal,) will perform one-third more work with one-fourth less "wear and tear," than a pair only trained up to the common standard. Besides this there is the physical and moral effect upon the driver, which is above pecuniary price.

Re-asserting what appears in the first part of this paper, viz: that likeness of disposition and equality of size and strength are indispensable conditions, I proceed to some practical hints on the early training of animals adapted to farm labor. While urging the propriety of early matching and training I feel bound to state what appears to be the only objection to such a course; viz: the risk of a dissimilar development—either in point of size, strength, organization, or temper—in the process of growth. And as some security against such a risk, the employment of a sagacious, experienced person in the selection of calves, presents itself as a suggestion worthy of adoption. The farmer must expect to give himself some trouble at the outset, and will often find it necessary to search among the herds of his acquaintances, at a considerable expense of time; and when successful must not grudge what may seem a sum out of proportion to what his experience may suggest as the maximum return. Having selected and brought his calves together, let them be kept so during the entire period of training. The manner of rearing calves

I shall not discuss, not deeming it relevant to the subject of this essay; if, however, they be well kept their size and strength at three months will admit of their being yoked and exercised in some of the more simple movements—such as turning *each way*; starting and halting at command; backing, and “holding up;” “standing out” and “standing up,” separately, &c., &c. In all these primary exercises the experienced teamster sees the chief advantages of early training. At this stage animals are supple and docile, and the *whip* almost finds its “occupation gone”—at least there is no need of severity. One of the most difficult branches of the science may then be taught with assurance of complete success. The art of backing, properly, is seldom taught, and more seldom acquired. Regarding this subject of “backing,” I beg leave to submit a few illustrations.

An ill-founded notion seems to have possessed the minds of not a few farmers and teamsters, touching the *ability* of the ox to force a load back by the horns. To this prejudice I attribute the general failure of working cattle in this particular. It is however an easily demonstrated fact that Nature has lodged more strength in the *neck* and head of the ox, than in his breast and shoulders. This is patent to the most casual observation of bulls and oxen when *fighting*. The size and strength of the *horns* of the ox also favor this view. In some parts of Europe this principle seems to be better understood: hence we find the ox and the cow appropriately harnessed for draft by the horns, and executing their tasks with apparent ease. Having exercised sufficiently without draft, let the calves then be hitched to a miniature cart or wagon and be instructed in all the manœuvres required of oxen. At first the load should be

light, and when backing, care should be taken not to injure the embryo horns. At this point, too, let the "sidewise movement" receive some attention. As this maneuver is not generally understood, I will describe it, as well as I may verbally. Every teamster who understands his business knows that one of the best tests of superior training is to be found in the manner in which a pair of cattle approach and place themselves astride a cart-spear, or tongue. None save those most thoroughly drilled can do it handsomely. When approaching the cart the "nigh" ox should be made to gradually place himself parallel to the spear, (the "off" one following suit,) and when sufficiently near, should step *sidewise*, (his fore and hind legs simultaneously) *over the spear*. This is rather difficult of execution, and should be taught *prior* to any requirement of use. In other words let cattle be taught to move "sideways" squarely, *to* and *from* the driver, as if on parade. This the maneuver once taught, is of incalculable value in all multiform exercises of ox-labor. The same rule reversed will apply when approaching the spear from the *left* hand.

Perhaps in this place I should indicate my preference among the *whips* known to teamsters. In some parts of Worcester County drivers use a whip made of common shoemaker's thread, by means of a very simple machine, which any farmer's boy can construct. This cord, which is very hard and stiff, and of uniform size, is looped on to the stock, and "let out" as it wears up. For cheapness, durability, and efficiency, I know of no whip to compare with it, and yet I hesitate to recommend its general use, for the reason that it can be made *too harmful*. It is an error to suppose that an ox-whip should be either large or long: the *stock*

may be a few inches over three feet—the *lash* about *six inches shorter*. Such a whip can be easily flourished, and will inflict greater punishment when required, than one much larger. In the matter of castigation as a means of breaking and governing refractory animals, it is not easy to draw the line between “a necessary act,” which Cowper says “incurs no blame,” and severity which would be obnoxious to the charge of cruelty. As I cannot dwell at length upon this most vital question, I must content myself with stating and briefly illustrating the great governing principle, which is—recognition of the intelligence, apprehensiveness, docility, and *dignity* of the animal. Farmers! let never a wanton or wicked blow be struck, nor a harsh, unmeaning sound be made; let nothing be done at the instance of mere caprice, or passion; cause all persons in any way employed with your teams to recognize and regard this principle. If, after sufficient trial, an animal proves incorrigible, by every principle of morality, by every consideration of wisdom and *economy*, release him from the yoke forever. It often happens that a man possesses an odd steer which he thinks too handsome to kill, and so sets himself to find a “mate.” If such a steer at the age of three years old proves, on trial, turbulent and ugly-natured, it will be nearly an impossibility to break him into sobriety and usefulness. There is so much wildness, will and muscle about steers that have run till three years old, that the task of breaking them is a formidable one, and not generally advisable.

After cattle have been taught to “lay up” close to the spear when backing, they should, constantly be required to place themselves right, before attempting the exercise, and should be looked after while performing. In this

place I would caution drivers against a common error—the practice of *going before* cattle to back them. Oxen thus treated never perform the operation handsomely. While backing, the driver should keep a little *back* rather than forward of the ox's middle, as there is a tendency to “wing out” when handling a heavy load. When using a cart or wagon upon the farm, and especially around barns, or in the door yards, the teamster should never *ride*, or allow any one else thus employed to do so. This common practice is fatal to the discipline of trained cattle. The driver should walk steadily by their side, not often using the whip, nor speaking in any but a firm, distinct manner, and *manifesting chiefly by motion*, his will. In the matter of ox-yokes my experience has not failed to impress me with the need of a revolution—most of those in common use being too *heavy*, “bungling,” and every way inconvenient. These remarks specially apply to those made by Nourse, Mason & Co. Indeed I have met with but very few of unexceptionable pattern, and those were manufactured in a part of Worcester County where ox-training is carried to a point much nearer perfection than in any other locality of which I have knowledge.

REPORTS OF COMMITTEES.



BLOOD STOCK.

The Committee on Blood Stock have attended to their duties and find the following entries: Two Durham Bulls, three Ayrshire Bulls, two Alderney Bulls, three Ayrshire Cows, and one Ayrshire Heifer. The show of Blood Stock was not as good as last year, owing to the absence of the herds from Millbury, and Framingham. The Committee think that no permanent improvement will be made in our stock until the Society cease giving premiums on grade Bulls. The only sure way of improving our stock is by the use of thoroughbred males, and we think if the grade Bulls are excluded we shall soon have a better class of animals at our shows.

The Committee on Blood Stock award the following premiums:

DURHAM BULLS.

1st, to Joseph Upton, Fitchburg, for his Bull "Red Rover," 2 years 2 months old,	\$5,00
2d, to T. Clark, South Royalston, for his Bull 1 year 5 months old,	3,00

AYRSHIRE BULLS.

1st, to N. C. Day, Leominster, for his Bull 1 year 6 months old,	5,00
2d, to Albert Stratton, Leominster, for his Bull 2 years old,	3,00

ALDERNEY BULLS.

- 1st, to Nathan Caswell, Fitchburg, for his Bull
 "Coaster," 1 year 4 months old, \$5,00
- 2d, to Nathan Caswell, Fitchburg, for his Bull
 "Jewell," 1 year 4 months old, 3,00
- We also recommend a gratuity of \$5,00 to N. C.
 Day, of Lunenburg, for his three Ayrshire Cows.

ABEL F. ADAMS, *for the Committee.*

GRADE, OR NATIVE BULLS.

The Committee on Grade Bulls award the following premiums, to wit:

BULLS TWO YEARS OLD AND UPWARDS.

- 1st, to I. B. Woodward, Fitchburg, for his
 7-8 Durham Bull, \$5,00
- 2d, to Abel F. Adams, Fitchburg, for his
 grade Durham Bull, 3,00

YEARLING BULLS.

- 1st, to J. P. Reed, Princeton, for his one
 year old Bull, 4,00

BULL CALVES.

- 1st, to Josiah Page, Westmister, for his 3-4
 Durham Calf, 4,00
- 2d, to Lorrison Stockwell, Fitchburg, for
 his 7-8 Durham Bull Calf, 3,00

WM. WOODBURY, JR., *Chairman.*

MILCH KINE.

Premiums awarded on Milch Kine by the Committee on the same.

HERD OF COWS.

1st, to Mandell G. Everett, Princeton,	\$10,00
2d, to J. P. Reed, Princeton,	7,00
Joseph Upton, Fitchburg, gratuity,	4,00

COWS.

1st, to Alvah Crocker, Fitchburg, whose small cow gave 479 pounds of milk in six days,	5,00
2d, to Willard H. Lowe, Fitchburg,	4,00
3d, to N. B. Reed, Princeton,	3,00

HEIFERS—TWO YEARS OLD.

1st, to S. M. Caswell, Fitchburg,	4,00
2d, to George M. Gregory, Princeton,	3,00
3d, to J. E. Merriam, Princeton,	2,00

The Committee recommend a gratuity of \$2,00 each to Reuben Vose, Jr., and Timothy Clark, for their extra grade of Durham Cows, not coming within the rules, were not entitled to compete for the regular premiums offered by the Society, otherwise they would have ranked high on the premium list. It is cause of regret that members debar themselves from high monied premiums by neglecting to comply with the necessary regulations of the Society, when with very little pains they may obtain all the information that would crown their efforts with success.

J. T. EVERETT, *Chairman.*

HEIFERS.

The Committee on Heifers make the following awards :

TWO-YEARS OLD.

1st, to Aaron Jones, South Royalston,	\$4,00
2d, to J. P. Reed, Princeton,	3,00
3d, to T. Clark, South Royalston,	2,00

The Committee recommend a gratuity of \$1,00 each to Joel Page, of Westminster, and Anan Stockwell, of South Royalston.

YEARLINGS.

1st to Geo. M. Gregory, of Princeton,	3,00
2d, to Nathan B. Reed, of Princeton,	2,00
3d, to Charles F. Woodbury, Winchendon,	1,00

The Committee recommend a gratuity of \$1,00 to Aaron Jones, of So. Royalston, and George M. Gregory, of Princeton.

EZRA KENDALL, *Chairman.*

HEIFER CALVES.

The Committee on Heifer Calves more than four months old, award the following premiums :

HEIFER CALVES MORE THAN FOUR MONTHS OLD.

1st, to Joel Page, Fitchburg,	\$3,00
2d, to Luke Wellington, Ashby,	2,00
3d, not awarded.	

RAISED BY HAND.

1st, to Chas. F. Woodbury, of Winchendon,	3,00
2d, to J. P. Reed, Princeton,	2,00
3d, to Alvin Ward, Ashburnham,	1,00

GEORGE O. SKINNER, *Chairman.*

WORKING OXEN.

The Committee on Working Oxen award the following premiums :

1st, to N. B. Reed, Princeton,	6,00
2d, to Geo. Miles, Westminster,	5,00
3d, to Mandell G. Everett, Princeton,	4,00
4th, to Lorrison Stockwell, Fitchburg,	3,00
5th, to Thomas Gibson, Fitchburg,	2,00

E. D. WORKS, *for the Committee.*

STEERS MORE THAN TWO YEARS OLD.

The Committee on Steers more than two years old award the following premiums :

THREE-YEARS OLD.

1st, to Daniel S. Eaton, Fitchburg,	\$5,00
2d, to J. E. Merriam, Princeton,	4,00
3d, to G. S. Beaman, Princeton,	3,00

The Committee recommend a gratuity of \$2,00 to Alfred A. Marshall, of Fitchburg, and to S. G. Mirick, of Princeton.

TWO-YEARS-OLD.

1st, to Reuben Vose, Jr., Winchendon,	4,00
2d, to Mandell G. Everett, Princeton,	3,00
3d, to Josiah Page, Westminster,	2,00

TRAINED STEERS.

1st, to Alfred E. Skinner, Princeton,	4,00
2d, to Nathan B. Reed, Princeton,	2,00
Herbert Hastings, Lunenburg, gratuity,	2,00

ABEL MARSHALL, *Chairman.*

YEARLING STEERS.

The Committee on Yearling Steers and Steer Calves, award the following premiums, to wit :

YEARLING STEERS.

1st, to Reuben Vose, Jr., Winchendon,	\$3,00
2d, to Thomas Billings, Lunenburg,	2,00
3d, to G. S. Beaman, Princeton,	1,00

TRAINED YEARLINGS.

1st, to J. P. Reed, Princeton,	3,00
--------------------------------	------

CALVES RAISED BY HAND.

1st, to J. P. Reed, Princeton,	5,00
2d, to N. B. Reed, Princeton,	3,00
3d, to Reuben Vose, Jr., Winchendon,	1,00

TRAINED CALVES.

1st, to J. P. Reed, Princeton,	3,00
--------------------------------	------

JOSIAH PUFFER, *Chairman.*

FAT CATTLE.

The Committee on Fat Cattle submit the following report :

That four Oxen, four three year-old Steers, and three Cows were offered for premium.

And we have awarded the first premium for Fat Oxen, of \$8,00, to Thomas Gibson, for his off ox.

The second and third premium of \$5,00 and \$3,00 to Abel Marshall, for his off and near ox.

The second premium to J. T. Everett, of \$3,00, for his Black Cow, and third premium of \$2,00, for his Devon Cow.

The first premium of \$6,00 to Sewell G. Mirick for his off steer.

The second premium of \$4,00 to Daniel S. Eaton, for his off steer.

Per order of the Committee,

CYRUS KILBURN, *Chairman.*

SWINE.

Your Committee on Swine after substituting Frank Sheldon, of Fitchburg, and Levi Jackson, of Westminster, in place of John L. Cummings of Ashburnham, and Wm. H. Brown, of East Princeton, proceeded to business and reported as follows :

BEST BOAR MORE THAN ONE YEAR OLD.

2d, to George Miles, Westminster, \$3,00

FAT HOGS MORE THAN EIGHT MONTHS OLD.

1st, to Samuel M. Dole, Fitchburg, 4,00

3d, to Willard H. Lowe, Fitchburg, 2,00

FAT PIGS LESS THAN EIGHT MONTHS OLD.

2d, to A. B. Damon, Fitchburg, 2,00

3d, to Samuel Farewell, 2d, Fitchburg, 1,00

We also recommend a gratuity of \$2,00 to Jonathan Whitman, for a breeding sow and litter of pigs.

The Boar of Jos. Waterhouse is very much of a hog and had he not taken the first premium last year would have been entitled to it at the present fair.

Mr. John Lowe entered for exhibition nine fat hogs, and we regret very much that they were not on the ground, as probably no man in Worcester North can show nine better ones.

All of which is respectfully submitted.

JOHN P. SABIN, *Chairman.*

STALLIONS.

The Committee on Stallions report that they have awarded

To Adam Thompson, of Littleton, for his Stallion Great Eastern, 5 years old 1st premium,	\$10,00
To Horace H. Brown, of Fitchburg, for his horse Dandy, 6 years old, 2d premium,	6,00
To Lewis Ware, of Lunenburg, 3d premium,	4,00
To John Brooks, of Princeton, for his Horse 4 years old, 1st premium,	6,00
To Dr. A. Hitchcock, of Fitchburg, for best 3 year old,	4,00
To Mandell G. Everett, of Princeton, for best 2 year old,	4,00

The Committee regret that the exhibition of this class of animals was so small that they did not feel justified in awarding all the premiums appropriated for the purpose by the Society.

JAMES O. PARKER, *Chairman.*

MARES AND SUCKING COLTS.

The Committee on Mares and Sucking Colts award the following premiums, viz :

BREEDING MARES.

1st, to Edmund Houghton, Lunenburg,	\$6,00
2d, to Alfred Hitchcock, Fitchburg,	4,00
3d, to J. E. Merriam, Princeton,	2,00

SUCKING COLTS.

1st to Edmund Houghton, Lunenburg,	3,00
2d, to Ohio Whitney, Ashburnham,	2,00
3d, to Alfred Hitchcock, Fitchburg,	1,00

S. W. A. STEVENS, *Chairman.*

DRAUGHT AND FAMILY HORSES.

The Committee on Draught and Family Horses award the following premiums :

DRAUGHT HORSES.

1st, to S. M. Dole, Fitchburg, best pair draught horses,	\$6,00
2d, to Walter Whitney, Fitchburg, 2d best pair draught horses,	4,00

SINGLE HORSES.

1st, to Walter Whitney, Fitchburg,	5,00
2d, to Jonathan Whitman, Fitchburg,	3,00
Gratuity to Dr. Fisher, and Jonas Pierce,	\$2,00 each.

FAMILY HORSES—PAIRS.

1st, to Lyman Patch, Fitchburg, double team,	7,00
2d, to Ira Carleton & Co., Fitchburg, double team,	5,00
Gratuity to Wm. Brown, Winchendon, double team,	3,00

FAMILY HORSES—SINGLE.

1st, to Frank E. Brown, Fitchburg, single team,	5,00
2d, to Abel Marshall, Fitchburg,	3,00

LEWIS WARE, *Chairman.*

COLTS.

The Committee on Colts award the following premiums :

THREE YEAR OLD GELDINGS,

1st, to John Cutter, Winchendon,	\$4,00
2d, to Joel Hayward, Ashby,	2,00
George Miles, Westminster, gratuity,	1,00

THREE YEAR OLD FILLIES.

1st, to E. E. Boyden, Leominster,	\$4,00
2d, to J. H. Reed, Bolton,	2,00

TWO YEAR OLD GELDINGS.

1st, to Porter F. Page, Westminster,	4,00
2d, to Alfred S. Houghton, Lunenburg,	2,00

TWO YEAR OLD FILLIES.

1st, to J. H. Reed, Bolton,	4,00
2d, to F. Nourse, Sterling,	2,00

YEARLING COLTS.

1st, to J. H. Reed, Bolton,	4,00
2d, to J. B. Proctor, Fitchburg,	2,00
E. C. Farwell, Fitchburg, gratuity,	1,00

GARDNER MERRIAM, *Chairman.*

SHEEP.

The Committee on Sheep, having attended to their duty, award the following premiums :

FLOCKS.

1st, to James McIntire, Fitchburg,	\$10,00
------------------------------------	---------

BUCKS.

1st, to A. Stockwell, South Royalston,	5,00
2d, to A. M. Sawyer, Fitchburg,	3,00

COSSETTS.

1st, to Samuel Heywood, Ashby,	2,00
2d, to L. Stockwell, Fitchburg,	1,00
W. G. Wyman, Fitchburg, gratuity,	3,00

EPHRAIM GRAHAM, *Chairman.*

POULTRY.

The Committee on Poultry submit the following as their report :

There were entered on the Secretary's book two lots of Turkeys, one of Ducks, and seven of Chickens of different varieties. Your Committee have awarded the following premiums :

DUCKS.

1st, to A. Crocker, Fitchburg,	\$2,00
--------------------------------	--------

TURKEYS.

1st, to A. M. Sawyer, Fitchburg,	2,00
2d, to Geo. B. Woodward, Fitchburg,	1,00

BARN YARD FOWLS.

1st, to Mary Miles, Westminster,	2,00
2d, to Jabez Fisher, Fitchburg,	1,00

GRATUITIES.

To N. C. Day, of Lunenburg,	,75
To Thomas Gibson, Fitchburg,	,50
A. P. Kimball, Fitchburg,	,50

Respectfully submitted,

WARD M. COTTON, *Chairman.*

TOWN TEAMS.

The Committee appointed to award premiums on Town Teams have attended to their duty, and make the following award :

There was but one team entered for premiums and the Committee awarded that to the town of Leominster, the first premium of \$25,00.

J. M. SAWYER, *Chairman.*

PLOWING—DOUBLE TEAMS:

The Committee on plowing with double teams award the following premiums :

1st, to Mandell G. Everett, Princeton,	\$7,00
Edwin A. Goodrich, Fitchburg, gratuity,	5,00
Silas Pratt, Fitchburg, gratuity,	3,00

ALVIN M. SAWYER, *Chairman.*

PLOWING—SINGLE TEAMS.

The Committee on plowing with single teams report as follows :

Whole number of teams entered for premium were eight. The teams were on the ground promptly ready for the work, and the contest was entered into with spirit and animation by the plowmen. The contest throughout was characterized by order and quietness.

We award the premiums as follows :

SINGLE TEAMS.

1st, to Hubbard B. Fuller, Fitchburg,	\$7,00
2d, to Sewall G. Mirick, Princeton,	5,00
3d, to Abel Marshall, Fitchburg,	3,00

And your Committee would award a gratuity to J. E. Merriam, of Princeton, of \$3,00 for the workman-like manner in which he performed his work with a beautiful pair of three-years-old steers, although entered as oxen.

MINORS WITH STEERS.

1st, to G. B. Woodward & J. M. Pierce, Fitchburg,	6,00
2d, to Geo. E. Adams & Albert Mirick, Princeton,	4,00

JAMES P. PUTNAM, *Chairman.*

HORSE TEAMS.

The Committee on Horse Teams award the following premium :

1st, to Walter Whitney, Fitchburg, \$7,00
STEPHEN SHEPLEY, *Chairman.*

ROOT CROPS.

Your Committee on Root Crops have to lament the state of things in their department, there being but a single entry, where there should have been at least twenty-five, and that one was of a character which had there been the competition there should have been, might not have appeared in this report. To Cyrus Kilburn, Esq., of Lunenburg, belongs the credit of rescuing this important product from the mortification of not appearing at all in this report, he being the only competitor, and notwithstanding his field of Potatoes might have been excelled by many not entered, yet under the circumstances, we feel that justice will warrant us in awarding to him the first premium.

1st, to Cyrus Kilburn, Lunenburg, for his field
of Potatoes, \$4,00
WM. BAKER, *for the Committee.*

CYRUS KILBURN'S STATEMENT.

POTATOES.

To the Committee on Root Crops—

Gentlemen: The soil on which I raised my Potatoes was a sandy loam, and was in grass for several years previous. They were planted the 20th of May, cut in

one or two pieces to a hill, about ten bushels to the acre; the quantity of manure was sixteen loads, costing about \$24; the kind was the Garnet Chili Potatoes, costing \$12 for seed and planting; they were hoed twice, and for cultivation cost \$10, and were dug the 25th of Oct., costing to harvest them \$8. The early part of the season was very dry and they suffered by the drought—saw no signs of disease, and it is said this variety has never shown any. The crop on forty rods weighed 3360 lbs. as weighed by the Committee.

VEGETABLES.

The Committee on Vegetables make the following awards:

KITCHEN VEGETABLES.

- 1st, to A. Crocker, Fitchburg, best collection, \$7,00
 2d, not awarded.
 3d, to Benj. Safford, Fitchburg, 2d best collection, 3,00

POTATOES.

- 1st, to Gardner Merriam, Leominster, 2,00
 2d, to Rodney Wallace, Fitchburg, 1,00
 3d, to N. C. Day, Lunenburg, ,50

GARDEN SEEDS.

- 1st, to N. C. Day, Lunenburg, 5,00

HUBBARD SQUASHES.

- 1st, to N. C. Day, Lunenburg, 1,00
 2d, to Jabez Fisher, Fitchburg, ,50

CROOKNECK SQUASHES.

- 1st, to N. C. Day, Lunenburg, 1,00
 2d, to Rodney Wallace, Fitchburg, ,50

PUMPKINS.

- 1st, to A. B. Damon, Fitchburg, ,75
 2d, to Thos. S. Eaton, Fitchburg, ,50

VEGETABLES.

45

CABBAGES.

1st, to George E. Towne, Fitchburg, ,75

CELERY.

1st, to H. S. Smith, Fitchburg, ,75

TURNIP BEETS.

1st, to Jacob Haskell, Fitchburg, ,75

2d, to David Battles, Fitchburg, ,50

ENGLISH TURNIPS.

1st, to Levi Kendall, Fitchburg, ,50

2d, to Jacob Haskell, Fitchburg, ,25

TOMATOES.

1st, to Thos. Palmer, Fitchburg, ,50

FIELD BEANS.

1st, to Ohio Whitney, Jr., Ashburnham, ,50

2d, to Charles Mason, Fitchburg, ,25

LIMA BEANS.

1st, to Charles Mason, Fitchburg, ,50

SEED CORN.

1st, to Levi White, Lunenburg, 1,00

2d, to Levi Kendall, Fitchburg, ,75

3d, to James McIntire, Fitchburg, ,50

GRATUITIES.

E. Bird, Leominster, collection kitchen vegetables, 2,00

Daniel North, Westminister, " " 1,00

George Miles, Westminister, " " 1,00

Alfred A. Marshall, Fitchburg, melons, ,50

Cyrus Kilburn, Lunenburg, " ,25

Jabez Fisher, Fitchburg, yokoharra squashes, ,50

Cyrus Thurston, Fitchburg, crookneck squashes, ,25

N. H. Richardson, Fitchburg, cabbages and carrots, ,25

A. S. Dole, Fitchburg, seed corn, ,25

J. T. FARWELL, *for the Committee.*

APPLES.

Three hundred and one plates exhibited by twenty competitors.

The Committee on Apples make the following awards:

APPLES.

For the best and largest collection of named varieties,		
1st, to Addison Hubbard, Fitchburg,		\$4,00
2d, to J. A. Marshall, Fitchburg,	<i>Harris on Insects</i>	
For twelve varieties five specimens each,		
1st, to G. P. Hawkins, Fitchburg,	<i>Harris on Insects</i>	
2d, to Benjamin Safford, Fitchburg,		2,00
3d, to Charles Flagg, Sterling,		1,00
For six varieties of five specimens each,		
1st, to Jabez Fisher, Fitchburg,		2,00
2d, to B. F. Lewis, Fitchburg,		1,50
3d, to A. S. Dole, Fitchburg,		1,00
For three varieties of five specimens each,		
1st, to N. C. Day, Lunenburg,		1,50
2d, to R. Wallace, Fitchburg,		1,00
3d, to G. F. Nutting, Fitchburg,		,50
For the best twelve specimens of one variety,		
1st, to N. C. Day, Lunenburg,		1,50
2d, to J. Fisher, Fitchburg,		1,00

PEACHES.

For best collection, premium not awarded.

For best dish,

1st, to B. Safford, Fitchburg, lemon peach,		2,00
2d, to J. Fisher, Fitchburg, late crawford,		1,00
3d, to A. Hubbard, Fitchburg, early crawford,		,50

PLUMS.

For best collection, premium not awarded.

For best plate,

1st, to Ohio Whitney, Jr., Ashburnham, green gage, 1,00

2d, not awarded.

QUINCES.

For best dish,

1st, to C. A. Emory, Fitchburg, 1,00

2d, to J. Fisher, Fitchburg, ,50

GRATUITIES ON APPLES.

Ezra Kendall, Sterling, 1,50

Ephraim Graham, Lunenburg, 1,00

Nathan Caswell, Fitchburg, 1,00

Levi Kendall, Fitchburg, ,75

F. A. Whitney, Fitchburg, ,75

T. R. BOUTELLE, *Chairman.*

PEARS AND GRAPES.

The Committee on Pears make the following awards :

PEARS.

For best and largest exhibition of named varieties,

1st, to Jabez Fisher, Fitchburg, \$4,00

2d, to Alvah Crocker, Fitchburg, *Harris on Insects*

For best twelve varieties of five specimens each,

1st, to Jonas A. Marshall, Fitchburg, *Harris on Insects*

2d and 3d, not awarded.

For best six varieties of five specimens each,

1st, to James Bennett, Leominster, 2,00

2d, to Thomas R. Boutelle, Fitchburg, 1,50

3d, to Addison Hubbard, Fitchburg, 1,00

For best three varieties of five specimens each,

1st, to Z. F. Young, Fitchburg,	\$1,50
2d, to George F. Nutting, Fitchburg,	1,00
3d, to Benjamin Safford, Fitchburg,	,50

For best twelve specimens of one variety,

1st, to Nathan Upham, Fitchburg,	1,50
2d, to Charles H. Colburn, Leominster,	1,00

GRATUITIES.

Cyrus Thurston, Fitchburg,	,75
Abel Simonds, Fitchburg,	,75
Sylvester Sawyer, Fitchburg,	,50
N. C. Day, Lunenburg,	,50
B. F. Proctor, Fitchburg,	,50
Wm. H. Harris, Fitchburg,	,50

GRAPES.

For best displays of foreign grapes, no premium awarded.

For best displays of native grapes,

1st, to Jabez Fisher, Fitchburg,	<i>Harris on Insects</i>
2d, to George E. Towne, Fitchburg,	2,00
3d, to Charles A. Emory, Fitchburg,	1,00

GRATUITIES.

Benjamin Safford, Fitchburg,	1,00
Alvah Crocker, Fitchburg,	1,00
Ohio Whitney, Jr., Ashburnham,	1,00
Wm. H. Harris, Fitchburg,	,50
James Bennett, Leominster,	,50
Joseph Sawyer, Fitchburg,	,50
Thomas Palmer, Fitchburg,	,50
Samuel Farwell, 2d, Fitchburg,	,50

CHARLES MASON, *Chairman.*

VINEYARDS.

Ever since "Noah began to be a husbandman, and planted a vineyard," the Grape has occupied a place more or less prominent among the cultivated fruits in some portions of almost every civilized country. Growing, (as history informs us) in its highest perfection in Syria and Asia—this luscious fruit and the unrivaled beverage it produced, early recommended it to the special notice of the patriarchal tillers of the soil, who planted vineyards long before any considerable attention was given to the cultivation of other varieties of fruit. As civilization advanced, the vine accompanied it first to Egypt, Greece and Sicily, and subsequently to Italy, Spain, France and Britain, to which the latter place it was introduced by the Romans about two hundred years after the Christian Era. The Grapes of the old world were celebrated for their excellent wine producing qualities, and the products of vineyards, in the same localities at the present day, still retain this distinguishing characteristic. In France the cultivation of the vine is very extensive. Goodrich informs us, that 5,000,000 acres are devoted to that object, and that the estimated value of the products in 1854 amounted to \$130,000,000. Although in no other country is there so large a part of the territory devoted to this object. Still, in nearly all the minor states of Europe the Grape furnishes no very inconsiderable part of the products of the soil. Plants and seeds of foreign varieties were brought to this country by Colonists during the first fifty years after its settlement, but no considerable attention seems to have been given to their propagation until after the close of the Revolutionary War. After

our forefathers had succeeded in throwing off the British yoke, and obtained a name among the nations, their attention began to be more especially directed to the cultivation of various kinds of fruit. Among these (though not the most prominent,) was the Grape. Experience soon showed that these foreign varieties would not withstand the severity of our stern New England winters without protection; and that our short and variable summers, and early autumnal frosts, presented an unsurmountable barrier to their successful cultivation, (except under glass.) These efforts in relation to Grapes of foreign origin having thus far failed, the attention of the fruit grower has been wisely directed to the examination of our more hardy native varieties. These, especially such as are found growing on the borders of our New England streams, are more or less characterised by the hardness of their pulp and a peculiar foxy-flavor which renders them as a dessert fruit, somewhat unpalatable. Experience however has shown that these objectionable qualities are susceptible of being materially modified by cultivation. By a careful selection of the most promising for propagation and by reproduction, several new varieties have been obtained within the last few years of acknowledged excellence, and well adapted to our New England climate. Among those now propagated in this vicinity, (more or less approved,) are the Concord, Delaware, Hartford Prolific, Diana Rebecca, and Early Amber.

The two first of the above named are undoubtedly the best and most profitable for the market. Possessing the three important qualities of being hardy, good bearers, and holding their fruit well. Several other new varieties, not yet fully tested, have recently been

brought to notice, Rogers' *Hybred* and Grant's *Ionia* and *Israella*, are all highly recommended and will no doubt soon occupy a high position in the catalogue. In most of the middle, and some of the southwestern states, vineyards on something of an extended scale have within a few years been planted and are now under successful cultivation. Many valuable varieties which cannot be successfully grown in New England, succeed well on the banks of the Ohio. The Catawba seems to take the lead in that locality, producing an abundant crop of well ripened fruit and richly rewarding the husbandman for his labor. In California, also, where the vine even in its wild uncultivated state bears the choicest fruit, vineyards have within a few years past been planted, which are said to produce in abundance, Grapes unsurpassed both in size and in flavor. This will undoubtedly eventually become one of the largest fruit growing states in this country. Wine has already been produced there, which is said to compare favorably with the best of foreign importation.

These unmistakable demonstrations in regard to the propagation and improvement of our native Grapes will, we trust, be a sufficient guarantee for awakening in the minds of this community, a much livelier interest on this subject—that instead of one vineyard (without a competitor) entered the present year, there may be found in 1865 a goodly number to contend for the promised awards.

It need scarce be said, that in selecting a site for a vineyard in this latitude, a warm sunny exposure should always be secured. A spot somewhat elevated above the surrounding level, sloping a little to the south or southeast is the best. It should also be one not liable

to be affected by the early frost, otherwise the crop will be in danger of being cut off before coming to maturity. All cultivators of the vine agree that a light, dry, warm soil is the best. If it can be found, a soil composed of decaying calcareous rocks should be selected. This should be well worked to the depth of eighteen inches at least, and enriched with well decomposed manure to which should be added, (if not already contained in the soil,) some portion of lime and crushed bones—some wood ashes will also be beneficial, especially in a dry season. If the ground is well prepared and enriched at the outset, an annual top-dressing will be all that will be required to keep the vineyard in a flourishing and healthy condition for two or three years.

Although much has been written and said in regard to the best method for cultivating the Grape, we apprehend, by a large part of the community, the subject is still very imperfectly understood. Any careful observer cannot fail to notice, that most of the vines planted in our gardens, and about our dwellings, have been suffered to retain all their native habits. Instead of being judiciously trimmed and properly trained, as they should be every year, they are permitted to grow unmolested, not only about the arbor or trellis provided for their accommodation, but if by chance a tree comes within their reach, they are allowed to stretch forth their tendrils to the nearest twigs and thus find ample means to assist them in their rambles, and gratify all their roving propensities. All who suffer their vines thus to wander unmolested, have good reason to expect their crop will be a failure. Every Grape-grower, whether on a larger or smaller scale, for the vineyard or garden, should have a suitable trellis or arbor, beyond which the vine

should never be suffered to climb. Late in autumn after the vine has shed its leaves, or in the early part of winter, it should be properly trimmed; and, if so situated that it can be conveniently done, be taken from the trellis and laid on the ground to remain through the winter, with some slight covering to hold it in place. This is all the protection that will be required for the hardy varieties, to enable them to withstand the most severe winter. Early in the spring before the buds have become much swollen, they should be taken up and carefully arranged again on the trellis, there to be trained through the growing and fruiting season. For further reliable information in relation to this subject, see the very full and clear statement of Dr. Fisher.

The Committee have attended to the duty assigned them, by carefully examining the only vineyard presented. Finding it highly satisfactory in regard to the location, general arrangement, and mode of cultivation, and in a flourishing and healthy condition,

We have awarded to Jabez Fisher, of Fitchburg, the first premium of \$20,00.

CYRUS THURSTON, *Chairman.*

DR. JABEZ FISHER'S STATEMENT.

GRAPES.

The specific plantation of native grapes which I enter for premium, consists of sixty-one vines, set six feet apart and trained upon a single trellis. The whole number are Concords, and were planted in the summer of 1861, having been grown from single eyes, started in pots under glass the previous March. An under-drain was put in directly underneath where the vines were

afterward set. The ditch was dug three feet deep, and the throat of the drain formed by placing flat stones like the two sides of a steep roof, upon the bottom. Stones and rubbish were then filled in to within 15 inches of the surface. Fresh bones with the flesh attached were spread liberally upon the rubbish and the earth levelled. The soil is a strong, deep loam, on a somewhat retentive bottom, having a southeasterly slope. The row runs very nearly north and south, the vines being planted on the east side of the trellis about a foot distant, and leaning towards it.

In the autumn of 1861, the vines were all cut down to within two or three buds of the ground and left without protection. In the spring of 1862 a trellis was built of posts and wire. The posts were chestnut, 2 x 2, except one at each end, which was 3 x 5, and braced in a foot. The posts were set ten feet apart, two and a half feet deep, and were dipped in gas tar before setting. I would now set them but six feet apart. Four strands of No. 12, annealed, iron wire were attached to the posts by staples made of the same wire. The lowest wire is 18 inches from the ground, and the others are placed at distances of 14 inches, so that the top wire is just five feet from the surface of the soil. These wires are coated with Paraffine varnish to keep them from rusting. During the summer of 1862 a single shoot was trained perpendicularly from each vine, all other growth being rubbed off as soon as it started, and all laterals were pinched back to one leaf, and this operation was repeated and continued as long as they made new growth.

In the autumn of 1862 the first vine at one end of the row was cut off at the third wire of the trellis.

The second vine was cut at the first or bottom wire, the third vine at the third wire, the fourth at the first wire, and the remainder in the same way, alternating between the first and third wire. Any vine that had not made a good growth was again cut back as in 1861 nearly to the ground. None of them received any protection during the winter but remained attached to the trellis the same as during growth. In the summer of 1863 a shoot was taken from each of the two upper buds, and trained horizontally along the first, or third wire as the case might be, in opposite directions, each vine forming a **T**. No other growth was allowed, and the laterals on these horizontal shoots or arms were pinched back as they had previously been on the upright shoots the year before. These arms were allowed to bear one or two clusters of fruit each according to their strength.

In the autumn of 1863 the arms were cut back, varying with their condition, but where they had grown vigorously, from two to four feet were left. Every thing else was removed so that the vines showed nothing but a stick in the form of the letter **T**. No winter protection was used. The training during the past summer, 1864, has been as follows: From each of the horizontal arms, upright shoots have been allowed to grow as often as every nine inches on the average, the intention being to have eight upright shoots or spurs upon each arm when the latter shall have reached its full length of six feet. The shoots from the buds on the end of the arms, were trained horizontally for the purpose of extending them. As soon as the clusters of fruit buds on the upright spurs were sufficiently developed to show their character, the end of the shoot was pinched off so as to leave but one leaf beyond the last

good cluster, all small or imperfect ones being removed. If the spur showed no fruit, it was allowed to grow all the same, and was pinched at about the same length, or a little shorter. When these spurs had grown sufficiently, they were tied to the second or fourth wires, as they belonged to the lower or upper set of vines. The horizontal shoots from the end of the arms were allowed to grow until they had met the adjoining ones, and two or three joints beyond, at which point they were pinched off. It would be more correct to say that they were pinched off at seven feet from the upright stem of the vine. All laterals, wherever found, were successively pinched off as often as they made a new growth, so as to leave but one additional leaf only each time.

The vines have been pruned this autumn as follows: The horizontal shoot which is now the continuation of the arm, was cut off at five feet and about eight inches from the central stem. Each upright spur is cut off so as to leave but two buds, not counting the undeveloped buds around the junction of the spur with the arm. The ground has all this time been cultivated with a horse hoe, except the space between the trellis and the trunks of the vines, which is kept loose by the hand hoe.

To exhibit this mode of treatment in full, it will be necessary to give the proposed operations for one year more. The vines are to be laid upon the ground, before it freezes up permanently, and kept there by a little soil thrown upon them. Next spring just before the buds start, they are to be tied to the trellis, and from the upright spurs, the upper bud will be allowed to grow and show fruit. If from any cause this bud fails

to start, the lower one will take its place, but otherwise the latter will be rubbed off. One of the best of the base buds which were only partially developed the autumn previous, will be permitted to grow, while all the others are to be rubbed off. Both these shoots will be tied to the wire immediately above, and pinched off the same as the past season. That portion of the arm which grew the past summer, will form spurs precisely as the first portion has already done. In the autumn of 1865 the old upright spur, with the shoot that has grown from its top bud, bearing fruit, will be cut entirely away, leaving only the shoot that grows from the bud at the base, and that shoot, or spur as it will then be, will be cut back, leaving but two buds as before. The spurs on the end of the arm, are to be pruned in the same manner, and then the vine is fully established, the same course of pruning and training being followed out year after year.

My reasons for adopting this method and its advantages over others, I will endeavor to give briefly. It is very well known that whoever plants a grape vine in a fair soil, gets, the third, fourth and fifth year, one or two very fine crops, but after this time the fruit depreciates in size and quantity, and although the vine may be sufficiently vigorous, the crop seldom equals that of its earlier years. The reason I conceive to be this: When a vine is three or four years old it makes a growth of wood, varying from two to ten or more feet in length on the different shoots. The best fruit buds are somewhere near the centre of these shoots. Everybody knows that it is common practice to prune grape vines every winter, but without a thought of the why, one cuts one way and one another. The usual plan is to

employ in substance one of two modes. One consists in cutting out a portion of the long shoots or canes entirely, the other in cutting off the greater length of all the canes. In the first case there will be a good show of fruit the following year, because a part of the best fruit buds are left, but if the same system be followed out for a few years, the vine requires more and more room to spread itself in every direction. The best fruit is borne at a distance from the centre, and mostly at the top of the vine if any portion of it grows upright, and after a few years the parts of the vine nearest the root become barren, and the fruit is borne only at the extremities. This system must finally run out for want of room, and will not answer for vineyard cultivation.

In the second plan above mentioned, if all the shoots are cut away for the most of their length, the best fruit buds are lost, and the result is necessarily a poor crop. The vine extends continually, but more slowly than in the other case and is otherwise less satisfactory.

To overcome these difficulties, that is to get strong fruit buds, and at the same time to keep the vine always at home, I have adopted the plan described. I am not aware that anything connected with it is original with me, for it has been in use essentially for many years. Its practical working is this: As the strength of a vine is expended principally at its extreme ends or top, the whole vine is made to be the top by the system of horizontal arms from which the upright fruit bearing spurs grow, no one having any special advantage over another. The two arms being of equal length and bearing the same number of spurs, are equally balanced. The effect of pinching off the ends of the bearing shoots

early in their growth, is to cause the remaining buds in the axils of the leaves, which are to produce fruit in the following year, to rapidly develope, and form fine, large fruit buds. The continual pinching of laterals, prevents the vine from neglecting these buds during the whole of the growing season. The same causes also operate to develope the fruit which is upon the same spur, and it grows very large, and ripens evenly and early. Another effect produced is, that the leaves that are left to grow, being few in number, grow very large and healthy. A single large leaf is of more value than a number of small ones, and is more able to resist disease and especially premature decay. When we come to prune in the autumn, although we are obliged to cut away some very fine buds, yet the second one from the base of the spur is nearly or quite as good as any of those removed, and will give very fine clusters. Many of mine this year weighed upwards of 13 ounces each. The principal advantage, even above all the others, is that the vine is always kept within a small compass, and is a permanent affair; inasmuch as it will bear as much fruit, and carry as much foliage at five or six years, as at 50 or 100. I think that the special efforts of the grape grower should always be directed to producing the buds for his future crop, the present one being already mostly beyond his control.

I have not usually given the Concord any winter protection. It is generally so well ripened and so hardy in its nature, as to endure ordinary winter weather without protection; but in unfavorable seasons it is liable to be insufficiently ripened to withstand the influence of extreme cold without suffering, and in such cases there follows a partial or even a total failure of a

crop. In fact the winter of 1860-1, showing a temperature of 22° below zero on the 8th day of February, killed all the wood which stood above the snow line on that day. This might not have happened, and probably would not, if the wood had been well ripened in the autumn previous. The autumn of 1860 was very wet, and slightly cooler than the average of seasons, and the foliage of grape vines and even apple trees was killed by a severe freeze on the 1st day of October, while still green and growing. Vines planted in the way I have described, can be easily laid down at a cost of not more than one day's labor of a man and a boy for an acre, which is a very cheap insurance, considering the risk of so valuable a crop. My vines are planted on the east side of the trellis, a foot from it, and are trained in a slanting direction to the lower wire. Above that point they are carried up on the west side of the trellis, so that when pruned, and the ties cut, they fall toward the ground on the west side by their own weight. A boy can hold them down, while a man throws three or four shovelfuls of soil upon them to hold them in place.

Although I have entered and described the vines trained to a single trellis, yet it is in most respects like fifteen others in the same vineyard, except that about one half of them are one year behind in the time of planting the vines. A portion of it was originally planted for other and different modes of training, all of which I became convinced must fail in the end. I therefore replanted with young vines, rather than attempt to retrain the old ones, and removed the latter last autumn to give way to the former. In so doing, I sacrificed the prospect of a crop of some tons of grapes this year, feeling that the end justified the means, and

that the longer I put off the sacrifice, the greater it would be.

I think it is an erroneous idea that a grape vine necessarily requires a very rich soil for its successful culture. My vineyard has had no manure other than the bones before mentioned, for four or five years, and is now too rich for the Concord, which comprises ninety-five per cent. of my vines. Some of the slower growing varieties require a considerably better soil. A soil too rich in fertility, forces an enormous growth of wood, every shoot of which must be pinched back, thus vastly increasing the labor without any compensating result. If this pinching is neglected the succeeding crop will be more or less a failure. A rather poor soil is preferable for this reason, and if too much so to produce satisfactory growth, a top dressing will be a sufficient means of obviating that difficulty. In view of these considerations, I would not trench or plow the land for a vineyard of Concord grapes more than twelve inches deep. I prefer that in this latitude, where the heat of the five growing months, from May 1st, to Sept. 30th, averages only 64.11 degrees, that the great majority of the roots should lie near the surface. A dry bottom however, either through natural or artificial drainage, is essential to the seasonable maturity of both wood and fruit.

It may be proper to state that although the vineyard is now of four summer's growth, yet it was planted with vines one year younger than are ever purchased for that purpose.

ASSORTED FRUITS AND FLOWERS.

The Committee on Assorted Fruits and Flowers, award the following premiums:

ASSORTED FRUITS.

1st, to Ohio Whitney, Jr., of Ashburnham,	\$2,00
2d, to B. F. Lewis, of Fitchburg,	1,00

FLOWER POTS.

1st, to F. E. L. Beal, of Lunenburg,	2,00
--------------------------------------	------

COFFEE PLANT.

Gratuity to Levi Downe, of Fitchburg,	,50
---------------------------------------	-----

CUT FLOWERS.

1st, to F. E. L. Beal, of Lunenburg,	2,00
2d, to Mrs. James F. Monroe, of Fitchburg,	1,00
3d, to Mrs. G. H. Howe, Sterling, two boquets,	,50
Gratuity to Mary Lowe, Fitchburg, plate,	,37
Gratuity to Mrs. L. Brigham, do., crop,	,37
Gratuity to H. L. Smith, do., boquet,	,37
Gratuity to Mary Green, do., do.,	,37
Gratuity to Mrs. B. F. Lewis, do., basket,	,25
Gratuity to Mrs. C. H. Whittemore, do., boquet,	,25
Gratuity to Abbie F. Battles, do., plate,	,25
Gratuity to F. E. Aldrich, do., boquet,	,25
Gratuity to Abby Younglove, do., plate dahlias,	,25

POT FLOWERS.

Gratuity to Louisa Lowe, Fitchburg, rose,	,25
Gratuity to Mrs. B. F. Lewis, do., abutilon,	,25

GEO. F. TOWNE, *Chairman.*

GARDENS.

The Committee on Gardens award to Mrs. James F. Monroe, a premium of two dollars for Flower Garden.

GEO. E. TOWNE, *Chairman.*

BREAD, BUTTER, CHEESE, PICKLES, &c.

“ All books of cookery, all helps of art,
 All critic learning, all commenting notes,
 Are vain, if void of genius, thou wouldst cook !”

The Committee regret to state that, with one or two exceptions, the quality of bread offered for inspection was decidedly poor. If the domestic economy of Fitchburg is to be thus determined, the ladies have need to tremble for their reputation. We call attention to the following rule: “ All bread must have been baked on the Monday previous to the exhibition, by *unmarried* ladies.”

The neglect of this provision caused a further neglect on the part of the Committee. The quality of Lump Butter was exceedingly good. It was almost impossible to determine with justice the proper awards. The June Tub Butter, exhibited by Messrs. C. F. & J. P. Hayward, was the best in quality, but not being of home manufacture could not receive award. Did this report compete for a premium, it would be but as the honey *sweet*, the pickles *sharp*, the cheese *pungent*.

Premiums awarded :

WHITE BREAD.

1st, to Alice S. Wilker, Ashburnham,	\$2,00
2d, to Miss W. Welch, Fitchburg,	1,00
3d, to Miss Etta Bailey, do.,	,50

UNBOLTED WHEAT BREAD.

1st, Miss Etta Bailey, Fitchburg,	1,00
-----------------------------------	------

BOLTED RYE BREAD.

1st, to Mary C. Gates, Ashby,	1,00
-------------------------------	------

RYE AND INDIAN BREAD.

1st, to Alice S. Wilker, Ashburnham,	2,00
2d, to Susie Sawtell, Fitchburg,	1,00

LUMP BUTTER.

1st, to S. M. Caswell, Fitchburg,	\$4,00
2d, to M. G. Everett, Princeton,	3,00
3d, Addison Howe, Ashburnham,	2,00
4th, to N. B. Reed, Princeton,	1,50

GRATUITIES.

Mrs. Charles Flagg, Sterling,	,75
Benjamin F. Wallis, Ashby,	,75
D. S. Eaton, Fitchburg,	,75
Nathan Caswell, do.,	,75

JUNE TUB BUTTER.

Gratuity to S. M. Caswell, Fitchburg,	,50
Gratuity to M. G. Everett, Princeton,	,50

CHEESE.

2d to George Miles, Westminster,	1,50
Gratuity to Mrs. Charles Dean, Fitchburg,	,75

PICKLES.

1st, to Mrs. I. B. Woodward, Fitchburg,	,75
2d, to Mrs. Levi Kendall, do.,	,50

HONEY.

1st, to Mrs. S. P. Davis, Ashby,	2,00
2d, to G. Merriam, Leominster,	1,00
3d, Cyrus Thurston, Fitchburg,	,50
Gratuity to A. S. Dole, do.,	,50
Gratuity to James McIntire, do.,	,50

JELLIES.

Gratuity to Mrs. Tyler Younglove, Fitchburg,	,75
Gratuity to Mrs. J. F. D. Garfield, do.,	,75

HENRY L. JONES, *Chairman.*

GRAIN.

The Committee on Grain consisted of J. A. Marshall, Joel Page, Ira Carlton, Lorrison Stockwell of Fitchburg, and Joshua T. Everett, of Princeton. The Chairman of the Committee in consequence of sickness and absence from home has not been able to perform his share of the arduous duty imposed on the Committee, but the work has been attended to by the other members, I believe faithfully, and I am instructed by them to make the following report :

There were four competitors for your premiums on corn, three of whom returned the forms or statements required in due season—in the main properly filled out and certified, though there were some defects in most of them, which I believe has generally been the case heretofore. We think it would be well for the Secretary each year to give such instructions to all who enter crops for premiums, as will insure accurate returns. The following were the competitors, all of whom have good fields of corn, yielding more than 4320 lbs. to the acre, viz: Benjamin Safford and Edward Smith of Fitchburg, and Lewis A. Goodrich and Ephraim Graham of Lunenburg. The season has been unusually dry but we are not informed whether the crop of corn was supposed to be materially diminished from that cause. The ground, as appears from the statements, was plowed from 4 to 7 inches deep, (all too shallow.) The time and manner of planting, the kind of seed and subsequent cultivation, appear in the statements of the competitors. The corn of Mr. Safford was topped the last of September. Mr. Goodrich and Mr. Kilburn cut at the ground and stooked until dry. The average rod from the different fields was gathered by the Committee at different

times and consequently there was a great disparity in the amount of shrinkage of the different parcels from the time they were gathered to the second weighing (November 11th,) when the weight was as follows: Lewis A. Goodrich's, 34 lbs. per rod on cob, equal 5440 lbs. per acre, when shelled to $27\frac{3}{4}$ lbs. per rod, 4440 lbs. per acre, equal to $79\frac{16}{56}$ bushels. Benj. Safford's, $35\frac{1}{4}$ lbs. per rod, 5640 lbs. per acre, shelled it weighed $27\frac{1}{2}$ lbs. per rod, and 4400 lbs. per acre, equal to $78\frac{32}{56}$ bushels. Cyrus Kilburn's weighed $29\frac{1}{2}$ lbs. per rod, 4720 lbs. per acre, equal to $84\frac{16}{56}$ bushels on cob. Edward Smith's weighed $30\frac{3}{4}$ lbs. per rod, 4920 lbs. per acre, equal to $87\frac{48}{56}$ bushels per acre on cob,—the last two lots not shelled. The corn was all good, very few imperfect ears.

There was but one entry of Rye, by Mr. Alonzo P. Goodridge, which weighed as follows: one rod 10 lbs. equal to 1600 lbs. per acre, equal to $28\frac{32}{56}$ bushels.

There was four entries of Wheat, by Cyrus Kilburn, Lewis A. Goodrich, Ephraim Graham, of Lunenburg, and Edward Smith, of Fitchburg. Two only made the returns required, viz: Ephraim Graham and Cyrus Kilburn. In quality the wheat was very good and equal. Mr. Graham's wheat weighed, Nov. 11th, 11 lbs. per rod, 1760 lbs. per acre, equal $29\frac{2}{3}$ bushels per acre. Mr. Kilburn's weighed 9 lbs. per rod, 1440 lbs. per acre, equal 24 bushels per acre. For further particulars would refer to their statements which are satisfactory. There was two entries of Barley but no returns.

Mr. Cyrus Kilburn also entered one-eighth acre of beans which weighed 16 lbs. per rod, 320 lbs. on twenty rods, equal $42\frac{4}{6}$ bushels per acre, of the early white pea beans—very handsome and a profitable crop.

The Committee on Crops have made the following awards of premiums :

CORN.

1st, to Lewis A. Goodrich, of Lunenburg,		
	(5440 lbs. per acre,)	\$8,00
2d, to Benjamin Safford, of Fitchburg,		
	(5640 lbs. per acre,)	6,00

WHEAT.

1st, to Ephraim Graham, of Lunenburg,		
	(1760 lbs. per acre,	8,00
2d, to Cyrus Kilburn, of Lunenburg,		
	(1440 lbs. per acre,	5,00

RYE.

1st, to Alonzo P. Goodrich, of Fitchburg,		
	(1600 lbs. per acre,)	3,00

FIELD BEANS.

1st, to Cyrus Kilburn, of Lunenburg,		
	(320 lbs. 1-8 acre,)	2,00

Respectfully submitted,

JONAS A. MARSHALL, *for the Committee.*

LEWIS A. GOODRICH'S STATEMENT.

CORN.

The soil on which I raised my corn offered for premium is clayey loam, was in grass in 1863, was manured with eighteen loads of thirty bushels to a load of barn yard manure, two hundred pounds of plaster, and two hundred pounds of superphosphate; plowed in Nov. 1863, and in the spring for present crop, four to six inches deep, and harrowed one way in May; cost of plowing and other preparation \$8,00; the manure cost

\$3,00 and was spread and harrowed in; the plaster and phosphate cost \$8,00 and was dropped in hills about three feet apart, and the corn dropped on that. Cost of seed and planting \$6,00. The cultivator was run through, and hoed twice, costing about \$10,00. Harvested from the 15th to the 20th of September; cut and stooked in the field until dried; cost of harvesting and husking, \$7,00. The whole cost is \$69,00 for the acre. Amount of stover four tons; the weight on one acre was 4440 lbs. of shelled corn or $79\frac{16}{56}$ bushels.

BENJAMIN SAFFORD'S STATEMENT.

CORN.

The soil on which I raised my corn is a gravelly loam, and was down to grass in 1862-3; a part was plowed last fall and the rest this spring, about seven inches deep, and harrowed both ways by a horse; the manure, of which there was twenty-five loads, was all spread and harrowed in; the seed was a twelve-rowed corn and planted the 21st and 23d of May, with a corn-planter; it was hoed three times using the cultivator the two first times; it was topped the last of September and harvested the last of October. The amount of shelled corn was 4400 pounds, equal to $78\frac{32}{56}$ bushels. The amount of stover on the acre was just two tons, which at \$10,00 per ton is \$20,00.

Cost of Seed and planting.....	\$ 3,00
“ “ Plowing and other preparation.....	5,00
“ “ Manure, twenty-five loads,.....	38,00
“ “ Phosphate of lime.....	10,00
“ “ Cultivation	8,00
“ “ Harvesting	8,00
	<hr/>
	\$72,00

EPHRAIM GRAHAM'S STATEMENT.

WHEAT.

The quantity of land was one acre. Crop of 1862 grass; 1863 the same, and without manure each year; the soil black loam and clay sub-soil; plowed Aug. 20th about seven inches deep, rolled and harrowed; twenty-five loads compost manure to one acre; the quantity of seed two bushels to the acre, known by the name of blue stem; sowed broadcast Aug. 29th; harvested July 20th 1864; bound and stooked, carted to the barn and stowed.

Cost of Plowing and other preparation.....	\$10,50
“ “ Manure.....	33,00
“ “ Seed and sowing	5,00
“ “ Harvesting and threshing.....	12,00
	<hr/>
	\$60,50

Product 1760 lbs. of wheat, or $29\frac{2}{3}$ bushels, and about one ton of straw.

The manure used was taken from the barn cellar, made from three cows, two oxen, one horse, and two swine, from the first of June to the 25th of August, incorporated with loam, and one hundred bushels leached ashes; the furrows rolled smoothly before spreading the manure, and harrowed with cultivating harrow, after which the land was bushed and rolled. It appears that the whole expense of cultivation and harvesting amounts to \$60,50, and the value of the product including the straw: 25 bushels at \$2,75 per bushel, \$68,75; value of straw \$10,25, making \$79,00, which gives a balance in favor of crop of \$8,50.

CYRUS KILBURN'S STATEMENT.

WINTER WHEAT:

I raised my wheat on a clayey loam soil, plowed about seven inches deep; applied only one barrel of superphosphate, and Sept. 22d sowed two bushels of blue stem winter wheat, and cradled it the last of July. The crop was injured by the herds grass sowed with it. By repeated experiments I am convinced that no grass seed should be sowed with winter wheat till the next spring, the grass being more hardy will start first and check the wheat. I think this an important item in the successful cultivation of winter wheat. The amount of wheat was twenty-four bushels to the acre, and about one ton of straw.

Cost of Phosphate	\$7,00
“ “ Plowing	5,00
“ “ Seed and sowing	8,00
“ “ Harvesting	6,00
	<hr/>
	\$26,00

ALONZO P. GOODRIDGE'S STATEMENT.

RYE.

The soil on which I raised my spring rye was a sandy loam, on which in 1862 and '63 I raised corn; and was plowed six inches deep, and rye sowed about the 1st of May; one and one-fourth bushels of seed was used to the acre; it was reaped 26th of July, and the acre yielded 1600 pounds, being about 28½ bushels to the acre.

Cost of Plowing	\$3,00
“ “ Sowing	3,00
“ “ Seed	2,00
“ “ Harvesting	6,00
	<hr/>
	\$14,00

* CYRUS KILBURN'S STATEMENT.

WHITE BEANS.

My beans were grown on a soil of sandy loam. For several years it had been planted with Indian corn. I used no manure, but put upon an acre 500 pounds of Coe's superphosphate of lime; the land was plowed six inches deep; harrowed once and furrowed one way; planted the early white pea bean, last of May; pulled, dried and harvested last of September. They are of superior quality for baking, and ripen early; raised on one-eighth acre 320 pounds, equal to 42½ bushels to the acre.

Cost of Phosphate for one-eighth acre	\$2,00
“ “ Plowing	,38
“ “ Seed and planting	1,50
“ “ Cultivating	1,50
“ “ Harvesting	1,50
	\$6,88

MECHANICS AND MANUFACTURERS.

Your Committee found on exhibition a fair display of articles in this department, although by no means so extensive as in some former years; upon which they proceeded to distribute their favors with due judgment and discretion. Some of the specimens presented were very good, but on the whole, we think that the high character of this section for mechanical and manufactured productions, was not indicated in the exhibition to-day. Many branches that might have been represented, were not to be seen. We trust that another

year will find an improved interest in contributing specimens from this great and increasing department of our industry.

Worcester County became noted for her manufactures quite early, and its northern section partook largely of this general feature. Half a century ago we were ahead in saw-mills and in the production of lumber. The manufacture of chairs and wooden ware soon came to be a prominent pursuit. Our soil was not the most favorable for plentiful and easy raised crops of farm products; and so the enterprise and industry of the people, proceeded to extract wealth from the wild forests and the noisy water-falls. Year by year our manufactures have increased, our mechanic arts have advanced, and through them, means and resources have accumulated. They have builded our villages, and attached population to them.

The mechanic arts by furnishing implements and machinery for farm operations, and manufactures by building up home markets for farm produce, have both most eminently become the handmaid of Agriculture. Is it not therefore meet, that in years to come, we should make these interests prominent in our exhibitions?

Your Committee have made the following awards:

Bailey, Cook & Co., Woonsocket, R. I., washing and wringing machine,	\$5,00
Whittemore, Belcher, & Co., chain pin hay cutter,	2,00
“ “ “ Shaw’s coulter harrow,	2,00
“ “ “ vegetable cutter,	3,00
Thomas Palmer, artificial teeth,	3,50
W. Ball, “ “	3,50
Enoch Paige, elevating bed,	3,00

S. G. Frost, two harnesses,	\$5,00
Charles Fessenden, horse collars,	3,00
B. F. Proctor, specimens of wood turning,	1,00
Samuel Smith, specimens chair seating,	,50
Proctor & Wright, plows, horse hoes, &c.,	3,00
Putnam & Phelps, leather,	3,00
L. J. Brown, ladies' cloaks,	3,00
M. J. Morse, burial case and caskets,	1,00
S. Newell Barnes, calipers,	,50
H. A. Goodrich, case of furs, hats, caps, &c.,	4,00
E. M. Dickinson, ladies' shoes,	2,00
Partridge, Sawyer & Co., boots and shoes,	2,00
Fitchburg Woolen Mill, four pieces cloth,	3,00
John D. Clark, improvement in chain pump,	1,00
Charles B. Sawyer, elevator,	3,00
A. Brown of Worcester, Union Mowing Machine,	5,00
A. Brown, of Worcester, Whitcomb's Horse Hay Rake,	3,00
John Choate, case of medicines,	2,00
S. P. Emory, case of confectionery, cakes, &c.,	2,00
Waldo F. Whitney, artificial teeth,	3,00

E. F. BAILEY, *Chairman.*

FINE ARTS.

The Committee on Fine Arts make the following awards :

PHOTOGRAPHS.

C. O. Gott, Fitchburg,	\$2,50
J. C. Moulton, “	2,50
C. F. Lamb, “	1,50

ORIGINAL DESIGN.

W. Fred White, Fitchburg,	\$4,00
---------------------------	--------

OIL PAINTINGS.

F. L. Palmer, Fitchburg,	4,00
Mrs. H. L. Smith, “	3,00

CRAYON DRAWINGS.

Miss Augusta Dean, Fitchburg,	,75
Miss Mary Louise Haskell, “	,75
Miss Juliette Goodrich, “	,75

PENCIL DRAWINGS:

Miss L. Cochran, Fitchburg,	3,00
Miss Mary L. Snow, “	1,50
Miss Anna T. Hayward, “	,75
Miss Nellie F. Lowe, “	,75
Maurice Richardson, “	,75
Miss Myra Richardson, “	,75
Miss Lizzie L. Goodnow, “	,50
Miss Edna Lowe, “	,50
Miss Nellie Smith, “	,50
Miss Lucy W. Damon, “	,37
Miss Alice Miller, “	,25
Horatio Moulton, “	,25
Frank O. Whitney, “	,25
George O. Wilson, “	,25

A. EMERSON, *Chairman.* *

FANCY ARTICLES.

The Committee on Fancy Articles award the following premiums :

Mrs. S. E. Howe, hair work,	\$,75
Mrs. H. G. Morse, " "	,75
Mrs. Kate Davis, " "	,50
Mrs. Hattie Friar, " "	,50
Mrs. C. D. Blanchard, " " gratuity,	,37
Ellen F. Barnes, " " "	,37
Mrs. F. C. Aldrich, pressed flowers,	,25
Miss E. M. Raymond, pair child's stockings, grat'y,	,25
Mrs. B. F. Whittemore, vase wax flowers,	,75
Mrs. C. Sawyer, vase wax flowers,	,75
Miss Emily Gardner, box infants shirts, gaiter boots,	,25
Mrs. D. A. Corey, child's dress and waist, grat'y,	,25
Mrs. Clara Priest, cone basket,	,37
Mary Maynard, paper wreath,	,75
Mrs. H. S. Bullock, bead and crochet mat,	,25
Mrs. Rachael Wetherbee, worsted mat,	,25
Mrs. I. R. Gilbert, emb'd blanket and skirt,	,50
Mrs. Flagg, flannel skirt,	,37
Mrs. H. G. Morse, flannel skirt,	,25
Mrs. Hattie Sampson, infants waist and flannel sk't,	,37
Mrs. Hines, gratuity,	,20
Miss Abbie Meserve, knit scarfs, and bead work,	,50
Abbie L. Sawyer, bead goblet, gratuity,	,10
George F. Sabin, pocket knife picture frame,	,25
Mrs. F. Boutelle, sofa pillow, gratuity,	,25
S. W. Putnam, Jr., sofa pillow, "	,25
Mrs. F. E. Aldrich, ottoman cover,	,50
Emily E. Boutelle, thread collar,	,25
Mrs. Rebecca Lingley, one box stockings,	,37

Fanny A. Damon, tidy,	,10
Hattie F. Kinsman, worsted work,	,50
Mrs. Mary Wood, silk velvet pin cushion,	,25
Mrs. George F. Vose bead pin cushion,	,25
S. M. Blake, embroidered thibet pin cushion,	,20
Lucy A. Danby, cone frame, grate and tidy,	,30
Mrs. Clara Gardner, bead bracelet,	,25
Mary A. Rugg, crystalized grass,	,75
Susie Sawtell, bead watch case,	,10
Johnny Marble, (blind boy) bead work,	,50
Mrs. Lizzie White, handkerchief,	,37
Hattie M. Burrage, scarf crochet,	,10
Nellie Whitney, wrought skirt,	,37
Mary E. Burrage, (12 years old,) tidy,	,10
Mary E. Torrey, tidy,	,25
E. L. Goodrich, patch work,	,10
L. J. Simonds, tidy and cushion,	,25
Mrs. M. S. Norwood, worsted flowers,	1,00
Mrs. I. R. Gilbert, two bonnets and hat,	1,00
Mrs. Thos. Trees, two bonnets,	1,00
Mrs. Mary Stewart, frame and fancy articles,	,50
Romanzo Downe, fancy boxes,	,75
Mrs. Kinsman, fancy box,	,25
Mrs. H. O. Rockwell, fancy box, gratuity,	,25
Mrs. Calvin Tolman, three pair hose,	,25
Mrs. J. A. Boutelle, one pair hose spun & knit, gr'ty,	,25
Miss Ellen E. Sizen, one silk quilt, 690 pieces,	1,00
Anna McIntire, (over 80 years old) one quilt,	,37
Mrs. H. C. Smith, knit shawl,	,75
Mrs. Levi Morgan, mats,	,50
Mrs. Amos Durant, two mats,	,37
Mrs. Sally Aldrich, (84 years old,) mats,	,25
Mrs. J. P. Webber, gratuity,	,25

Mrs. C. D. Blanchard, one bed quilt,	,75
Mrs. Georgia Dean, spreading quilt,	,37
Mrs. A. Miller, quilt,	,37
Touissant Berord, quilt,	,37
Mrs. M. J. Vinton, quilt,	,37
Mrs. J. L. Hutley, ottomon, gratuity,	,25
Mrs. Lizzie White, gratuity,	,25
Mrs. Samuel Carter, one quilt, gratuity,	,25
Mrs. J. W. Cate, worsted, gratuity,	1,00

L. J. BROWN, *Chairman.*

ESSAYS.

The Committee on Essays respectfully report that having attended to their duty, they have awarded the first premium of \$15,00 to the author of the Essay on "The Soil of New England," bearing the motto "The Earth is not yet finished;" and the second premium of \$10,00 to the author of the Essay on "The Education of the Ox," bearing the motto

"Their strength, or speed, or vigilance were given
To aid of our defects."

They would also suggest that as there is to be no address before the Society, the Essay which receives the first premium be read as a substitute for the usual address. They make this suggestion believing that the thoughts contained in that Essay, are important, and timely, and worthy of such distinction.

In behalf of the Committee,

KENDALL BROOKS, *Chairman.*

COMMITTEE'S REPORTS.

The Committee to award premiums for Reports, regret to say, that most of the Committees have only awarded the premiums of the Society, without giving any additional information as the result of their deliberations. Your Committee consequently have not awarded the first and second premiums, but have awarded the third premium of four dollars to Cyrus Thurston, of Fitchburg, for report on Vineyards.

L. H. BRADFORD, *for the Committee.*

NEW MEMBERS.

ASHBURNHAM.

Harris, Humphrey.
Whitney, Waldo F.

BOLTON.

Reed, J. H.

BOSTON.

Whittemore, Belcher & Co,

FITCHBURG.

Ball, William.
Lewis, B. Frank.
Marshall, Alfred A.
Proctor & Wright.
Works, George F.

LEOMINSTER.

Bennett, James.
Harrington, Fred. B.
Pratt & Stocking.
Whitney, F. W. & F. A.

LITTLETON.

Thompson, Adam.

LUNENBURG.

Bailey, Samuel H.
Goodrich, Lewis A.
F. E. L. Beal.

PRINCETON.

Hastings, Solon S.

SHIRLEY.

Davis, Alpheus B.

WESTMINSTER.

Page, Peter F.

WINCHENDON.

Brown, William, 2d.
Mason, Orlando.

WOONSOCKET, R. I.

Bailey, Cook & Co.

WORCESTER.

Brown, Alzirus,

ANALYSIS OF PREMIUMS AND GRATUITIES AWARDED.

Amount awarded for	Plowing at the Exhibition.....	\$49,00
“	“ Fancy Articles,.....	28,48
“	“ Fine Arts,.....	29,87
“	“ Committees Reports,.....	4,00
“	“ Essays,.....	25,00
“	“ Neat Stock,.....	232,00
“	“ Other Stock,.....	25,00
“	“ Horses,.....	128,00
“	“ Sheep,.....	24,00
“	“ Swine,.....	14,00
“	“ Poultry,.....	9,75
“	“ Grain,.....	30,00
“	“ Root Crops,.....	4,00
“	“ Fruits,.....	62,00
“	“ Flowers,	9,04
“	“ Butter and Cheese,.....	16,75
“	“ Bread,.....	8,50
“	“ Mechanics and Manufactures,.....	72,00

Premiums and gratuities were paid to two hundred and forty different persons, and the amounts distributed as follows :

Fitchburg,.....	\$420,35
Princeton,	124,00
Lunenburg,	69,50
Leominster,	40,50
Westminster,	24,49
Winchendon,	21,00
Royalston,	18,00
Shirley,	10,62
Ashburnham,.....	10,00
Bolton,.....	10,00
Littleton,.....	10,00
Ashby,	8,00
Worcester,.....	8,00
Boston,.....	7,00
Woonsocket, R. I.,.....	5,00
Sterling,.....	3,25
Leicester,	,50
Townsend,.....	,37

1864.	{	Amount of premiums offered.....	\$1223,75
		Amount of premiums and gratuities awarded.....	831,90
		Amount of premiums and gratuities paid.....	790,58
		Amount of permanent fund,.....	5,129,79

Dr.	THOMAS C. CALDWELL, Treasurer,	
1863.		
Dec. 2.	To amount on hand as per last settlement,	\$1,961,95
1864.		
Apr. 4.	“ cash as dividend of Washington Bank,	40,00
“ “	“ “ “ North Bank,	9,00
“ 6.	“ “ “ Bank of Commerce,	40,00
May 18.	“ “ “ First National Bank,	25,00
Sep. 29.	“ for admission to Town Hall,	497,14
Oct. 5.	“ as dividend of Washington Bank,	40,00
“ “	“ “ “ North Bank,	12,00
“ “	“ “ “ First National Bank,	25,00
“ “	“ “ “ Bank of Commerce,	40,00
“ 18.	“ of Commonwealth for bounty,	600,00
Nov. 30.	“ for 24 new memberships the past year,	120,00
“ “	“ interest on money loaned,	103,09
		<hr/>
		\$6,513,18
	Amount in hands of Treasurer,	\$5,129,79
	Increase the last year,	\$167,84

THOMAS C. CALDWELL, *Treasurer.*

The undersigned have examined the above account of the Treasurer, and believe it to be correct.

ABEL F. ADAMS,	} Committee on Finance.
THOS. R. BOUTELLE,	
JABEZ FISHER,	

in account with Worcester North Agricultural Society, Cr.
1863.

Dec. 18.	1864.	By cash paid services of Ashburnham Band at Fair,	\$22,50
Jan'y 4.	" "	" Pratt & Stocking, prem. per order of Trustees,	5,00
" 22.	" "	" F. W. & F. A. Whitney, same,	4,50
March 3.	" "	" E. Garfield, bill for printing,	285,10
April 13.	" "	" L. W. Warren, for book case,	10,00
Sept. 28.	" "	" H. Harris, prem. per order of Trus.	3,00
Oct. 4.	" "	" A. M. Sawyer, services as asst. Sec.	6,00
" "	" "	" J. F. Stiles, for ribbon,	3,37
" 7.	" "	" Mrs. M. Miles, honey stolen at Fair,	,50
" 10.	" "	" John Upton, selling tickets 2 days,	5,00
" 13.	" "	" J. T. Farwell, " "	5,00
" 14.	" "	" Ashburn'm Band, services at Fair,	78,00
" 15.	" "	" A. Marshall, setting & remov'g pens,	25,00
" "	" "	" L. W. Warren, glass for pict'r frames,	2,50
" 20.	" "	" T. Younglove, services at Fair and cash paid for same,	30,65
" "	" "	" L.H.Bradford, cash pd for stamps, &c.	28,34
" 28.	" "	" Fairbanks & Clapp, tending scales,	1,00
Nov. 30.	" "	" L.H.Bradford, services as Sec. 1864,	50,00
" "	" "	" R. Wallace & Co., stationery,	3,35
" "	" "	" Post Office for stamps,	11,00
" "	" "	" Curtis & Bushnell, printing,	2,00
" "	" "	" A. Marshall, for preparing lands to plow, loading & unloading carts, drays, &c.,	5,00
" "	" "	" Daniel Stearns, copying premiums,	5,00
" "	" "	" For certificate stamps,	1,00
" "	" "	" Premiums awarded Sept. 28th and 29th and Nov. 12th and 30th,	790,58
Dec. 7.	" "	" amount carried to new account to balance,	5,129,79
			<u>\$6,513,18</u>

PAST PRESIDENTS, ORATORS & SECRETARIES
—OF THE—
WORCESTER NORTH AGRICULTURAL SOCIETY.



PRESIDENTS.

- 1850-1.—ABEL F. ADAMS, Esq., of Fitchburg.
1852-3.—HON. IVERS PHILIPS, of Fitchburg.
1854-5.—HON. MOSES WOOD, of Fitchburg.
1856-7.—THOMAS R. BOUTELLE, M. D., of Fitchburg.
1858-9.—HON. JABEZ FISHER, of Fitchburg.
1860-1.—THOMAS BILLINGS, Esq., of Lunenburg.
1862-3.—LEWIS H. BRADFORD, Esq., of Fitchburg.
1864-5.—HON. OHIO WHITNEY, JR., of Ashburnham.

ORATORS.

- 1850.—HON. CHARLES HUDSON, of Lexington.
1851.—HON. ROB'T RANTOUL, (appointment not filled.)
1852.—THOMAS E. PAYSON, Esq., of Rowley.
1853.—REV. HORATIO STEBBINS, of Fitchburg.
1854.—GOV. EMORY WASHBURN, of Worcester.
1855.—HON. N. P. BANKS, of Waltham.
1856.—CHARLES L. FLINT, Esq., of Boston.
1857.—JUSTUS TOWER, Esq., of Lanesborough.
1858.—No appointment made.
1859.—HON. GEORGE S. BOUTWELL, of Groton.
1860.—DOCT. GEORGE B. LORING, of Salem.
1861.—HON. A. H. BULLOCK, of Worcester.
1862.—REV. A. N. ARNOLD, D. D., of Westboro.
1863.—LUTHER H. TUCKER, Esq., of Albany, N. Y.
1864.—No appointment made.

SECRETARIES.

- 1850-1.—NATHAN UPHAM, of Fitchburg.
1852.—JOSEPH PIERCE, of Fitchburg.
1853.—CHARLES W. WILDER, of Fitchburg.
1854-5.—THOMAS R. BOUTELLE, of Fitchburg.
1856-7.—JABEZ FISHER, of Fitchburg.
1858-9.—WILLIAM G. WYMAN, of Fitchburg.
1860-1.—WILLIAM G. WYMAN, of Fitchburg.
1862-3.—WILLIAM G. WYMAN, of Fitchburg.
1864.—LEWIS H. BRADFORD, of Fitchburg.

COMMITTEES AND PREMIUMS
FOR THE
THIRTEENTH ANNUAL EXHIBITION,
TO BE HELD AT FITCHBURG,
Tuesday and Wednesday, September 26th and 27th, 1865.

No person will be allowed to become a competitor for any of the Premiums herein offered, unless he shall have made an entry for the same, with the Secretary, within the time prescribed for each class, nor unless he shall also have furnished all required statements relating thereto within the specified time.

For the convenience of those who live at a distance, entries may be made by Mail; and all entries so made must be delivered at some Post Office one day previous to the expiration of the time specified, and must bear proof of having been so delivered either by Post-mark, or a certificate of registry from the Postmaster.

☞ Communications for the Secretary should be sent to *West Fitchburg*.

S T O C K .

All entries for premiums under this head, must be made on or before the Friday previous to the show, except Horses for exhibition, and Poultry, which may be as late as the day previous, and all stock must be owned by the person who enters it.

All persons who are required to furnish a statement, must do so to the Secretary at the time of making the entry.

All live stock must have been raised by the person entering the same, or owned by him at least three months next previously, except in the case of mis-mating oxen rendered necessary by injury or disease.

Each entry of stock for the pens must specify the breed of the animal if known, and the age.

Fat cattle, working cattle, draught horses and swine must be weighed on the same scale, in Fitchburg, and will be weighed free of expense.

The weight of all other stock will not be required.

BLOOD STOCK.

Committee.—J. T. Everett, East Princeton; Solon Carter, Leominster; Benj. Safford, Fitchburg; Ivers Adams, Ashburnham; Joel Hayward, Ashby.

Durham Bulls more than two-

years-old,.....	1st premium,.....	\$6,00
	2d premium,.....	4,00
North Devon,.....	1st premium,.....	6,00
	2d premium,.....	4,00
Ayrshire,.....	1st premium,.....	6,00
	2d premium,.....	4,00
Alderney,.....	1st premium,.....	6,00
	2d premium,.....	4,00
Yearlings,.....	1st premium,.....	5,00
	2d premium,.....	3,00
Calves,.....	1st premium,.....	4,00
	2d premium,.....	2,00
Any other breed, pure blood,.....	1st premium,.....	6,00
	2d premium,.....	4,00

Authentic pedigrees will be required.

The Committee may award gratuities for superior specimens of cows, heifers or heifer calves, of either of the breeds named.

MILCH KINE.

Committee.—E. F. Bailey, Fitchburg; Elliot E. Boyden, Leominster; Moses Mirick, East Princeton; John Davis, Ashby; N. C. Day, Lunenburg.

Herds of four Cows or Heifers each,	1st premium,.....	\$10,00
	2d premium,.....	7,00
	3d premium,.....	4,00

The person receiving these premiums will not be allowed to compete for any other, with the same animals.

The Committee will regard age, expense of keeping, &c.

Cows for butter,.....	1st premium,.....	\$5,00
	2d premium,.....	4,00
	3d premium,.....	3,00
Heifers, three-years-old for butter,	1st premium,.....	5,00
	2d premium,.....	4,00
	3d premium,.....	3,00
Heifers, two-years-old for butter,	1st premium,.....	4,00
	2d premium,.....	3,00
	3d premium,.....	2,00
Cows for milk,.....	1st premium,.....	5,00
	2d premium,.....	4,00
	3d premium,.....	3,00
Heifers three-years-old for milk,	1st premium,.....	5,00
	2d premium,.....	4,00
	3d premium,.....	3,00
Heifers two-years-old for milk,	1st premium,.....	4,00
	2d premium,.....	3,00
	3d premium,.....	2,00

Competitors for premiums on milch cows, whether for herds or single animals, and milch heifers, will be required to certify in writing, at the time of entry, to the weight of the milk, or to the weight of butter, as the case may be, during the six days commencing with the first Monday in June, and the corresponding six days in September; and to the manner of keeping, and general management. Cows that calve near or after the first Monday in June, may be tried at another time.

HEIFERS.

Committee.—Thomas Billings, Lunenburg; S. M. Caswell, Fitchburg, George M. Gregory, Princeton; Samuel Hayward, Ashby; A. W. Benjamin, Westminster.

Intended to be kept for the Dairy.

Two-years-old,.....	1st premium,.....	\$4,00
	2d premium,.....	3,00
	3d premium,.....	2,00
Yearlings,.....	1st premium,.....	3,00
	2d premium,.....	2,00
	3d premium,.....	1,00

HEIFER CALVES.

Committee.—G. S. Beaman, East Princeton; Edward Bacon, Westminster; F. W. Wright, Ashby; N. L. Eaton, Ashburnham; Lyman Merriam, Fitchburg.

Calves, more than four months old,	1st premium,.....	\$3,00
	2d premium,.....	2,00
	3d premium,.....	1,00
Calves, more than four months old, raised by hand,.....	1st premium,.....	3,00
	2d premium,.....	2,00
	3d premium,.....	1,00

WORKING OXEN.

Committee.—Harlow Skinner, Princeton; Howard Gates, Ashby; John Minot, Westminster; George Wood, Leominster; Walter Whitney, Fitchburg.

Working Oxen,.....	1st premium,.....	\$6,00
	2d premium,.....	5,00
	3d premium,.....	4,00
	4th premium,.....	3,00
	5th premium,.....	2,00
Best Teamster,.....	1st premium,.....	5,00
	2d premium,.....	2,00

The working oxen will be tried, attached to loads weighing, including the cart, one-third more than themselves.

STEERS MORE THAN ONE YEAR OLD.

Committee.—Charles K. Sawyer, Fitchburg; Sewall G. Mirick, Princeton; Samuel H. Sprague, Westminster; Josiah Page, Westminster; George B. Sampson, Ashburnham.

Three-years-old,.....	1st premium,.....	\$5,00
	2d premium,.....	4,00
	3d premium,.....	3,00
Best Teamster,.....	1st premium,.....	4,00
	2d premium,.....	2,00

The three-year-old steers will be attached to carts, and tried like the oxen, on the same ground; the cart and load to equal the steers in weight.

Two-years-old,.....	1st premium,.....	\$4,00
	2d premium,.....	3,00
	3d premium,.....	2,00
Trained, two-years-old,.....	1st premium,.....	4,00
	2d premium,.....	2,00

YEARLING STEERS AND STEER CALVES.

Committee.—Eph'm Graham, Lunenburg; Abel Marshall, Herbert Goodrich, Fitchburg; George W. Houghton, Princeton, John C. Davis, Ashburnham.

Yearlings,.....	1st premium,.....	\$3,00
	2d premium,.....	2,00
	3d premium,.....	1,00
Trained Yearlings,.....	1st premium,.....	3,00
	2d premium,.....	2,00
Calves,.....	1st premium,.....	5,00
	2d premium,.....	3,00
	3d premium,.....	1,00
Calves, raised by hand,.....	1st premium,.....	5,00
	2d premium,.....	3,00
	3d premium,.....	1,00
Trained Calves,.....	1st premium,.....	3,00
	2d premium,.....	2,00
	3d premium,.....	1,00

FAT CATTLE.

Committee.—Anan Stockwell, So. Royalston; Sampson Bartlett, East Princeton; Marshall White, Westminster; Ezra Kendall, Sterling; Charles W. Morse, Gardner.

Oxen,	1st premium,	\$8,00
	2d premium,	5,00
	3d premium,	3,00
Cows,	1st premium,	6,00
	2d premium,	3,00
	3d premium,	2,00
Three-year-old Steers or Heifers,	1st premium,	6,00
	2d premium,	4,00

All competitors with fat cattle or swine, must furnish a statement to the Secretary, of the mode and expense of feeding.

SWINE.

Committee.—George E. Towne, Samuel Ware, Fitchburg; Franklin Nourse, Sterling; George O. Skinner, Princeton; Stephen Ward, Ashburnham.

Must be entered like other stock.

Boars, more than one year old,	1st premium,	\$4,00
	2d premium,	3,00
Less than one year old,	1st premium,	3,00
	2d premium,	2,00
Fat Hogs, more than eight mos. old,	1st premium,	4,00
	2d premium,	3,00
	3d premium,	2,00
Fat Pigs, less than eight mos. old,	1st premium,	3,00
	2d premium,	2,00
	3d premium,	1,00
Breeding Sows,	1st premium,	3,00
	2d premium,	2,00
	3d premium,	1,00
Weaned Pigs, not less than four,	1st premium,	3,00
	2d premium,	2,00
	3d premium,	1,00

STALLIONS.

Committee.—J. E. Merriam, Princeton ; Oliver Patch, Leominster ; John L. Cummings, Ashburnham ; Wm. W. Comee, John M. Sawtelle, Fitchburg.

All persons offering Stallions, five years old and upwards, will be required to exhibit specimens of their stock.

Stallions, five years old & upwards,	1st premium,	.....\$12,00
	2d premium,	.....8,00
Four-years-old,	1st premium,	.....6,00
	2d premium,	.....4,00
Three-years-old,	1st premium,	.....4,00
	2d premium,	.....2,00
Two-years-old,	1st premium,	.....4,00
	2d premium,	.....2,00

MARES AND SUCKING COLTS.

Committee.—Warren Simonds, Templeton ; Samuel Osgood, Levi Burr, Ashby ; Caleb W. Jaquith, Fitchburg ; J. G. Woodward, Ashburnham.

The mares must be four years old and upwards and accompanied with their colts.

Breeding Mares,	1st premium,	.....\$6,00
	2d premium,	.....4,00
	3d premium,	.....2,00
Colts, less than one year old,	1st premium,	.....3,00
	2d premium,	.....2,00
	3d premium,	.....1,00

DRAUGHT AND FAMILY HORSES.

Committee.—James P. Parker, Sterling ; Charles J. Delahanty, Fitchburg ; Sewall Richardson, Princeton ; John S. Jaquith, Ashby ; Franklin, Wyman, Westminster.

Draught Horses will be tried, attached to a stone boat, loaded to weigh one-third more than the horses.

The same draught horse cannot receive a premium as a single horse and also one of a pair, but a draught horse may compete as a family horse.

These must be four years old and upwards.

Draught horses and mules, pairs,...	1st premium,.....	\$6,00
	2d premium,.....	4,00
Draught horses, single,.....	1st premium,.....	5,00
	2d premium,.....	3,00
Best teamster,.....	1st premium,.....	4,00
	2d premium,.....	2,00
Family horses, pairs,.....	1st premium,.....	7,00
	2d premium,.....	5,00
Family horses, single,.....	1st premium,.....	5,00
	3d premium,.....	3,00

COLTS.

Committee.—S. W. A. Stevens, Gardner ; Joel Merriam, Jr., Westminster ; Isaac D. Ward, Ashburnham ; Jonas H. Temple, Princeton ; J. H. Reed, Bolton.

Three-years-old Geldings,.....	1st premium,.....	\$4,00
	2d premium,.....	2,00
Three-years-old Fillies,.....	1st premium,.....	4,00
	2d premium,.....	2,00
Two-years-old Geldings,.....	1st premium,.....	4,00
	2d premium,.....	2,00
Two-years-old Fillies,.....	1st premium,.....	4,00
	2d premium,.....	2,00
Yearling Colts,.....	1st premium,.....	4,00
	2d premium,.....	2,00

SHEEP.

Committee.—Timothy D. Wood, Westminster ; Oliver Kendall, Fitchburg ; John Hayward, Ashby ; Gardner Merriam, Leominster ; John Sawin, South Gardner,

Flocks not less than ten, owned by one person,.....	1st premium,.....	\$10,00
	2d premium,.....	5,00
Bucks,.....	1st premium,.....	5,00
	2d premium,.....	3,00
Cossetts,.....	1st premium,.....	2,00
	2d premium,.....	1,00

POULTRY.

Committee.—Caleb S. Merriam, Westminster; Natt Cowdin, Fitchburg; Joseph Whitcomb, East Princeton; Church Howe, Holden; Alpheus B. Davis, Shirley.

Must be entered like other stock.

Barn-yard fowls, not less than six,	1st premium,	\$3,00
	2d premium,	2,00
Turkeys, not less than six,	1st premium,	3,00
	2d premium,	2,00
Geese, not less than six,	1st premium,	3,00
	2d premium,	2,00
Ducks, not less than six,	1st premium,	3,00
	2d premium,	2,00
The most appropriate coop in which to exhibit poultry,		3,00

TOWNS TEAMS.

Committee.—Daniel Putnam, Lunenburg; Dennis Fay, Ashby; Abel Derby, Fitchburg; Wilkes Roper, Princeton; Edward Greenwood, Gardner.

For the best town Team, not less than fifteen yoke of oxen from any one town.

1st premium,	\$25,00
2d premium,	10,00

PLOWING MATCH.

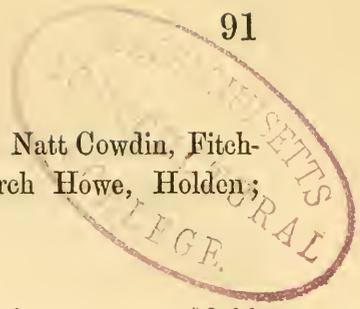
All entries for plowing must be made on or before the Wednesday previous to the exhibition, and one dollar must be deposited with each entry, to be returned to the competitor if he plows, otherwise forfeited to the Society.

No teams or parts of teams will be allowed to compete for more than one premium on plowing.

DOUBLE TEAMS.

Committee.—Asaph Wood, Gardner; Levi Downe, Alonzo P. Goodridge, Fitchburg; Geo. Miles, Westminster; Antipas Maynard, Ashburnham.

Double Teams,	1st premium,	\$7,00
	2d premium,	5,00
	3d premium,	3,00



SINGLE TEAMS.

Committee.—Cyrus Kilburn, Lunenburg; Joseph W. Forbush, Westminster; Thomas Sheldon, Fitchburg; George Howard, Ashburnham; Joseph P. Reed, Princeton.

Single Teams,.....	1st premium,.....	\$7,00
	2d premium,.....	5,00
	3d premium,.....	3,00
Minors with Steers,.....	1st premium,.....	6,00
	2d premium,.....	4,00
	3d premium,.....	2,00

HORSE TEAMS.

Committee.—John Brooks, Princeton; Lewis G. Tuttle, Fitchburg; Levi Smith, Ashby; Warren Marble, Ashburnham; W. L. Brown, Lunenburg.

Horse or Mule Teams,.....	1st premium,.....	\$7,00
	2d premium,.....	5,00
	3d premium,.....	3,00

CROPS.

All entries for Premiums, in this department must be made with the Secretary, on or before June 1st, with the exception of English turnips and cabbages, which must be entered on or before August 1st. Immediately after these dates the Secretary will transmit to all competitors a copy of the following blank form adopted by the Trustees, to correspond with the requirements of the Board of Agriculture.

In pursuance of authority delegated to the Board of Agriculture, by Chap. 24, of the Acts of 1862, Agricultural Societies receiving the bounty of the State, are required to make use of the following form, and be governed by its conditions, in the mode of ascertaining the amount of crops entered for premium.

Worcester North Agricultural Society.

Statement concerning a crop of _____, raised by Mr. _____
in the town of _____, 1865.

What was the crop of 1863?

What manure was used, and how much that year?

What was the crop of 1864?

What manure was used, and how much that year?

What is the nature of the soil?

When and how many times plowed, and how deep, for the present crop?

What other preparation for the seed?

Cost of plowing and other preparation?

Amount of manure, in loads of thirty bushels, and how applied, for the present crop?

Value of manure upon the ground?

When and how planted, and the amount and kind of seed?

Cost of seed and planting?

How cultivated, and how many times.

Cost of cultivation, including weeding and thinning?

Time and manner of harvesting?

Cost of harvesting, including the storing and husking, or threshing?

Amount of straw, stover, or other product?

REMARKS.

Signed by

Competitor.

From actual measurement, I hereby certify that the land which the above crop of covered, contained rods, and no more.

From personal observation, we hereby certify that the above answers are true.

I hereby certify that the weight of the above crop, as ascertained by me, on the day , was pounds.

In ascertaining the weight of a crop, an average rod shall be selected, harvested and weighed, by one or more members of a committee, and the whole estimated by multiplying it by the number of rods.

The certificate shall state the weight of all crops only when in a merchantable state.

RULES OF MEASURE

Practiced and adopted by the State Board of Agriculture.

Wheat, Potatoes, Sugar Beets, Mangel Wurzel, Ruta Baga, White Beans, and Peas.....	60	lbs. to bushel.
Corn, Rye, Onions,.....	56	“ “
Oats,.....	32	“ “
Barley, Buckwheat,.....	48	“ “
Cracked Corn, Corn and Rye and other meal except Oat, and English Turnips,.....	50	“ “
Parsnips,	45	“ “
Carrots,	55	“ “

These forms must be returned to the Secretary, on or before November 10th, with each question concerning the crop answered, and the certificates properly signed.

No person will be allowed to compete for more than one Premium, with a crop raised upon the same field, however large, with the same treatment.

Committees should not encourage *the irregular* entry of *accidental* good crops.

GRAIN.

Committee.—Solon Carter, Leominster; Ira Carleton, Joseph Upton, Fitchburg; Sam'l H. Bailey, Lunenburg; Jos. P. Reed, Princeton.

Samples must be exhibited at the Fair.

The Committee may award gratuities for valuable new varieties of grain.

For the largest crop of Herds Grass seed, not less than three bushels,.....	1st premium,.....	\$5,00
	2d premium,.....	3,00
Red top, not less than six bushels,	1st premium,.....	5,00
	2d premium,.....	3,00

For the most profitable crops of Corn, Wheat, Rye, Barley and Oats, one acre each; of Cabbages, Beans and Flax, one-eighth acre each; the product of Corn to be not less than 4320 lbs. on the cob; that of Wheat, Rye, Barley and Oats, not less than 1200 lbs. of grain each.

Corn,	1st premium,.....	\$16,00
	2d premium,.....	10,00
	3d premium, <i>Grasses & Forage Plants</i>	
Wheat,.....	1st premium,.....	16,00
	2d premium,.....	10,00
Flax,.....	1st premium,.....	10,00
	2d premium,.....	5,00
	3d premium, <i>Grasses & Forage Plants</i>	
Rye,	1st premium,.....	6,00
	2d premium,.....	4,00
	3d premium, <i>Grasses & Forage Plants</i>	
Barley,	1st premium,.....	6,00
	2d premium,.....	4,00
	3d premium, <i>Grasses & Forage Plants</i>	
Oats,.....	1st premium,.....	6,00
	2d premium,.....	4,00
	3d premium, <i>Grasses & Forage Plants</i>	
Field Beans,.....	1st premium,.....	4,00
	2d premium,.....	2,00
	3d premium, <i>Grasses & Forage Plants</i>	

ROOT CROPS AND CABBAGES.

Committee.—Wm. Baker, Lunenburg; Ward Russell, Ashburnham; John K Going, Shirley; Lorrison Stockwell, John M. Harris, Fitchburg.

For the most profitable crops of Potatoes, one-fourth acre each; of Carrots, Onions, Beets and Turnips, one-eighth acre each.

Potatoes, not less than 3000 lbs.,...	1st premium,.....	\$8,00
	2d premium,.....	5,00
	3d premium, <i>Grasses & Forage Plants</i>	
Carrots, not less than 5500 lbs.,...	1st premium,.....	4,00
	2d premium,.....	3,00
Onions, not less than 2000 lbs.,	1st premium, <i>Harris on Insects.</i>	
	2d premium,.....	2,00
Sugar Beets,.....	1st premium,.....	2,00
	2d premium,.....	1,00
Mangel Wurzel,.....	1st premium,.....	2,00
	2d premium,.....	1,00

English Turnips,.....	1st premium, <i>Harris on Insects</i>	
	2d premium,	2,00
Turnips of any other variety..	1st premium, <i>Harris on Insects</i>	
	2d premium,.....	2,00
Cabbages,	1st premium,.....	2,00
	2d premium,.....	1,00

FARMS.

Committee.—Jabez Fisher, Fitchburg; George Chandler, Shirley; Levi Heywood, Gardner.

All Competitors must make their entries on or before the first day of May. Each farm will be open to the inspection of the Committee during the entire season.

For the best cultivated and managed Farm,	1st premium,.....	\$15,00
	2d premium,.....	8,00

GARDENS.

Committee.—Jacob Haskell, James F. Monroe, Fitchburg; Hobart Spencer, Ashby.

No person having received a premium for a kitchen or mixed garden shall be allowed to compete for another with the same land within five years, except for a higher one.

Entries must be made on or before June 1st.

Kitchen or mixed Gardens,.....	1st premium,.....	\$6,00
	2d premium,.....	4,00
	3d premium,.....	2,00
Flower Gardens,.....	1st premium,.....	2,00
	2d premium,.....	1,00

EXPERIMENTS.

Committee.—Abel F. Adams, Abel Marshall, Jonas A. Marshall, Fitchburg.

All entries must be made at least one week before commencing the Experiments.

Best experiment testing the value of corn and cob for fattening purposes, with the cob or otherwise,	\$15,00
Best experiment in steaming food for cattle and horses,	10,00
Best experiment testing the comparative value of drilling wheat or other grain to broadcast sowing,	5,00

There will be placed at the disposal of the Committee for the best and most reliable Agricultural Experiments, made in 1865, the sum of \$20.

TOWN HALL.

No article intended for the Hall will be entitled to a premium, unless it shall have been deposited by one o'clock, P. M., on Tuesday, from which time the Hall will be occupied by the Committees exclusively until half-past six o'clock, when it will be opened to the public for the evening.

All articles must have been grown, manufactured or produced by the person entering the same for premium, and should be plainly marked with the name and residence of the exhibitor.

A strict compliance with these regulations will be absolutely necessary.

APPLES, PEACHES PLUMS AND QUINCES.

Committee.—James Bennett, Leominster; George Jewett, L. H. Bradford, Fitchburg; Henry C. Hill, Gardner; Timothy Brown, Westminster.

APPLES.

For the best and largest exhibition of named varieties, of three specimens each,.....	1st premium,.....	\$4,00
	2d premium, <i>Harris on Insects</i>	
For twelve varieties, of five specimens each, 1st prem. <i>Harris on Insects</i>	2d premium,.....	2,00
	3d premium,.....	1,00
For six varieties, of five specimens each, 1st premium,.....	2d premium,.....	2,00
	3d premium,.....	1,50
For three varieties of five specimens each, 1st premium,.....	2d premium,.....	1,00
	3d premium,.....	1,00
For the best exhibition of twelve specimens of one variety,.....	1st premium,.....	1,50
	2d premium,.....	1,00

No person will be allowed to compete for a premium in more than one of the above classes, with the same specimens of fruit; and if the number of specimens exhibited does not correspond with these regulations, the fruit will be excluded from competition for the premiums.

PREMIUMS.

PEACHES.

For the best collections,.....	<i>Harris on Insects</i>
For the best dishes or baskets,	1st premium,.....\$2,00
	2d premium,.....1,00
	3d premium,..... ,50

PLUMS.

For the best collection,	\$2,00
For the best plates,.....	1st premium,.....1,00
	2d premium,..... ,50

QUINCES.

For the best dishes or baskets,.....	1st premium,.....\$1,00
	2d premium,..... ,50

In addition to the above premiums, there will be placed at the disposal of the Committee for gratuities, \$10,00.

PEARS AND GRAPES.

Committee.—Thomas R. Boutelle, Fitchburg; Samuel White, Lunenburg; Amos Whitney, Ashburnham; Seth Heywood, Gardner; Jackson Burr, Ashby.

PEARS.

For the best and largest exhibition of named varieties, of three specimens each,.....	1st premium,.....\$4,00
	2d premium, <i>Harris on Insects</i>
For twelve varieties, of five specimens each,	1st premium, <i>Harris on Insects</i>
	2d premium,.....2,00
	3d premium,.....1,00
For six varieties of five specimens each,...	1st premium,.....2,00
	2d premium,.....1,50
	3d premium,.....1,00
For three varieties of five specimens each,	1st premium,.....1,50
	2d premium,.....1,00
	3d premium,..... ,50
For the best exhibition of twelve specimens	
of one variety,.....	1st premium,.....1,50
	2d premium,.....1,00

No person will be allowed to compete for a premium in more than one of the above classes, with the same specimens of fruit; and if the

number of specimens exhibited does not correspond with these regulations, the fruit will be excluded from competition for the premiums.

GRAPES.

For the best displays of Foreign Grapes,	1st premium,.....	\$3,00
	2d premium,.....	2,00
	3d premium,.....	1,00
For the best displays of Native Grapes,	1st premium, <i>Harris on Insects</i>	
	2d premium,.....	2,00
	3d premium,.....	1,00

In addition to the above premiums, there will be placed at the disposal of the Committee for gratuities, \$10,00.

ASSORTED FRUITS AND FLOWERS.

Committee.—George E. Towne, Mrs. Joseph E. Manning, Mrs. A. P. Kimball, Fitchburg; Mrs. Gilbert Howe, Sterling; Mrs. D. L. Abercrombie, Lunenburg.

FRUIT.

For the best dishes or baskets,.....	1st premium,.....	\$2,00
	2d premium,.....	1,00

FLOWERS.

For best displays of named Plants in pots,	1st premium,.....	\$2,00
	2d premium,.....	1,00
For the best displays of cut Flowers,.....	1st premium,.....	2,00
	2d premium,.....	1,00
	3d premium,.....	,50

In addition to the above premiums, there will be placed at the disposal of the Committee for gratuities, \$10,00.

VEGETABLES.

Committee.—Stephen Shepley, Levi Kendall, B. F. Lewis, Benj. Wheeler, Fitchburg; Addison Howe, Ashburnham.

Of Squashes, Pumpkins, Cabbages and Celery, there should be six specimens, in each lot; of Cauliflower, three; of Onions, Beets, Turnips and Tomatoes, one peck in each lot; of Field Beans, one-half peck, and of Lima Beans, two quarts.

For the best collections of Kitchen Vegetables,.....	1st premium,.....	\$7,00
	2d premium,.....	5,00
	3d premium,.....	3,00
Best collections of Garden Seeds,.....	1st premium,.....	5,00
	2d premium,.....	3,00
Collections of Potatoes,.....	1st premium.....	2,00
	2d premium,.....	1,00
	3d premium,.....	,50
Marrow Squashes,.....	1st premium,.....	1,00
	2d premium,.....	,50
Hubbard Squashes,.....	1st premium,.....	1,00
	2d premium,.....	,50
Crookneck Squashes,.....	1st premium,.....	1,00
	2d premium,.....	,50
Pumpkins,.....	1st premium,.....	,75
	2d premium,.....	,50
Cabbages,.....	1st premium,.....	,75
	2d premium,.....	,50
Cauliflowers,.....	1st premium,.....	,75
	2d premium,.....	,50
Celery,	1st premium,.....	,75
	2d premium,.....	,50
Onions,.....	1st premium,.....	,75
	2d premium,.....	,50
Turnip Beets,.....	1st premium,.....	,75
	2d premium,.....	,50
English Turnips,.....	1st premium,.....	,50
	2d premium,.....	,25
Tomatões,.....	1st premium,.....	,50
	2d premium,.....	,25
Field Beans,.....	1st premium,.....	,50
	2d premium,.....	,25
Lima Beans,.....	1st premium,.....	,50
	2d premium,.....	,25
Seed Corn, in Traces,.....	1st premium,.....	1,00
	2d premium,.....	,75
	3d premium,.....	,50

In addition to the above. there will be allowed for gratuities, \$10,00.

No person will be allowed to receive more than one copy of *Harris on Insects*; if more than one is awarded, cash will be paid instead, at the rate of \$3,00 per copy; and if any to whom a copy is awarded already has one, he may receive the copy awarded, or the cash as above, at his option.

BREAD, BUTTER, CHEESE; PICKLES, PRESERVES AND JELLIES.

Committee.—C. H. B. Snow, Mrs. Alvah Crocker, Mrs. Abel F. Adams, Fitchburg; Mrs. Dennis Fay, Ashby; Mrs. J. T. Everett, East Princeton; Mrs. Asaph Wood, Gardner; Mrs. Ohio Whitney, Jr., Ashburnham.

All Bread must have been baked on the Monday previous to the exhibition by unmarried ladies.

Competitors will be required to furnish a detailed statement in writing of the process of manufacturing Butter, Cheese and Pickles.

White Bread,	1st premium,.....	\$2,00
	2d premium,.....	1,00
	3d premium,.....	,50
Unbolted Wheat Bread,.....		1,00
Bolted Rye Bread,.....	1st premium.....	1,00
	2d premium,.....	,50
Rye and Indian Bread,.....	1st premium,.....	2,00
	2d premium,.....	1,00
	3d premium,.....	,50
Lump Butter, not less than 12 pounds,....	1st premium,.....	4,00
	2d premium,.....	3,00
	3d premium,.....	2,00
	4th premium,.....	1,50
June Tub Butter, not less than 25 lbs.,....	1st premium,.....	3,00
	2d premium,.....	2,00
	3d premium,.....	1,00
Cheese, not less than 50 lbs.,.....	1st premium,.....	2,00
	2d premium,.....	1,50
	3d premium,.....	1,00
Pickles,.....	1st premium,.....	,75
	2d premium,.....	,50
	3d premium,.....	,25
Virgin Honey in the Comb,.....	1st premium,.....	2,00
	2d premium,.....	1,00
	3d premium,.....	,50

In addition to the above, there will be allowed for gratuities, \$10,00.

MECHANICS AND MANUFACTURES.

Committee.—Amasa Norcross, Fitchburg; Wm. H. Brown, East Princeton; Ward M. Cotton, Leominster; Charles Winchester, Ashburnham; C. S. Greenwood, Gardner.

For the best specimens of Mechanic and Manufactured articles, exclusive of ladies' home manufacture, there will be placed at the disposal of the Committee, the sum of \$75,00.

AGRICULTURAL IMPLEMENTS.

Committee.—Walter Heywood, Wm. Woodbury, Jr., Fitchburg; Porter Piper, Leominster; B. F. Kendall, Asaph Wood, Gardner.

Best Mowing Machine,.....	\$10,00
“ Farm Wagon for one or two horses,.....	10,00
“ Horse Rake,.....	5,00
“ Team Harness,.....	5,00
“ Hay or Straw Cutter,.....	3,00
“ Ox Yoke,.....	3,00
“ Churn.....	2,00
“ Best Set of Horse Shoes,.....	2,00
For Implements not specified, to be awarded by the Committee,.....	10,00

FINE ARTS.

Committee.—Robert G. Hutchins, Mrs. L. P. Comee, Mrs. George E. Towne, Mrs. L. H. Bradford, Fitchburg; Wm. T. Allen, Leominster.

For the best specimens of Paintings, Drawings, or other kindred productions in the Fine Arts, there will be placed at the disposal of the Committee the sum of \$30,00.

Best collection by a Daguerrean Artist, .. 1st premium,.....	\$4,00
2d premium.....	2,00

FANCY ARTICLES.

Committee.—Herbert W. Kimball, Miss Lizzie H. Haskell, Miss Kate Adams, Fitchburg; Miss Rebecca Greenwood, South Gardner; Mrs. W. H. Brown, East Princeton.

For the best specimens of Ladies' Useful and Fancy Articles, of their own manufacture, including specimens of nice mending and darning, there will be placed at the disposal of the Committee, the sum of \$30,00.

ESSAYS.

Committee.—Charles Mason, G. A. Torrey, Jabez Fisher, Fitchburg.

All persons competing for these premiums must file their Essays with the Secretary on or before the 1st of September. Each Essay is to be marked with a motto or design, and accompanied with a sealed envelope containing a corresponding motto or design, and also the name of the author.

The envelopes of the successful competitors will be opened on the day of the exhibition, immediately upon the announcement of the awards.

For the best Essays on some practical subject connected with Agriculture, deemed worthy of publication in the Society's "Transactions,".....1st premium,.....\$15,00
 2d premium,.....10,00

COMMITTEES' REPORTS.

Committee.—The President, two Vice Presidents and Secretary.

For the purpose of inducing the Chairman of the several Committees to take upon themselves more labor and care in elaborating their reports, the following premiums will be paid :

1st premium,.....\$10,00
 2d premium,.....6,00
 3d premium,.....4,00

Reports in connection with awards made on the day of exhibition, must be delivered to the Secretary on or before October 25th. All others on or before November 15th.

Total amount of premiums offered for 1865,.....\$1359,25.

PROSPECTIVE.

For the best experiment to determine the economy of growing Indian Corn as a part of a rotation compared with grass through a series of six years, the amount of manure applied being the same in both cases,

1st premium,.....\$25,00
 2d premium,.....15,00

Entries must be made on or before July 1st, 1865.

APPLE ORCHARDS.

Committee.—Cyrus Kilburn, Ephraim Graham, Lunenburg; Addison Hubbard, Fitchburg; C. C. Field, Leominster; John Minot, Westminster.

For the best Orchards of not less than fifty trees, all having been set after January 1st, 1861, to be awarded in 1865,

1st premium,.....\$25,00

2d premium,.....10,00

PEARS.

For the best Orchards of not less than fifty trees, all having been set after January 1st, 1861, to be awarded in 1866,

1st premium,.....\$25,00

2d premium,.....10,00

POTATOES.

For the best seedling Potatoes, to be tested for not less than three successive years,.....\$25,00

FOREST TREES.

Entries must be made on or before the first day of June.

For the best plantation of any kind of Forest Trees, suitable for fuel or timber, raised from the seed, not less than five hundred in number, which shall be in the most flourishing condition in the fall of 1868,.....1st premium,.....\$25,00

2d premium,.....15,00

3d premium,.....10,00

LIVE FENCE.

Committee.—A. F. Adams, J. A. Marshall, Fitchburg; Daniel Putnani, Lunenburg.

For the best experiment demonstrating the feasibility of substituting live farm fence for those in common use; the entries to be made on or before May 1st, 1863, or whenever afterwards planted, and the premiums to be paid in 1868:

1st premium,.....\$25,00

2d premium,.....15,00

3d premium,..... 5,00

ICE HOUSES.

For the best constructed Ice House for family purposes, to be tested at least twelve months,.....\$5,00

OFFICERS OF THE SOCIETY FOR 1865.

ELECTED AT THE ANNUAL MEETING WEDNESDAY, DECEMBER 7, 1864.

OHIO WHITNEY, JR., of Ashburnham, *President*.

J. A. MARSHALL, of Fitchburg, }
 GEORGE E. TOWNE, of Fitchburg, } *Vice Presidents*.

ALVIN M. SAWYER, of West Fitchburg, *Secretary*.

T. C. CALDWELL, of Fitchburg, *Treasurer*.

TRUSTEES.

JOEL HAYWARD, Ashby,	JOEL PAGE, Fitchburg,
S. W. A. STEVENS, So. Gardner,	JOSEPH UPTON, Fitchburg,
W. B. HOSMER, Leominster,	I. B. WOODWARD, Fitchburg,
OLON CARTER, Leominster,	WM. WOODBURY, JR., Fitchburg,
THOMAS BILLINGS, Lunenburg,	DENNIS FAY, Ashby,
DANIEL PUTNAM, Lunenburg,	ASAPH WOOD, So. Gardner,
JOHN BROOKS, Princeton,	PORTER PIPER, Leominster,
J. T. EVERETT, E. Princeton,	ELLIOT E. BOYDEN, Leominster,
ANAN STOCKWELL, So. Royalston,	J. EDWIN MERRIAM, Princeton,
JAMES O. PARKER, Shirley,	JOHN K. GOING, Shirley,
EZRA KENDALL, Sterling,	CHARLES FLAGG, Sterling,
J. M. SAWYER, Sterling,	FRANKLIN NOURSE, Sterling,
WARREN SIMONDS, Templeton,	JOHN MINOT, Westminster,
BENJAMIN WYMAN, Westminster,	AMOS MILLER, Westminster,
DANIEL C. MILES, Westminster,	L. H. BRADFORD, Fitchburg,
JOHN CUTTER, Winchendon,	ALVAH CROCKER, Fitchburg,
A. F. ADAMS, Fitchburg,	JACOB HASKELL, Fitchburg,
T. R. BOUTELLE, Fitchburg,	EPIRAIM MURDOCK, Winchendon,
JABEZ FISHER, Fitchburg,	OHIO WHITNEY, Ashburnham,
LEVI KENDALL, Fitchburg,	JOHN C. DAVIS, Ashburnham.
ABEL MARSHALL, Fitchburg,	

ABEL F. ADAMS, of Fitchburg, *Member of the State Board of Agriculture*, elected Dec. 3, 1862.

R U L E S .

All teams entered for plowing and for draught, must have been owned by the person entering the same, for at least three months next previous, and the team must be driven, and the plow managed by him or by some one usually in his employ.

Any person competing for a premium, who shall serve on the Committee having charge of the department in which he competes, shall retire from the Committee, while his own competition is in question.

The several Committees will not consider themselves bound by the terms of the above offers, to award a premium for anything which they shall deem inferior.

Any person to whom a premium shall have been awarded, in consequence of any deception or misrepresentation used by him, shall not only forfeit such premium, but afterward be incapable of competing for the Society's premiums.

All persons, (ladies and minors excepted,) not members of the Society, to whom may be awarded a premium or premiums amounting to \$5,00 or upwards, shall receive a certificate of membership for \$5,00 and the balance in cash. If the amount shall be less than \$5,00, a deduction of fifty per cent will be made, unless the individual chooses to make the amount up to that sum, and receive a certificate of membership.

All premiums not demanded on or before November 30th, will revert to the Society.

An extract from the "General Statutes of the Commonwealth of Massachusetts," Page 376, Chapter 66.

SEC. 4. "No society receiving the bounty, shall distribute any part thereof for an animal or article for which a premium is awarded, unless it was produced within the limits of the society, or the animal has been owned and kept within its limits, by the person to whom the premium is awarded, for three months next preceding the award. And no animal or article for which a premium has been awarded to the owners by any such society, shall be considered subject for any further premium of the society, except for qualities different from those for which the former premium was awarded or for a higher premium, and no animal or article shall be offered for a premium at more than one such society in the same year.

* * * * *

SEC. 6. "A society which neglects in any year to comply with the laws relating thereto, or with the regulations of the board of agriculture, shall not be entitled to the bounty of the state the year next succeeding.

TRANSACTIONS
OF THE
WORCESTER NORTH
AGRICULTURAL SOCIETY,
FOR 1865,
PREPARED BY THE SECRETARY.



FITCHBURG :
PRINTED AT REVELLE OFFICE.
1865.

SECRETARY'S REPORT.

In accordance with the requirements of the Statute law of the Commonwealth, the Thirteenth Annual Cattle Show and Exhibition of the Worcester North Agricultural Society commenced in Fitchburg, on Tuesday, September 26th, 1865.

At half-past one o'clock, P. M., the various Committees on articles exhibited in the Hall were organized and attended to the duties assigned them.

The show of fruit, flowers, vegetables, mechanic arts and manufactures, fancy articles, bread, butter, cheese, pickles and honey, gave evidence of the continued interest in this part of the exhibition. A large crowd was in attendance in the evening, being frequently entertained by songs and glees by a volunteer club under the direction of Moses G. Lyon, Esq.

The principal Show was on Wednesday, the 27th. The plowing match took place on land of Mr. Justin Stearns, on Flat Rock road, at eight and a half o'clock, A. M. The exceedingly dry soil gave an unusual opportunity to display the skill of the plowman.

At nine and three-fourths o'clock the various Committees on stock, drawing, &c., were organized.

The trial of draught horses and working oxen commenced at ten o'clock at the usual place near the Unitarian Church. The trial of working steers immediately following that of oxen on the same ground. Exhibition of stallions and family horses at eleven o'clock, A. M., and two town teams, one from

Fitchburg, and one from Leominster were exhibited at eleven and a half o'clock. The show of blood stock was excellent, there being twenty-seven entries. The show of grade and native stock was not as good as at some of our previous Fairs. The exhibition of sheep, poultry and swine was good.

After dinner at the Fitchburg Hotel, the members of the society assembled at the lower town hall, where Hon. Ohio Whitney of Ashburnham, President of the society, congratulated the members on the success of the present exhibition, after which he introduced the delegate of the Board of Agriculture, Mr. N. S. Hubbard.

MR. HUBBARD said that people having come to hear Col. Bullock, he was diffident of occupying the time. He expressed his satisfaction at the fine exhibition of fruit in the hall. The social element in these Fairs repaid all their expense, but more richly when we see the fine cattle and the delicate handiwork. Here we compare notes, giving each other the benefit of our experience. We do not give sufficient cultivation to our crops. We want to know how to get the best cultivation for the least labor. He almost wished the products of the soil commanded a higher price, that young men might be induced to engage in agricultural pursuits. He alluded to the great advance in labor-saving machines on the farm—to the mowing machines, the improved plows, lessening by one half the manual labor on the farm, making the farmer's work a pleasant one.

ELIAS GROUT of Ashland was introduced as a member of the Board of Agriculture. He had been highly entertained and gratified, but would have been more pleased if the grounds, the exhibition and dining halls could be made more common and social, and afford opportunity for a more free interchange of ideas. By improving the soil we enhance the value of the people and advance the interests of the nation. One reason why our crops are not better is that we do not *study* to apply labor to best results. We should know exactly when we put the plow in the soil what will be the crop, and this we can do

by experimenting. He wanted young men and women to love the farm; he wanted the young women to understand good cooking, saying in this connection that for good, wholesome, healthy cooking New England maidens could beat the world. In his town an extra premium was awarded to the young lady under twenty who would make the best bread.

HON. DANIEL NEEDHAM of Groton, said the great difficulty in New England was that young men will not make farming a *business*. He goes where he thinks he can make the most money. But our young farmers go westward, for they find there more pay for their work. What do we lack? Not implements or inventive power, but method and system. Here he keeps in the old ruts, but in the West he strikes out for himself in new ways. If they would do the same here, and abandon old ways, making a business of his work, he was sure it would pay far better than at the West. Sheep culture was the most paying of agricultural pursuits for the hills of this vicinity and in other places in New England. Find out what pays best and devote attention to that. Bring sheep to the Fairs and advertise your stock in the papers; make your work and your flocks known and it will be in demand. Don't go on the principle that a horse is a horse, because a horse *isn't* a horse. It don't cost more to keep good stock than that of a poor quality. There was no reason why New England farmers should not be the best in the world. One man told him that he had raised four tons of grapes on an acre of ground in Fitchburg this year, on which he had spent but three weeks labor. At twenty cents a pound, that gave sixteen hundred dollars receipts from that one acre. It is profitable to be enterprising, and the farmer can be so as well as any one else.

MR. J. T. EVERETT of Princeton, made a few remarks, urging the more thorough *study* of farming pursuits.

HON. ALVAH CROCKER paid some attention to the agricultural question "Will it pay?" making its application to this rocky gorge of northern Worcester, and thought it would.

To encourage competition from a distance, the Trustees this year voted to make a reasonable allowance for keeping all stock over night, when driven from a distance of more than eight miles.

It may not be improper here to call attention to the manner of making entries by letter. A competitor hurriedly writes that he desires to enter a colt for premium, but does not state whether it is one or three years old. Another enters a two years old heifer, but neglects to state whether for butter or for milk.

Another, perhaps, says he wishes to plow with two yoke of oxen. So the Secretary enters his name under "Double Teams." A land is provided under that class, and when the hour of starting arrives and the people are waiting, 'tis found that the "two yoke" were intended as *two single* teams.

In other cases the age may be omitted or confounded with descriptions of cattle, sheep and horses, and at the Fair the Secretary is expected to have every detail correct in black and white, if not, he is blamed for inaccuracy, blundering, &c. Now all this trouble and perhaps hard feeling can be very easily remedied if competitors will carefully notice our rules, the specified classes for which premiums are offered, and state plainly class, age, quality, &c., as they wish to have it appear before the committee.

The Secretary regrets that so many of the members of the Society were obliged to dispense with Mr. Secretary Flint's "Agriculture of Massachusetts" for 1864. Only fifty copies were received, thus leaving but four or five copies after supplying the trustees and officers of the society.

The Winchendon Band, eighteen pieces, G. W. Gwinner, leader, was in attendance, furnishing excellent music.

Great credit is due to the President of the Society, and to Col. JOHN W. KIMBALL, chief marshal, and his assistants, for the success of the exhibition.

The following Ode, inscribed to the Worcester North Agricultural Society, to be read on the occasion of their first Annual Fair after the return of peace, was written by Mrs. Charles Mason of Fitchburg :

Thank God! the long, long night is past ;
 Thank God! the day has dawned at last.
 The anguish and the strife are o'er ,
 The nation shall learn War no more.

“ Bring now your glittering spear and sword,
 And make ye of them,” saith the Lord,
 “ Plow share and pruning-hook instead ;
 To tend my green earth, plenty spread.

“ For long enough ye’ve drenched her breast
 With life-streams of your Bravest, Best !
 And long enough her rills have run
 Blood-red with gore of sire and son !

“ See! with my sweet and gracious rain,
 I wash her bosom clean again :
 Go up! go up! at my command,
 Repair the wastes, possess the land.”

Lord! we obey: ’Tis Thine to lead ;
 To follow, Ours,—to sow the seed,—
 And wait with grateful hearts, the while,
 Until the golden Harvest smile.

For better is the mellow yield
 Of Plenty, than the blood-red field ;
 And, in the sight of man and God,
 Fairer green turf than crimson sod.

REPORTS OF COMMITTEES.

The Committee on Farms report that after several years without an entry, one farm which took the first premium in 1855 was again entered this year for the same purpose. The rule which required a particular financial statement of the yearly operations, it was supposed, prevented many persons from competing who would otherwise have done so. Many and in fact the generality of farmers are not in the habit of keeping an exact record of transactions, even where money is concerned, so that it is impossible for them to know at the year's end whether their prosperity is plus or minus. Some who do, although good farmers, are unable to show a balance sheet that they feel proud of. There are still others who, though they can demonstrate to themselves a very satisfactory state of affairs, yet have a modest repugnance to telling the world of it, even under the temptation of a premium. Under these circumstances the present board of trustees abolished the requirement of a financial statement, hoping by this means to get a specimen of farm operations worthy of record for the public benefit.

The question here suggests itself, what is the object to be attained through the offer of premiums by agricultural societies? The Commonwealth gives to each of the various agricultural societies within its limits, a sum not exceeding six hundred dollars annually to be offered in premiums for various objects. Why is this done and what is to be gained

by it? In general terms we may say that it is given for the promotion of Agriculture and the Mechanic Arts, by the collection and diffusion of agricultural and mechanical information. The Worcester North Society, receiving six hundred dollars of this bounty, evidently has a duty to perform. It ought to show to the State that its money has been well expended and has elicited its quota of information. This can only be shown in its public record or printed report. If a society makes no report, the inference is that it has nothing worth saying and it becomes a question whether or not it deserves its bounty. If the report is a bare statement of the awards, it has no value except to the directly interested parties. This meagerness of the annual report, or the entire want of it, may be in part the fault of the society as such, but is more likely to be due to the failure of the different committees. Each committee has intrusted to it a portion of the State's bounty to be awarded to deserving competitors, and is to that extent responsible to the society for its expenditure. We think it the duty of every committee, where the case will admit of it, to give a reason for their decision. Of what value is it to the community to know that Mr. Smith's cow received the first premium? What is gained by the decision? Mr. Smith gets the money, and the committee gain what information they can, by seeing the animal and hearing Smith's statement. Now if the members of the committee are to be the only gainers in the way of knowledge, it would be best to make our committees very much larger than we do. We look upon the committees rather as almoners of the State's bounty on the one hand, and Smith's experience on the other. If they award money or other property, they should be able to, and should, show for just what it was awarded, and give the reasons therefor. In many cases this, of course, would be unnecessary or even impracticable, but where there are palpable reasons for the decision of a committee that would be of interest to the public, the committee ought, we think, to give them in connection with their award.

The only farm entered for our examination was that of Mr. Abel F. Adams of Fitchburg. We award him the first premium of \$15.00. Now, suppose we make no further remark. Mr. Adams gets the \$15.00 and that is all there is to it, except that the fact becomes public, and people know where a premium farm is, which they can visit if they please. The difficulty however is that scarcely anybody pleases. Mr Adams in this dilemma, volunteers a statement which accompanies this report. Although well enough, as far as it goes, it gives but a faint idea of what he has done and is doing, as it appeared to us. A great many statements reading as well as that might be made of farms all about us, not one of which would deserve a premium, and therefore we feel that something additional should be said to make the case a little clearer.

We may safely say that with Mr. Adams farming has been one-sided and up-hill business. One-sided, because on a hundred-acre farm his buildings are placed at the extreme end of its longest diameter. Up-hill, for the reason that although compact, its altitude varies, as near as we could judge, about 200 feet. The greatest variation is across its shortest diameter. His system of roads is such that these natural obstacles of elevation are in part overcome. They run lengthwise of the farm in nearly parallel lines, so that most of his roadway has but small grade to overcome. The greater part of the whole area has a northeasterly slope and its clean and well kept surface affords the writer, on an opposite rise, a perpetual feast for the eye. The surface is divided into fields of four to six acres or more by substantial stone walls, which must have required in the aggregate a very great amount of labor in their construction. We believe that very many interior walls on our farms might be dispensed with at a profit. In Mr. Adams' mode of farming they are perhaps necessary, as all portions of his farm are used alternately for tillage, mowing and pasture. His walls were all built of the stones lying on and in the soil and that

used to be considered the best way of getting rid of them. Having built all the wall he desires, Mr. Adams some years ago established a stone "depot" in a favorable location, where he has deposited, literally, thousands of loads of stone the product mainly of his manner of plowing.

Mr. Adams' forte lies in the manufacture of soil, so to speak. An unproductive spot is a continual eye sore to him. If he discovers anything of the kind on any one of his acres, he straightway leaves the ninety and nine and devotes himself to the barren fraction until it becomes fitted for the companionship of its associates, and worthy of its owner. So far does he carry this passion, that he has actually dug out the bottom of a pond, and then what lay below it, all for the purpose of rendering the tops of ledges whereon it was spread, productive. In so doing he has obtained satisfactory success, but we cannot help thinking, at too great a cost. We do not believe that the end quite justifies the means. It might be for his interest if his limits could be circumscribed and the barren spots left out in the cold, only that his occupation would be gone. We like his method of thoroughly doing whatever he undertakes. There are no bushes, briars or weeds allowed to grow near to, or in the corners of his walls, but everything is kept clean. He believes such crops to be unprofitable, inasmuch as they are expensive to raise, and bring but a poor price in the market.

We consider it great praise to be able to say of this farm, that we could find nothing from first to last that we should be ashamed to exhibit if we owned it. There are very few farms of that kind. The greatest want that we discovered was that of a good mowing machine. Mr. Adams has not had encouraging success in consequence of using poor machines, and has come to speak with satisfaction of his mowers upon legs that are always in order. We believe however that no man growing twenty or more acres of grass can afford for a single season, in these times, to cut his grass by hand. To say nothing of the increased cost, the deterioration

in value of the grass consequent upon its standing a few days and in some cases weeks after the moment of its greatest value arrives, would sometimes pay for a machine in one hay season.

The buildings are well arranged, with facilities for conveniently carrying on the ordinary operations, with a good cellar under the barn for saving manure. Water was in plentiful supply to the buildings and pastures during the whole of the past very dry season.

In conversation with Mr. Adams, we inquired of him if he thought that he could have commenced life as a mechanic, placing his small capital at interest, and been in equally good circumstances as he is at the present time. He was decidedly of the opinion that he could not have done it and brought up and cared for his family equally well. He ran in debt for his farm, and then, instead of devoting his whole energies toward immediately paying it off, by skinning his farm, he had the foresight to purchase manure, thus getting still farther into debt, all the time believing that in the end he could pay it all the easier.

Here is where many an ambitious young farmer fails. They make themselves slaves to the nightmare of a debt, imagining that until it is paid they can do nothing for the farm or themselves. A small debt to an intelligent and energetic farmer is not worth the loss of a night's sleep, while the opposite class, who ought to be frightened by it, sleep on notwithstanding. Many people have no faith in their own farming, as is evidenced by the fact of their not investing any of their surplus earnings in the business. If a farmer invests his money in corporative stocks that pay but six per cent. dividends, it is simply a confession that that is the best use he can make of it, or, in other words, he does not understand sufficiently his own pursuit, or has not confidence enough in it, to expect a return of six per cent. for his outlays. Such people, we think, should leave farming for something else that offers greater inducements to them. When a

farmer runs in debt intelligently, it shows that he has faith at least in his ability to get more than the legal rate of interest through the use of his borrowed money, and as long as he is satisfied that he does so, he need have no fears of his ability to pay in the end.

Your committee can but express the wish that there were more farmers who had this faith, which they made their governing principle of action, in which case the Committee on Farms would have their labors increased, and such men as Mr. Adams might not always succeed in obtaining the first premium.

For the committee,

JABEZ FISHER, *Chairman.*

A. F. Adams' Statement.

To the Committee on Farms of the Worcester North Agricultural Society:

GENTLEMEN:—A portion of the farm which I offer for your inspection, received a premium in 1855. Since that time I have sold land to the amount of \$1000, and purchased three acres, paying \$200 for it. Feeling desirous to keep up the fertility of my farm, I have been engaged most of the time in the manufacture and sale of milk, consequently consuming most of my hay and grain upon the farm. From April 1, 1856, to April 1, 1865, (the time when I make up my farm account,) I have sold milk amounting to ten thousand seven hundred and ten dollars (\$10,710). My sales of other articles from my farm, with the exception of cattle and beef, have amounted to about \$500 annually, and owing to the size of my family I have had a very large home market.

I have usually hired two men for eight months, and one

man from three to five months, or nearly that amount of labor by the day, and generally one man in the winter. Much of this labor has been employed in making permanent improvements on the farm. I have continued the practice of following the plow with the iron bar and lever, until most of my fields are pretty thoroughly cleared of stones, some of my heaviest crops being raised where the most stones have been removed. I cannot boast of extraordinary crops. I have been more anxious to make two spears of grass grow where but one grew before, or to raise some crop where nothing grew before, than to apply all my manure upon one acre for the purpose of obtaining a premium crop. I have plowed most of my pasture, manuring and cultivating, raising respectable crops, and on such land am seldom troubled with worms or weeds. For stock, I prefer a cross with the Short Horn. They come to maturity early, are good milkers, and I think, will make more beef, at the same expense, than any other breed with which I am acquainted. They require good keeping, but I wait to see the man who has made himself rich by starving animals of any breed. If my statement is not sufficiently full, I would be happy to answer any questions proposed by the committee.

Respectfully yours,

ABEL F. ADAMS.

APPLE ORCHARDS.

The Committee on Apple Orchards herewith report:

That only two entries for premiums were made, viz: By Charles Mason, Esq., of Fitchburg, and Ephraim Graham Esq., of Lunenburg.

Your committee visited both orchards and found they had been cultivated with great care. The competitors gave us a verbal account of their management of their trees, and it was apparent that orchards, in order to have well developed trees and fruit, require cultivation as well as cereals.

Each competitor also gave us an elaborately detailed statement in writing (which is herewith transmitted), respecting their manner of setting their trees and their cultivation, which statement renders it unnecessary for us to make further comment.

We have awarded the society's first premium to Ephraim Graham, Esq., and the second premium to Charles Mason, Esq. All which is submitted.

CYRUS KILBURN, *Chairman.*

Ephraim Graham's Statement.

The orchard I offer for the society's premium consists of fifty-six trees, all of which are Baldwin's, transplanted May 6, 1862.

The land was an "old bound out pasture," producing only a small quantity of feed; but laurel, hard-hack, so called, sweet fern and mullein were in abundance; the surface soil is a light, sandy loam generally; the subsoil, by no means calcareous, but clay intermixed in small quantities with gravel and loam, and in some parts of the field small quantities of sand, so that on the whole the soils are not what are generally termed favorable for the growth of fruit trees or the best of fruit.

The field has a southern slope and is well sheltered from the north and northwest winds by another orchard and buildings adjoining the same.

In 1861 the field was twice plowed, as well as could be

done with four oxen, and about twenty-five loads of manure spread to the acre and planted with potatoes.

In 1862 the stones were removed and the field well plowed.

The ground was then staked off into rows thirty-two feet distant each way, and the holes dug about twenty inches deep and from five to six feet in diameter and filled with compost prepared the year previous, composed of loam, leaves, decayed wood, leached ashes and a small quantity of barn manure. The object of preparing the borders so large is to give a rich and fertile soil for the small roots to penetrate during the first two years after transplanting. The trees were selected from two nurseries, twenty-five of which were four years from the bud, and upon an average one and a quarter inches diameter, and are at this time, September 20, from three to three and a half inches; the remainder of the trees were two years from the bud and from five-eighths to seven-eighths inches in diameter and are now from two to two and a half inches. The field was sowed with oats, with the exception of one square rod around each tree, in order to make it an object to hoe and cultivate around the trees. I would here mention that during the month of May, 1862, the weather was quite dry, so much so that many of the trees showed no signs of foliage, and the lives of some of them were almost despaired of for a time; in the course of the season, however, many of the trees made very respectable growth, throwing out shoots from eight to ten inches, others showing no indications of shoots, simply foliage, the younger and smaller trees making the greater number of shoots.

In 1863 the stones were removed and the field plowed and planted with stover corn and potatoes, a small quantity of manure spread to each tree.

In 1864 the field was again planted with potatoes and beans, spreading around the trees as in the year previous; during this year the growth, notwithstanding the dry season

was greater than in previous years, throwing out shoots from thirty-five to forty inches.

In 1865 the boulders and small stones were again removed from the field, being sufficient to make fifteen rods of wall, and about thirty loads compost applied to the field, made from muck, decayed wood, three loads of horse manure and three loads leached ashes, and planted with potatoes, corn and white beans; thus the whole field has been under cultivation with some hoed crop since first transplanted, and should continue to be so cultivated for the next ten years. The question now arises whether it is more profitable to transplant large or small trees; it is certain, thus far, that the small trees have made, comparatively, the greater amount of wood.

In the opinion of very good judges of orchards, the larger trees will come into bearing at least one year sooner than the others. Should that be the *fact*, it is economy to set trees of older growth than two years from the bud.

EPHRAIM GRAHAM.

Charles Mason's Statement.

The apple orchard offered by me for a premium consists of fifty-three trees, of which twelve were set out the latter part of April, 1862, thirty-seven about the 20th of May, 1863, and six in May, 1864.

Of the trees, twenty-seven were raised by myself and twenty-six, all of them but one set in 1863, were procured from a nursery. Of these latter I am obliged to say they were not of the choicest, being such as I could get rather than such as I would have had.

Of the trees raised by myself, nine were set in 1862, when a year old from the bud, most of the others at two years old. The age of the nursery trees I cannot state positively, but

suppose them to have been three years from the bud when set. The advantage, however, which they had, in point of age, was fully compensated by the more careful treatment which my trees had previously received, and by their having been taken up properly and transferred while the roots were fresh, to the places where they were to stand. My largest trees, except two which are somewhat older, are those which were set in 1862, when one year from the bud, some of which measure nine inches in circumference. Trees that have had one year's free growth from the bud, and have become well confirmed upon the stock, if taken up, as they well may be, with the roots nearly entire, and transplanted immediately, will *grow right along* without seeming much to feel the removal.

The soil in which my trees are set is very light and sandy, insomuch that persons sometimes have been led to entertain a doubt in their own minds of its capability to bear anything to much purpose. Underneath the surface soil is found, mainly, gravel or sand of different degrees of fineness.

Of the trees twenty stand twenty-five feet apart, in a row, by the roadside. The other thirty-three are in three rows, thirty feet between the rows, and the trees twenty-seven feet apart in the rows, upon ground sloping to the northwest and so steep that the upper row stands upon an embankment or terrace. This land was completely waste, overgrown with laurel and other shrubs. The bushes were cleared off and the ground plowed as well as it admitted, and after a couple of years' hoeing, being partially subdued and smoothed down, the trees were set, the first in 1863, the rest the next year. The ground has been plowed and cultivated from year to year, with hard crops, chiefly potatoes and beans, and manured for planting, but only in the hill, and that quite moderately.

When the trees were planted places were dug for their beds eighteen to twenty-four inches in depth and five feet or more across. These were filled again with the best of the surface

soil about the spot, intermingled with a bushel or so of *leather* chips and waste, and as much, or rather more compost from barn cellar, consisting of loam, barn manure, vegetable waste, and the like, with sink water, &c. When these ingredients were well forked over, a peck or thereabouts of leached ashes and two quarts of air slaked lime to each tree, were spread upon the surface and slightly dug in, and then the trees were set.

Since the setting I have had, every year, a few shovelfulls of the same compost spread about each tree and dug in with the soil in the spring. Through the summer the ground about the trees has been hoed over occasionally to keep the weeds down and the surface light. After some of the trees were set, the weather proving dry, I had such of them as were in the most exposed situations, *mulched* to some extent, a thing, by the way, well worth doing in all cases, especially with young trees.

These things, together with clearing the trees thoroughly of caterpillars, when occasion required, and a little pruning, constitute about all the care and attention they have received. I have not aimed or desired to force the growth of the trees, and with the soil, such as it was, and the comparatively slight manuring that has been bestowed upon them, the growth they have made has been, in the main, to me quite satisfactory.

The pruning that has been done to the trees has consisted in cutting out shoots when too thick or interfering, and in the spring heading back such as were too luxuriant, or straggling, or where the habit of growth of the tree is too aspiring; the aim being always to keep the trees *well down*, alike for convenience and for their own security, and to preserve the heads handsomely proportioned and well balanced and open to admit freely the light and the air.

My orchard is made up of the following varieties: (winter) Baldwins 17, common apples 5, Roxbury Russetts 4, R. I. Greenings 3, Spitzenburg Esopus, King of Tompkins Coun-

ty, Peck's Pleasant and Hubbardston Nonsuch, 2 each, Mother Apple, Wagener, Yellow Belle Fleur and Seeknofurther, 1 each; (fall) Gravenstein 2, Foundling, Red Astrachan, Gordon Royal, Williams Favorite and Shropshirevine 1 each; (sweet), Ladies Sweeting, Danvers Winter Sweet, Jersey Sweeting, Autumn Sweet Bough and Early Sweet Bough 1 each.

The admission of so many kinds in so small a collection may not, perhaps, be readily vindicated, in a purely prudential point of view. Were one rearing an orchard for the sole purpose of raising fruit for the market, he would, doubtless, best consult his interest by having all or nearly all his trees Baldwins, that being an apple of approved quality and always saleable, and being the tree which hererabouts is, on the whole, unrivalled as a bearer. Still, this one kind does not meet the demands of all seasons; besides, that some variety is always desirable. One would scarcely, but from necessity, be without some good fall apple, like the Gravenstein or Foundling, or the Roxbury Russett or its equivalent, for the latter part of winter and spring, or good sweet apples for both autumn and winter. A person, therefore, who is planting an orchard from which he designs to select fruit for his own use, may be indulged in some latitude in the selection of a larger number of kinds, of admitted excellence, even at the risk that some of those kinds may be found, upon trial, not to succeed well in the particular locality.

CHARLES MASON.

FITCHBURG, September 27, 1865.

APPLES, PEACHES, PLUMS AND QUINCES.

The *Pyrus Malus* of botanists, the "Apfel" of the Dutch, from which our Anglo-Saxon ancestors coined the word as now used, apple, has been celebrated as a choice fruit in the north temperate zone from the earliest periods of authentic history.

Whether the mysterious, allegorical tree in the garden of Eden bore apples,

Whose mortal taste
Brought death into the world, and all our wo,
With loss of Eden,

or not, is a subject of less importance *now* than to improve our fruit products and confer a lasting blessing on mankind by improvement in quality, productiveness and longevity.

Writers on pomology assert that the original of the pippin was the crab-apple, now growing wild in the forests of Europe; if that assertion be true, and it was the tempting fruit that Eve tasted, it must have been a poor dish to have handed over to the lovely Adam.

According to heathen mythology a goddess was especially assigned to watch over the orchards of Scandinavia, as apples conferred immortality on the gods,—kept them from showing signs of age;—the fermented juice was drunk by "Woden in Vathalla" on special occasions, and given the shades of heroes who had bravely fallen in battle.

The Druidic Celts of Britain held the apple tree next in veneration to the holy oak, as the parasite, the "sacred mistletoe," flourished on it nearly as well as on that monarch of forest trees.

Among the Welch of the present day, the old ceremony of saluting an apple orchard to keep off the "little folk," elfin and fairy, from injuring the crop, is yearly performed by the farmers.

They approach some tree that has failed the previous year in its crops, with a wassail-bowl of cider, on which floats a written toast, pour on its roots some of the cider as an oblation, hang up the toast on a branch, form a circle of cider drinkers around the tree, join hands and sing songs like the following specimen :

“ Here’s to thee, old apple tree,
Whence thou mayst bud, whence thou mayst blow ;
And whence thou mayst bear apple enow,
Hats full ! caps full !
Bushels and sack full !
Huzza ! ”

We know the apple was cultivated very early in many parts of England, from the fact that the Anglo-Saxons were a drinking people ; a part of their religion, in very early times, consisted in drinking deep potations to their gods, and he who drank the most was the most worthy worshipper. The Saxon Chronicles speak of their cider on festive occasions, although beer was the principal drink then, as now, among that people.

Many of the celebrated orchards gave the names to towns that have come down to us, as Appleton, Apple-garth, Apple-bottom, Appleby and Applegate.

The king of Ithica, Ulysses, homeward bound from the sack of Illium, found them in Alcimus’ garden, for he says of fruits,

“ On apples apples, figs on figs arise.”

The pilgrims of Plymouth, soon after making a settlement, planted the apple ; most of the trees, however, were from seeds brought from England—grown without either budding or grafting—the chief object being the manufacture of cider and vinegar, and, occasionally, apple-butter. If the wild European crab is the parent of our Baldwins, Porters and Newtown Pippins, (which is doubtful,) a vast improvement has taken place in quality at the expense of health and durability of the stock, a principle holding good in all organisms.

No climate or soil is better adapted to the culture of the apple than the United States, extending west from the Atlantic, between the parallels of forty degrees to forty-four degrees north, to the Pacific ocean, where ever orchards have been planted. The young orchards of Washington Territory and Oregon are producing the very finest of pomological productions.

As much has been written how apple trees *should* be cultivated, your committee wish to state how they *are* cultivated and some of the *results*.

Formerly, trees raised in New England, from well ripened seed, gathered from fruit of seedling trees, in a virgin soil, lived, bloomed and bore fruit more than two hundred years. The tree planted by Peregrine White, the first male born in Plymouth Colony, is now bearing fruit. Now, young trees are constitutionally impaired, sickly, and, while yet young, show signs of premature decay, and—death. Most of the seeds now used for seedling stocks, (where stocks are used at all,) are washed from the pomace of windfall, unripe, wormy, refuse fruit. The seeds are planted in nursery drills, sometimes without being freed from the acid, poisonous pomace, to form grafting stocks; no, not stocks, but pieces of roots.

At the West, from whence come most of our young trees, by and through agents, the nurserymen let the trees stand till they have made roots of considerable length, then they dig them up late in autumn, put them into their "grafting cellars," and, during the inclemency of winter, cut the roots into pieces of about six inches in length, with pruning shears, put a graft into one of the ends, put on their grafting wax and pack them away in wet sand for spring setting; if, however, the root can grow, (as many do,) they make the trees of which many of our young orchards are composed. They are produced to *be sold* by agents, or otherwise.

Another fact is, the grafts, though of choice kinds, too frequently are taken from old trees in renovated orchards. and the renovating grafts taken from other old trees, there-

fore partaking of a double degree of infirmity from decaying trees. The maimed roots are forced, by stimulating manures, to make wood; when the trees are taken up the roots are cut with spade and mattock, within six inches of the crown of the roots, and packed to New England for our orchards.

The Almighty made a tap root to the apple tree, to hold the tree firmly in its place, and, in case of drouth, to draw moisture from the subsoil, but modern culturists cut it off; and the result is, where exposed to a strong current from the northwest, the trees lean at an angle of forty-five degrees to the horizon. The choice of soil and shelter hardly secure a passing thought, and trees are planted in holes big enough to insert a post, in blue clay and barren sand banks; if not too sterile to bear grass, perhaps, the next five years, the field is mown. The grass crop has exhausted the soil, and stops growing, and so do the young trees.

The farmer puts in his plow, cuts off half the roots, and having no deep roots, the trees are miserable apologies for an orchard.

In many sections the canker worm (*anisoptery pometaria*), or the tent caterpillar, (*clysiocampa Americana*), are allowed to defoliate the trees, taking from them their very lungs and digestive organs. When a little larger, the apple borer, (*seperda vivitata*), will bore into the young tree at the crown of the roots, to sap its life, and should a friendly woodpecker commence taking it out, some lazy village or city "pimp" with gun and game-bag, trespassing on the farmer's orchard, will shoot it. If the trees still live the (*coccus*), or scale louse, will fasten on the sickly branches and suck the life blood of the trees; the (*aphis mali*) attack the opening buds, beside twenty other depredators on the growing twigs and roots; the apple being, naturally, a very hardy tree, still fruit spurs are prematurely formed, it blooms and produces fruit. Our hills are denuded of forest trees, depriving the atmosphere of the requisite moisture, the Borean blasts have a free sweep from the north pole to the Gulf of Mexico, and

a year like 1865, these causes combined with others, publish to New England, in every young orchard, the word—FAILURE.

Under the above heading your committee have made the following awards :

APPLES.

For the largest and best collection of apples no award.

For the best twelve varieties, five specimens each,

To J. A. Marshall, Fitchburg, 1st premium, *Harris on Insects*.

For the best six varieties, five specimens each,

1st premium, to J. Minnott, Westminster,	\$2 00
2d, to N. Caswell, Fitchburg,	1 50
3d, to Benjamin Safford, Fitchburg,	1 00
H. Wood, Fitchburg, gratuity,	50
J. G. Woodward, Ashburnham, gratuity,	50

For the best three varieties of five each,

1st premium, to J. W. Forbush, Westminster,	1 50
2d, to A. M. Sawyer, Fitchburg,	1 00
3d, to J. Fisher, Fitchburg,	50
A. S. Dole, Fitchburg, gratuity,	50
L. Nichols, Fitchburg, gratuity,	50
J. Bennett, Leominster, gratuity,	50

For the best twelve specimens of one variety.

1st premium, to L. Stockwell, Fitchburg,	1 50
2d, to Benjamin Safford, Fitchburg,	1 00
N. Caswell, Fitchburg, gratuity,	50
Horace Wood, Fitchburg, gratuity,	50
James McIntire, Fitchburg, gratuity,	50

PEACHES.

Best collection, no award.

Best dish or basket,

1st premium, to H. A. Blood, Fitchburg,	2 00
2d, to L. Nichols, Fitchburg,	1 00
3d, to A. Crocker, Fitchburg,	50
Mrs. B. F. Lewis, Fitchburg, gratuity,	50

QUINCES.

Best dish or basket,	
1st premium, to Benjamin Snow, Jr., Fitchburg,	\$1 00
2d, to James McIntire, Fitchburg,	50
C. A. Emory, Fitchburg, gratuity,	40
J. Fisher, Fitchburg, gratuity,	35

PLUMS.

For the best collection, no award.

Best dish,	
1st premium, to Ohio Whitney, Jr., Ashburnham,	1 00
2d, to James Bennett, Leominster,	50
J. A. Marshall, Fitchburg, gratuity,	25

JAMES BENNETT, *Chairman of the Committee.*

GRAIN.

The committee appointed by the Trustees to award the society's premiums on Grain, consisted of Solon Carter of Leominster, Ira Carleton and Joseph Upton of Fitchburg, Samuel H. Bailey of Lunenburg, and Joseph P. Reed of Princeton.

The secretary sent a list of the entries to the chairman early in June. The committee was called together the 24th of June, at which time they learned that Mr. Carleton would not act with the committee, because he had been a member of the grain committee in 1864. They assigned the duties of the committee as follows:

Samuel H. Bailey was to examine and report upon the fields of Rye and Oats.

Joseph Upton was to examine and report upon the fields of Wheat.

Joseph P. Reed was to examine and report upon the fields of Barley and Beans; and Solon Carter was to examine and report upon the fields of Corn.

The Corn of Joseph Goodrich was harvested September 6, twenty-three hills to the square rod, and the weight of ears was 40 12-16 lbs. November 6, the ears weighed 30 14-16 lbs.; shrinkage 9 14-16 lbs., shelled corn 24 12-16 lbs., cobs 6 2-16 lbs. This would give on an acre, on the cob 4940 lbs., shelled corn 3960 lbs., cob 980 lbs.; and would give 70 40-56 bushels to the acre.

The Corn of Cyrus Kilburn was harvested September 6, thirty-three hills to the square rod, and the weight of ears was 40 8-16 lbs. November 6, the ears weighed 26 10-16 lbs.; shrinkage 13 14-16 lbs.; shelled corn 20 lbs., cobs 6 10-16 lbs. This would give on an acre, on the cob 4260 lbs., shelled corn 3200 lbs., cobs 1060 lbs.; and would give 57 8-56 bushels to the acre. This falls below the society's standard of weight, to entitle the competitor to a premium. This field suffered in two ways: first, by being too *thick* both in the row and in the hill, and, in the second place, from the drouth, it did not fill out well; it was very loose upon the ear, consequently it was light.

The Corn of Edwin D. Works was harvested September 26, twenty-three hills to the square rod, and the weight of ears was 37 12-16 lbs. November 6, the ears weighed 32 2-16 lbs.; shrinkage 5 10-16 lbs.; shelled corn 24 4-16 lbs., cobs 7 14-16 lbs. This would give on an acre, on the cob 5140 lbs., shelled corn 3880 lbs., cobs 1260 lbs.; and would give 69 16-56 bushels to the acre.

The committee award the following premiums:

BEANS.

First Premium to Cyrus Kilburn,	\$4 00
---------------------------------	--------

BARLEY.

First premium to Benjamin Safford of Fitchburg,	6 00
Second premium to John G. Woodward of Ashburham,	4 00

RYE.

First premium to Joseph Goodrich,	6 00
-----------------------------------	------

CORN.

First premium to Joseph Goodrich,	\$16 00
Second premium to Edwin D. Works,	10 00

The committee regret exceedingly that competitors for the society's premiums should be so delinquent in complying with the requisitions of the society, in relation to a statement concerning their crops, and that there should be so few to compete. There were three entries of Rye and but one statement that reached the committee. Of Wheat there were four entries, and no competitor complied with the rules fully. Therefore, the premiums were not awarded. It was the same with other crops. This is very unsatisfactory to the committee as well as to the competitors.

The committee venture to offer a few suggestions on the cultivation of *grain*, not because they are new, but to stir up the minds of agriculturists by way of remembrance.

And the first thing to be done, to insure success, is to thoroughly prepare the ground by plowing, harrowing and removing stones, so that its surface, to the depth of six or eight inches, may be made fine, that the roots of the young plants may easily and readily find food from which to grow. The next thing is to apply the manure in such a way that the growing crop can appropriate it to its own increase.

Distance of hills is another subject on which there is a diversity of opinion and practice, and this, to a considerable extent, must be regulated by the condition and location of the land, the kind of seed planted, and such other considerations as will occur to the mind of every practical farmer. A side hill would require more distance than an even surface, and one where there were stones and coarse sods more than where the surface was well pulverized. From three and one-half to four feet each way is a proper distance where the land is capable of being cultivated both ways, if not, the rows should be wider one way and closer the other, and should be so close as to contain from twenty to twenty-five hills to the square rod.

As to distance of seed in the hills there is also a diversity of practice. It should be planted close in the hills for the following reasons: 1st. Because it will stand stronger and suffer less from the winds and rains. 2d. Because the rows may be equally near and give six or eight inches more space to work. 3d. Because it is more easily cleared of weeds, and there is less danger of breaking it down when bringing up the fresh dirt around it. 4th. Because when ready for harvesting, a hill can be cut at a single stroke of the cutter or sickle, when, if scattered, a stroke would be necessary for each stalk. Number of kernels in the hill. To guard against depredations by worms and imperfect seed, there should be from five to eight kernels put in each hill, to remain until after the hoeing, but, before the second hoeing, the number of stalks should be reduced to four. It is better to have but three than to have more than four. In cultivating a field of corn the object should be to keep the surface as even as possible, as the earth is worth more to the growing crop to remain in the rows for the roots to work in than to be drawn up around the stalks. And it will stand the drouth better and be firmer in the hills.

A clean culture is also necessary. The surface should be kept constantly light by the plow, harrow, horse hoe, or cultivator. No weeds or grass should be allowed to grow with corn, as they consume a part of the food designed for the corn, and thus check *its* growth and productiveness, as well as that of succeeding crops.

In reading the report of the Secretary of the Board of Agriculture, of a discussion by that body, on the subject of raising corn, I was very much surprised at the opinion expressed by Mr. Grout, (a member of the board,) relating to the depth to which corn roots extend below the surface. The remark to which I refer is on the 62d page of the "Agriculture of Massachusetts" for 1864, where he says: "I have examined that matter myself, and I have found the roots about two inches under the surface. They do not run to a very great depth."

My belief was that they extended much deeper, and to satisfy my own curiosity in the matter, *I also have examined it to some extent.*

While plowing a few days since, where my corn grew the present year, I found corn roots, distinctly discernable by the naked eye, at the depth of a foot, and the roots were to be seen in every particle of soil as deep as I could plow, and I am confirmed in the belief that the roots of corn will *penetrate as deep* as you will loosen the earth, and place manure for them to feed upon.

There are many subjects connected with the raising and securing a field of corn, which the committee do not propose to enlarge upon at this time, such as the best kinds of manure, quantity, time and manner of application, the right time and the best manner of putting the seed into the ground, the most economical method of harvesting, whether by cutting the stalks in the usual manner, or by cutting at the ground and stooking. These questions, and such as these, are capable of almost indefinite enlargement. If, by anything suggested in this report, any *young farmer* or *old one*, should be led to a wiser expenditure of labor, or a richer harvest than heretofore, the committee will feel amply rewarded.

All of which is respectfully submitted.

SOLON CARTER, *Chairman of Committee.*

Joseph Goodrich's Statement.

CORN.

The soil on which I raised my corn is rough clay loam. In 1863 the land was pastured. In 1865 I raised corn, using fifteen loads compost from the barn cellar.

For the present crop, I plowed in April, from six to eight inches deep, furrowed with plow, one way, four feet apart, putting a small shovelfull of cellar compost in each

hill. I planted the first week in May in rows, one way, about three feet apart, with seven quarts of seed, called (Carter corn,) to the acre. The first week of September the stalks were cut, and the corn harvested the third week, having two and a quarter tons of stover.

Cost of seed and planting,	\$ 3 00
“ “ plowing and other preparations,	9 00
“ “ manure, fifteen loads,	25 00
“ “ cultivating twice, with plows,	10 00
“ “ plaster applied at hoeing,	2 00
“ “ harvesting,	10 00
	<hr/>
	\$59 00

Edwin D. Work's Statement.

CORN.

The soil is sandy loam. Had oats on the same field in 1863, putting on about eight loads of manure. In 1864 had a cross of sorrel with a very little clover; no manure used. For the present crop, I plowed over, the 23d and 24th of May, seven inches deep, harrowed with a cultivator harrow. I applied twenty-five loads manure, spreading a part and putting the remainder in the hill; also applied fourteen bushels of ashes.

Planted the 26th of May, by hand, common eight-rowed corn. Cultivated twice with a common cultivator. Value of stover \$10.00 Harvested the middle of October.

Cost of seed and planting,	\$ 5 50
“ “ plowing, and other preparations,	5 00
“ “ manure,	50 00
“ “ weeding and hoeing,	8 00
“ “ harvesting,	8 00
	<hr/>
	\$76 50

Joseph Goodrich's Statement.

RYE.

The soil is loam gravel subsoil, and has been down to grass several years. For the present crop, I plowed the last part of August, eight inches deep, then pressed the sods down with a roller, and sowed, broadcast, with white rye the 7th of September, five pecks of seed to the acre.

It was scaped the second week of July, yielding 28 3-14 bushels per acre, and 2200 lbs. stover; used no manure.

Cost of seed and sowing,	\$4 00
“ “ plowing and other preparations,	5 00
“ “ harvesting,	6 00
	<hr/>
	\$15 00

Benjamin Safford's Statement.

BARLEY.

The soil was gravelly loam. In 1863, raised grass on the same land, and in 1864, corn, applying twenty-five loads of manure.

I applied fifteen loads of manure, spreading and plowing it in five or six inches deep; then harrowed. The 15th of May, sowed broadcast with two-rowed barley. Mowed the first week in August, harvesting 53 1-3 bushels, and 1 ton straw.

Cost of plowing,	\$4 00
“ “ manure,	22 50
“ “ seed and sowing,	7 00
“ “ harvesting,	8 00
	<hr/>
	\$41 50

John G. Woodward's Statement.

BARLEY.

The soil in which I raised my barley is clayey. In 1863, I had grass in the same field, and in 1864, raised corn and potatoes, applying sixteen loads green manure.

For the present crop, I plowed May 23d, seven inches deep, and then harrowed in eighteen loads of manure. June 1st, sowed, broadcast, three bushels of two-rowed barley. Mowed August 17th, harvesting 38 1-8 bushels of barley and 2730 lbs. straw.

Cost of plowing, &c.,	\$3 50
“ “ seed and sowing,	4 75
“ “ manure,	18 00
“ “ harvesting,	5 00
	<hr/>
	\$31 25

Cyrus Kilburn's Statement.

WHITE BEANS.

The soil on which I raised my beans is dark sandy loam. In 1863 I raised potatoes, and in 1864 corn, on the same ground, applying manure at the rate of twenty loads to the acre. For the present crop, I plowed once, in June, six inches deep, put two loads compost manure in the hill, hoed with a hand-hoe three times; pulled and stocked about the 1st of September. My beans are of an early variety, (white pea bean,) ripen in eighty or ninety days from planting. They were planted so near, one hill to another, that the vines nearly covered the ground, not more than eighteen inches apart each way, three to six beans in a hill. The square rod selected

by the committee produced 17 lbs. and 4 oz. of beans, well dried and hand picked, fit for the pot.

Cost of seed and planting,	\$3 00
“ “ plowing,	1 00
“ “ cultivating,	2 00
“ “ harvesting,	4 00
“ “ value of manure,	2 00
	<hr/>
	\$12 00

GARDENS.

The Committee on Gardens report, that it was a subject of regret that only one garden was entered for premium, that of Alvah Crocker, Esq. On the 10th of June, two of your committee visited the garden, and found the early vegetables, such as peas, cucumbers, &c., looking well. On the 13th of July we visited it again, and found a great improvement. August 12th, one of your committee visited it again, and on the 18th, also, with the other members of the committee who had not before seen it. The garden is situated back of Mr. Crocker's residence, and did not seem to suffer much from the drouth, and the later vegetables were looking well. The garden, we should judge, had yielded bountifully, and with the exception that rather more care should have been taken in conquering the weeds, was well managed by Mr. Crocker's gardener, Mr. Dyke.

The committee award to Alvah Crocker, the second premium of \$4.00.

The Committee on Gardens would impress upon their fellow-citizens the importance of giving more attention to this department of agriculture. When we consider that in 1860 there were six entries for premiums for kitchen gardens, and that the entire report on gardens for 1864 is comprised in these words: "The Committee on Gardens award to Mr. James F.

Munroe a premium of two dollars for Flower Garden," and that only one entry had been made the present season. We cannot let the present opportunity pass without doing what we can to direct attention anew to this subject. It is well known that a large proportion of our early vegetables are procured in Boston, and after adding expense of freight, are sold at a profit by the dealer; this, together with the fact that vegetables, freshly gathered, are better and more healthy, should induce the farmers of Worcester North to endeavor to furnish a supply for the markets of our larger towns, and our mechanics and others, wherever practicable, to raise their own supply. We would stimulate all such persons to greater efforts in this direction, not doubting but they will find it both remunerative and an increase of employment. There are many mechanics who are employed in shops and elsewhere, who would find time, in addition to their regular employment, to cultivate a garden, and would find it a pleasant recreation, beside other advantages named. We are not aware of the amount paid out in a single season for vegetables, even in a small family. We know it is said by some that it is cheaper to buy; this we do not admit, only to the extent that it might not pay for any one to attempt to raise every kind, for their land might not be adapted to all. At the Hall, in 1863, one individual exhibited fifty-four varieties, but few would have leisure to attend to so large an assortment, nor is it necessary, for a comparatively few varieties, of the most approved kinds, are sufficient. It is hardly necessary to say that in order to succeed, especial care should be taken in the preparation of the soil, it being thoroughly worked, either by the plow or spade, or both, and that the manure used also, should be fine, and not green from the yard, that it may mix readily with the soil. Care should be had also in selecting seeds; it is believed that many of those for sale do not germinate on account of age. We know of no remedy for this, but for each one to raise his own. But it is not always the fault of the seeds. Many plant their gardens too early. A few

warm days in April, and they hasten in the seed, this being followed by the long and often cold storms of May, and the plants do not appear, and the garden must be again planted, or no crop. Great care should also be taken in subduing the weeds, which can at first be done best by hand, but after the plants became larger, a garden hoe or other approved instrument will suffice. Some are still negligent in allowing weeds to mature late in the season, which furnish not only for themselves, but for their neighbors, a crop for another season. We are aware that in the cultivation of a garden, the grace of patience will be called into exercise; we shall not only have to contend with weeds which grow not only when we wake but when we sleep, but with insects of various kinds, and with drouth it may be, but all these may be overcome, and with diligence, a satisfactory crop secured. We know that in our larger towns there will always be many unable, from want of land, or other causes, to raise their supply of vegetables. Such must, of course, depend upon the market, and we think that our farmers should see that this supply should be furnished from our own vicinity, and not brought from the Boston market. We have land in our neighborhood well adapted to market gardening, and the necessary skill to cultivate it. In conclusion, we would enjoin upon all to endeavor to awaken a new interest in the garden, honored by the Creator as being the first dwelling place of Man, and let us not suppose that after his defection, the sentence that he should eat the herb of the field, and in the sweat of his face he should eat bread, was an unmixed evil, but blended with mercy, for such employments tend to elevate man, and the careful study of the most minute plant is calculated to inspire us with gratitude and love to the beneficent Creator.

J. HASKELL, *for the Committee.*

EXPERIMENTS.

The Committee on Experiments, appointed by the Worcester North Agricultural Society, would state, that but one experiment was entered for their inspection, and that was by D. H. Merriam, Esq., for an experiment in cultivating onions upon sward land. The field contained three acres, and was sowed with onions, with the exception of some ridges of sods, upon which cabbages were raised, and some vacant spots filled with squashes and tomatoes. According to his statement, he has made a clean profit of \$100 per acre, besides making a permanent improvement to the land, by thorough cultivation, removing stones, &c., and as he applied a large amount of manure, we suppose that one half the strength of it still remains in the soil. The result shows what can be done, by a liberal application of manure and a judicious employment of a large amount of labor. His crop was a good one; but he anticipates a much greater crop the next season. We think his statement a valuable document, well worthy of the attention of the members of the society, and we accordingly award him a gratuity of fifteen dollars.

ABEL F. ADAMS,
 JONAS A. MARSHALL, } *Committee.*
 ABEL MARSHALL,

 PLOWING—DOUBLE TEAMS.

The Committee on Plowing with Double Teams, having attended to their duty, report as follows:

1st premium to Moses Sawyer, 2d, of Sterling,	\$7 00
2d " " D. F. McIntire of Fitchburg,	5 00
3d " " Isaac B. Woodward of Fitchburg,	3 00
F. B. Harrington of Leominster, gratuity,	3 00

F. B. Harrington made his entry too late for compliance with the rules of the society, yet he appeared on the ground

and performed his work so well, that the committee recommend for him the above gratuity. The ground, for plowing, although presenting a tolerably smooth surface, was not very clear from cobbles, and being quite dry, was not in condition for fancy plowing. The teamsters performed their part in a very quiet and orderly manner.

Mr. Sawyer used a double swivel plow, it being the only one of the kind on the ground. The time occupied in performing the work by Mr. Sawyer, was forty-three minutes; by Mr. McIntire, thirty minutes; by Mr. Woodward, twenty-nine minutes; by Mr. Harrington, twenty-eight minutes. And, although Mr. Sawyer occupied the longest time, the committee were of opinion that the very thorough manner in which he accomplished his work, (with his swivel plow,) would amply pay the difference in time.

All the awards were made on that principle. Taking into consideration the plows used by the other competitors for the premiums, and the unfavorable condition of the ground plowed, the committee were of opinion that they performed their work in a manner highly creditable to them as plowmen.

ASAPH WOOD, *Chairman.*

PLOWING—SINGLE TEAMS.

The Committee on Plowing with Single Teams, report:

That the whole number of teams entered for premium was four, viz.:

Joseph Cushing of Fitchburg, by his man, Elijah Taylor, as plowman and driver.

Levi Down of Fitchburg, holder and driver.

J. E. Merriam of Princeton, holder and driver.

George Wood of Leominster, holder, with driver.

J. E. Merriam intended, but failed to make the entry, seasonably, the committee decide, taking the post office mark on

his letter notifying the secretary, it being dated Thursday instead of Tuesday previous. George Wood entered his team as a double team, by mistake. So that, conforming to the rules of the society, we felt obliged to count *out* J. E. Merriam and George Wood, (much to our sorrow,) leaving only two competitors, Joseph Cushing and Levi Downe, although all four plowed and did excellent work.

Levi Downe with his six years old oxen, weight 2935 lbs., and Michigan plow, performed his work of one-tenth of an acre of sward land on Justin Stearns' farm, in thirty-nine minutes, and we award him the society's first premium of \$7.00.

Joseph Cushing's six years old oxen, weight 3400 lbs., with Blake & Barnard's plow, performed the same amount of work in forty-one minutes, and we award him the society's second premium of \$5.00.

J. E. Merriam with his four years old oxen, weight 2805 lbs., performed the same amount in thirty-nine and a half minutes.

George Wood with his four years old oxen, weight 2920 lbs., and driver and side-hill plow, performed the same amount in forty minutes, all doing the work excellently, without noise and whipping, all the oxen being trained to work without much urging, which is, we think, an important feature in the improvements of the day.

And we would recommend that the society give a gratuity to J. E. Merriam of \$5.00, for the excellent manner in which his four years old oxen performed their work, we being compelled by the society's rules, to withhold a premium from him.

In conclusion, your committee would recommend, that land, to be plowed by competitors another year, be found more contiguous to the village of Fitchburg, as we climbed "Alps upon Alps," and a distance of one mile or more from the village, rendering it very inconvenient for most persons to witness this important part of the programme of Worcester North Agricultural Show.

CYRUS KILBURN, *Chairman.*

PLOWING—HORSE TEAMS.

The Committee on Plowing with Horse Teams, award to
 Warren B. Page of Fitchburg, first premium, \$7 00
 Joseph Cushing of Fitchburg, second premium, 5 00

LEWIS G. TUTTLE, *Chairman.*

BLOOD STOCK.

The Committee on Blood Stock have attended to the duties of their appointment, and make the following report, viz.:

There were offered for premium, two Bulls only of the Alderney stock, by Nathan Caswell of Fitchburg, and we award, for his best two years old bull, the second premium of \$4.00.

The first premium on Devon bulls, we award to J. P. Reed of Princeton, \$6.00.

To Timothy Clark of Royalston, for his Durham bull, the first premium of \$6.00.

To Lyman Nichols, for his Durham bull, \$4.00.

We recommend a gratuity to Capt. J. Upton, Fitchburg, for his Durham bull, that took the first premium last year, \$2.00.

To J. W. Gates, Ashby, for his Ayreshire bull, not entered by the society's rules, a gratuity of \$2.00.

To J. P. Reed, Princeton, for his Holderness bull, a gratuity of \$3.00.

To Lyman Nichols, Fitchburg, for his pure Ayreshire bull, two years old, the first premium, \$6.00.

To J. H. Whitcomb Littleton, for his Ayreshire bull, second premium, \$4.00.

To J. P. Reed, for his Holderness cows, we recommend a gratuity of \$6.00.

Respectfully submitted,

J. T. EVERETT, *Chairman.*

MILCH KINE.

E. F. Bailey of Fitchburg, John Davis of Ashby, Milo Robbins of Ashby, and Alexander Craig of Townsend, Committee, award,

ON HERD OF FOUR COWS.

To J. P. Reed of Princeton, first premium,	\$10 00
“ F. B. Harrington of Leominster, second premium,	7 00

COWS FOR BUTTER.

To Nathan B. Reed of Princeton, second premium,	4 00
“ “ “ “ third premium,	3 00

HEIFERS, THREE YEARS OLD, FOR BUTTER.

To Hosea M. Caswell of Fitchburg, first premium,	5 00
--	------

HEIFERS, TWO YEARS OLD, FOR BUTTER.

To Hosea M. Caswell of Fitchburg, first premium,	4 00
“ Nathan B. Reed of Princeton, second premium,	3 00
“ Isaac B. Woodward of Fitchburg, third premium,	2 00

COWS FOR MILK.

To E. T. Miles of Fitchburg, first premium,	5 00
“ L. Barker of Fitchburg, second premium,	4 00

HEIFERS, THREE YEARS OLD, FOR MILK.

To J. P. Reed of Princeton, first premium.	5 00
--	------

HEIFERS, TWO YEARS OLD, FOR MILK.

To Samuel Burnap of Fitchburg, first premium,	4 00
---	------

E. F. BAILEY, *Chairman.*

J. P. Reed's Statement.

GENTLEMEN:—The herd of four cows which I offer for premium, are of the Holderness breed, two of them, and are

aged five and seven years; the other two are grades of that breed, and are four years old, each.

The weight of their milk at the June trial was 840 lbs., which produced 30 lbs. and a small fraction of butter. Weight of milk, September trial, 640 lbs., which produced 23 lbs. of butter. Keeping in June, pasture; September, an addition of corn fodder twice a day.

The three years old milch heifer which I offer for premium, is a grade Holderness; calved the 22d of February, 1865.

Her milk weighed, June trial, 204 lbs.

“ “ “ September trial, 150 1-2 lbs.

Keeping as above stated.

F. B. Harrington's Statement.

I enter for premium, one herd of four cows, for butter. I weighed the milk the first six days after the first Sunday in June, weight 692 4-7 lbs.; butter from the same, 33 lbs. The corresponding six days in September, weight of milk, 570 lbs; butter from the same, 26 lbs. 7 oz. Total milk, 1262 lbs; total butter, 59 lbs. 7 oz.

N. B. Reed's Statement.

To the Committee on Milch Kine:

I offer for premium, two cows, age seven and ten years; breed mixed; were raised in Princeton, by myself. No. 1, ten years old, calved April 5th, and gave during the June trial, 264 lbs. of milk, which made ten pounds of butter; the corresponding days in September she gave 181 pounds of milk, which made 5 3-4 lbs. of butter. No. 2, seven years old, calved January 19th. She gave in June trial, 210 lbs. of milk, which made 8 3-4 lbs. of butter; the corresponding days in September she gave 156 pounds of milk, which made

5 lbs. of butter. Their keeping has been pasture, fodder feed and corn, since August.

The two years old heifer I enter for premium, calved January 1st, 1865; will calve February 5th, 1866. She gave 203 lbs. of milk during the June trial, which made 6 lbs. of butter; the September trial she gave 103 lbs. of milk, which made 3 lbs. of butter. The first trial was six months after calving, and the second trial eight months; she has run with my other cows; common pasture, with fodder corn, has been their keeping.

NATHAN B. REED.

Hosea M. Caswell's Statement.

This three years old heifer made nine and a half pounds of butter, the first week in June, commencing first Monday; also, the first week in September, made seven pounds of butter. She had no feed but the pasture.

This two years old heifer, made seven pounds and six ounces of butter, the first week in June; also, the first week in September, made four pounds and twelve ounces of butter; she had no feed but the pasture.

Isaac B. Woodward's Statement.

To the Committee on Milch Kine:

GENTLEMEN:—The heifer, "Topsy," which entered for premium as a butter heifer, was two years old last March. She dropped her calf in March. Her cream for the six days in June, commencing the first Monday, made six pounds and one ounce, (6 lbs. 1 oz.) At the like trial, in September, she made four pounds and one ounce, (4 lbs. 1 oz.) Her feed, in June, was what she got with the other cows in the pasture. In September, the same with cows, corn night and morning and dry at that.

ISAAC B. WOODWARD.

September 20, 1865.

E. T. Miles' Statement.

To Committee on Milch cows :

"*Star*," eight years old, weight 1070 lbs. Dropped calf May 13, 1865. Her milk, for the first six days in the month of June, measured, respectively, 20, 19 1-2, 20 1-4, 19 3-4, 20 1-4, 20 1-2 quarts. For the first six days of September, 15, 15, 15, 15 1-4, 15 1-4, 15 1-4 quarts. No trial has been made as to butter. In the month of June there was made from her milk, 37 pounds of butter; during this month, however, three quarts of her milk were sold daily; my own family used milk without regard to quantity; we also indulged somewhat in the "June luxury," strawberries and cream. In the month of June, she gave 657 quarts; in July, 553 3-4 quarts; in the month of August, 472 quarts. From the 29th day of May to September 25th, inclusive, say 120 days, her milk measured 2110 quarts, or 17 5-8 quarts per day. Her keeping has been the pasture in rear of my house, with from four to six quarts fine feed per day, with corn fodder, for a short time, of not very good quality.

E. T. MILES.

FITCHBURG, Sept. 25, 1865.

L. Barker's Statement.

Weight of milk, June 7,	-	-	-	44 1-2 pounds.
" " " " 8,	-	-	-	44 1-2 "
" " " " 9,	-	-	-	46 1-2 "
" " " " 10,	-	-	-	40 "
" " " " 11,	-	-	-	41 "
" " " " 12,	-	-	-	37 1-4 "
				<hr/>
				253 3-4 "

Fed on eight quarts of potatoes; went in pasture; milked three times each day.

Weight of milk	September	18,	-	-	22	pounds.
"	"	"	"	19,	22	"
"	"	"	"	20,	22 1-2	"
"	"	"	"	21,	23	"
"	"	"	"	22,	23	"
"	"	"	"	23,	23	"
					<hr/>	
					135 1-2	"

Fed in the stall four quarts middlings.

L. BARKER.

September 25, 1865.

Samuel Burnap's Statement.

The heifer I offer for premium is one half Dutch, the remainder Native and Durham; was two years old on the 24th of March last. On the 16th of April she had a calf; when five weeks and two days old, the butcher credited me for 103 pounds, dressed. I milked from her, for three weeks, nearly three quarts a day, after the calf had taken all it would. I commenced weighing the milk on the first of June, for seven days; weight 181 1-2 pounds, averaging 26 pounds daily. September 1st, for seven days, 129 1-2 pounds, averaging 18 1-2 pounds daily, of good milk. The keeping, in June, was a poor pasture, with two quarts of shorts at night. In September, the same pasture, with fodder corn, night and morning, and two quarts of fine feed at night.

SAMUEL BURNAP.

FITCHEURG, September 19, 1865.

HEIFERS.

The Committee on Heifers report:

TWO YEARS OLD.

1st premium, to Joel Page of Fitchburg,	\$4 00
2d, to J. P. Reed of Princeton,	3 00
3d, to Loriston Stockwell of Fitchburg,	2 00

YEARLINGS.

1st premium, to J. E. Merriam of Princeton,	3 00
2d, to J. P. Reed of Princeton,	2 00
3d, to C. F. Woodbury of Winchendon,	1 00

For the committee,

THOMAS BILLINGS, *Chairman.*

HEIFER CALVES.

The Committee on Heifer Calves, having attended to their duty, award the following premiums:

CALVES MORE THAN FOUR MONTHS OLD.

1st premium, to A. F. Adams of Fitchburg,	\$3 00
2d, to Samuel Hayward of Ashby,	2 00

RAISED BY HAND.

1st premium, to C. F. Woodbury of Winchendon,	3 00
2d, to J. P. Reed of Princeton,	2 00
3d, to N. B. Reed of Princeton,	1 00

For the committee,

EDWARD BACON.

WORKING OXEN.

The Committee on Working Oxen have attended to the duty assigned them, and respectfully report:

That the whole number of teams entered was fourteen.

After as careful a consideration as the circumstances of the

occasion would permit, they have with great unanimity agreed upon the following awards :

1st premium, to Moses Sawyer, 2d, of Sterling,	\$6 00
2d, to Mrs. M. Shattuck of Fitchburg,	5 00
3d, to J. P. Reed of Princeton,	4 00
4th, to Whitman & Miles of Fitchburg,	3 00
5th, N. B. Reed of Princeton,	2 00

BEST TEAMSTERS.

1st premium, to William Sawyer of Sterling,	5 00
2d, to C. K. Sawyer of Fitchburg,	2 00

The cattle were in good condition, gave evidence of admirable training, and performed to the entire satisfaction of the committee. All of which is respectfully submitted,

HARLOW SKINNER, *Chairman.*

STEERS MORE THAN TWO YEARS OLD.

The Committee on Steers more than two years old have awarded as follows :

1st premium, to Alfred Skinner of Princeton,	\$5 00
2d to Edward Bacon of Westminster,	4 00
3d, to N. B. Reed of Princeton,	3 00
Frank Gates of Ashby, gratuity,	1 00

TEAMSTERS.

1st premium, not awarded.	
2d, to Alfred Skinner of Princeton,	2 00
N. B. Reed of Princeton, gratuity,	2 00

TWO YEARS OLD.

1st premium, to Thomas Billings of Lunenburg,	4 00
2d, to J. P. Reed of Princeton,	3 00
3d, not awarded, no one to compete.	

TRAINED STEERS.

1st premium, to J. P. Reed of Princeton,	4 00
2d, not awarded, no one to compete.	

C. K. SAWYER, *Chairman.*

YEARLING STEERS AND STEER CALVES.

The Committee on Steers and Steer Calves, award the following premiums, to wit:

YEARLINGS.

1st premium to N. B. Reed of Princeton,	\$3 00
2d, to J. P. Reed of Princeton,	2 00

TRAINED STEERS.

1st premium to J. P. Reed of Princeton,	3 00
2d, to N. B. Reed of Princeton,	2 00

STEER CALVES RAISED BY HAND.

1st premium to J. P. Reed of Princeton,	5 00
2d, to Daniel S. Eaton of Fitchburg,	3 00

TRAINED CALVES.

1st premium to J. P. Reed of Princeton,	3 00
---	------

For the committee,

EPHRAIM GRAHAM, *Chairman.*

FAT CATTLE.

The Committee on Fat Cattle submit the following report:

That there were two oxen, four four-years old, two three-years old and five cows offered for premium, and we have awarded the first premium, of \$8.00, to Sewall G. Mirick; the second, of \$5.00, to Charles G. Boyden of Leominster; the third, of \$3.00, to J. P. Reed of Princeton.

On cows, to J. T. Everett, for his four years old, the first premium of \$6.00; the second, of \$3.00, to his Native cow; the third, of \$2.00, to his No-horned cow.

And the first premium, of \$6.00, to Joel Page of Fitchburg, for his three years old heifer; the second, of \$4.00, to N. B. Reed of Princeton, for his three years old steer. All of which is respectfully submitted.

For the committee,

ANAN STOCKWELL.

SWINE.

The Committee on Swine award as follows :

For the best boar, more than one year old, George Miles of Westminster,	\$4 00
For the best boar, less than one year old, Joseph Cushing of Fitchburg,	3 00
For the best fat hog, second premium to Abel F. Adams of Fitchburg,	5 00
For the second best fat hog, third premium to Abel F. Adams of Fitchburg,	2 00
For the best fat pig, second premium to E. Caldwell of Fitchburg,	2 00
For the best, and only breeding sow on exhibition, to Asa Sawyer of Fitchburg,	3 00
For the best four weaned pigs, to William P. Smith, of Fitchburg,	3 00
For the next best four weaned pigs, to William P. Smith of Fitchburg,	2 00

All of which is respectfully submitted.

For the committee,

FRANKLIN NOURSE.

STALLIONS.

The Committee on Stallions award :

1st premium, to Horace H. Brown,	\$12 00
2d, to Joseph Cushing,	8 00
1st premium, to Warren Simonds for his three years old colt, Gen. Grant,	4 00

W. W. COMEE.

MARES AND COLTS.

The Committee on Mares and Colts having attended to the duties assigned them, make their report, as follows :

We find there were entered for premium, fourteen ; but nine were exhibited, and we have awarded the following :

BREEDING MARES.

1st premium, to B. Wheeler of Fitchburg,	\$6 00
2d, to Levi White of Lunenburg,	4 00
3d, was not awarded.	

SUCKING COLTS.

1st premium, to Ohio Whitney of Ashburnham,	3 00
2d, to B. Wheeler of Fitchburg,	2 00
3d, to Levi White of Lunenburg,	1 00

And the committee recommend that a gratuity of \$1.00 be paid to Amos Whitney of Ashburnham.

Your committee beg leave to make a few suggestions to those engaged in breeding horses. We find that a large proportion of the colts raised, never pay the expense of raising, because people try to raise them too cheaply. No man would expect to raise a crop of onions upon a piece of worn out land ; but if he expects to get a profit from the crop, he will select his best soil, use the best manure, and take great pains to obtain the best seed, and apply his best skill in cultivation, and then expects and obtains a bountiful harvest ; let this principle be carried out by horse breeders and the work is accomplished. To do this, take not the halt, wind-broken mares, for breeding, because they are old and worthless for anything else, but select your young, best blooded mares, and obtain the service of the best stock-getting horse in the country, and in nine cases out of ten you will raise a good colt ; but do not, for a moment, think the colt will take care of himself, but be sure you give him good care for the two first years of his life, at least ; a few oats

will never hurt a colt, with carrots two or three times a week. Be careful that he has good air and exercise. Some farmers think they will raise a colt because it will not cost much, for he will eat the orts which the stock refuse. The only reason the colt will eat them is because it is so nearly starved. A colt thus cheaply kept, often dies the first winter, but if he chances to live, is obliged to be raised nearly every morning; but if properly kept, will raise himself, with head and tail in the air, and thus acknowledge your kindness to his coltship; and when grown to the proper age for the market, can be sold for from two hundred to five thousand dollars, which pays a large profit for the expense and care bestowed by his owner, and our markets will soon be filled with the finest stock of horses in the world. Let us, as a society, start right, and others will soon follow, and thus challenge the world to compete with Massachusetts in raising fine horses.

WARREN SIMONDS,

Chairman of the Committee.

DRAUGHT AND FAMILY HORSES.

The Committee an Draught Horses decide that
 Charles Nutting of Groton, has the first premium for
 pair of draught horses, \$6 00

SINGLE DRAUGHT HORSES.

1st premium, to Geo. W. Wheelwright, Jr., of Fitchburg, 5 00
 2d, to S. M. Dole of Fitchburg, 2 00

TEAMSTERS.

1st premium, to C. L. Nutting of Groton, 4 00
 2d, to Henry Wheelock, 2 00

FAMILY HORSES—PAIR.

1st premium, to Ira Carleton & Co. of Fitchburg, for best pair of family horses,	7 00
2d, to Walter Heywood of Fitchburg,	5 00

FAMILY HORSES—SINGLE.

1st premium, to Walter Heywood of Fitchburg,	5 00
2d, to Geo. F. Vose of Fitchburg,	3 00

JAS. P. PARKER, *Chairman.*

COLTS.

The Committee on Colts award the following premiums :

THREE YEARS OLD GELDINGS.

1st premium, to William Gibson of Fitchburg.	\$4 00
2d, to Porter F. Page of Westminster.	2 00

THREE YEARS OLD FILLIES.

1st premium, to Franklin Nourse of Sterling.	4 00
2d, to Ephraim Graham of Lunenburg.	2 00

TWO YEARS OLD GELDINGS.

1st premium, to J. H. Reed of Bolton.	4 00
---------------------------------------	------

TWO YEARS OLD FILLIES.

1st premium, to Josiah Puffer of Harvard.	4 00
2d, to Timothy Brown of Westminster.	

ONE YEAR OLD COLT.

1st premium, to Joseph Cushing of Fitchburg.	2 00
--	------

We recommend a gratuity to J. H. Marshall of Leominster, of \$3.00, for his three years old filly, it being the best one on the ground, but was not properly entered.

JOEL MERRIAM, JR.,

Acting Chairman of the Committee.

SHEEP.

The Committee on Sheep having attended to that duty, award the following premiums :

FLOCKS.

1st premium, to A. M. Sawyer of Fitchburg, for the best flock of sheep, (10),	\$10 00
2d, to M. L. Holden of Fitchburg,	5 00

BUCKS.

1st premium, to James McIntire of Fitchburg,	5 00
2d, " " " "	3 00

COSSETS.

1st premium to James McIntire of Fitchburg,	2 00
2d, to Charles F. Woodbury of Winchendon,	1 00

T. D. WOOD, *Chairman.*

POULTRY.

The Committee on Poultry submit the following report :

BARN YARD FOWLS.

1st premium, to Otis Flagg of Westminster,	\$3 00
2d, to A. B. Wood of Westminster,	2 00

TURKEYS.

1st premium to Josiah Puffer of Westminster,	3 00
2d, to A. M. Sawyer of Fitchburg,	2 00

DUCKS.

2d premium to Martin Lakin of Fitchburg,	2 00
The most appropriate coop, Otis Flagg of Westminster,	3 00

We also recommend the following gratuities :

W. P. Snow of Fitchburg, lot of doves,	\$1 00
G. E. Smith, lot of guinea hens,	1 00
Edwin Monroe, lot of doves,	1 00
For the committee,	
C. S. MERRIAM, <i>Chairman.</i>	

TOWN TEAMS.

The Committee on Town Teams have to report, a team of twenty-six yoke, from town of Fitchburg, and a team of seventeen yoke, from town of Leominster.

The committee desire to express their satisfaction in examining such teams, particularly that from town of Leominster, being made up of large, thrifty, handsome young cattle.

The committee award, to the town of Leominster, the society's first premium, of twenty-five dollars; and to the town of Fitchburg, the second premium of ten dollars.

For the committee,

DANIEL PUTNAM.

PEARS AND GRAPES.

The committee on Pears and Grapes, make the following awards :

PEARS.

Two hundred and thirty-four plates exhibited. For best and largest exhibition, &c.,

1st premium, to A. Crocker,	\$4 00
2d, to Jabez Fisher,	<i>Harris on Insects.</i>
Gratuity, to B. Snow, Jr.,	2 00

For best twelve varieties, five specimens each,
 1st, premium, to Jas. Bennett of Leominster, *Harris on Insects*.
 2d, to J. A. Marshall of Fitchburg, \$2 00
 3d, not awarded.

For best six varieties, five specimens each,
 1st premium, to Walter Heywood, 2 00
 2d, to T. R. Boutelle, 1 50
 3d, to B. Safford, 1 00
 Gratuity to E. D. Works, 1 00

For best three varieties, five specimens each,
 1st premium to Z. F. Young, \$1 50
 2d, to Mrs. Sawyer, 1 00
 3d, to O. Whitney, Jr., 50

For best twelve specimens of one variety,
 1st premium, to Charles Mason, 1 50
 2d, to T. R. Boutelle, 1 00

GRAPES.—(*Thirty-three plates.*)

For best display of *foreign grapes*, first and second premiums not awarded. But one sample of foreign grapes has come to the notice of the committee.

To Mrs Sawyer is awarded the 3d premium, \$1.00, for her dish of Black Hamburgs.

For best display of *native grapes*:

1st premium, to Jabez Fisher, *Harris on Insects*.
 2d, to George E. Towne, \$2 00
 3d, to Miss Nellie Heywood, 1 00

Gratuities are awarded to Benj. Safford, O. Whitney, Jr., Ashburnham, Dr. T. Palmer, Fitchburg, C. A. Emory, Fitchburg, each, one dollar. To Jas. Bennett, Leominster, Geo. Reed, Fitchburg, Mrs. Sawyer, A Crocker, each, seventy-five cents.

The committee have to state that they were informed by our secretary, that a vineyard had been entered for premium, and as no premium had been offered for the present year, in order to give proper encouragement to the cultivation of that

fruit, the president requested this committee to examine the vineyard entered by Dr. T. Palmer, and if, in our judgment, it should be found worthy of gratuity, to report accordingly. On the 14th of August, a majority of the committee examined said vineyard, and have seen it again to-day. It covers nearly an acre of ground; was planted with the Concord grape vine in 1863 and 1864; about one third of it in the former year. It consists of six hundred and sixty odd vines, in rows eight feet apart, the roots six feet apart in the rows, trained to wires attached to posts twelve feet apart. The vines set out in 1863, are now in good bearing, a large specimen of the fruit being upon our tables to-day. To Dr. T. Palmer is recommended a gratuity equal to the second premium for vineyards, offered in 1863, and awarded in 1864, viz., ten dollars, thinking it worthy of something more, had a premium been offered.

THOS. R. BOUTELLE, *Chairman.*

September 26, 1865.

ASSORTED FRUITS AND FLOWERS.

The committee on Assorted Fruits and Flowers award as follows:

ASSORTED FRUITS, ETC.

Jabez Fisher, assorted fruit,	\$2 00
James Bennett, " "	1 00
Wm. H. Harris " " gratuity,	1 00
J. M. Sawtelle, plants in pots,	2 00
W. H. Woods, geranium, gratuity,	25

CUT FLOWERS.

J. M. Sawtelle, best cut flowers,	2 00
Nellie Heywood, second best,	1 00
Abbie F. Battles, third best,	50
Jabez Fisher, gratuity,	50

GEO. E. TOWNE, *Chairman.*

VEGETABLES.

For Vegetables, your Committee make the following awards :

KITCHEN VEGETABLES.

1st premium, to A. Crocker of Fitchburg,	\$7 00
2d, to E. Bird of Leominster,	5 00

POTATOES.

1st premium, to G. Merriam of Leominster,	2 00
2d, to Humphrey Harris of Ashburnham,	1 00
3d, to H. M. Clifford,	50
Gratuity, to J. M. Sawtelle,	50
“ “ H. Sibley,	25
“ “ A. F. Adams,	25
“ “ Charles Davis,	25

SQUASHES.

1st premium, to D. H. Merriam,	1 00
2d, to L. Pratt,	50
Gratuity, to J. M. Sawtelle,	50
“ “ B. Safford,	25
“ “ G. Alexander,	25

PUMPKINS.

1st premium, to J. Haskell,	75
2d, to Marshall Boutwell,	50

CABBAGES.

1st premium, to Geo. E. Towne,	75
2d, to Walter Heywood,	50
Gratuity, to L. Pratt,	50

CELERY.

1st premium, to Walter Heywood,	75
---------------------------------	----

ONIONS.

1st premium, to L. Pratt,	75
2d, to J. M. Porter,	50
Gratuity, to O. Whitney, Jr.,	25

TURNIP BEETS.

1st premium, to L. Pratt,	\$0 75
2d, to David Battles,	50
Gratuity, to J. M. Sawtelle,	50

ENGLISH TURNIPS.

1st premium, to G. Merriam,	50
2d, to J. Minot,	25
Gratuity, to D. Battles,	25

TOMATOES.

1st premium, to J. C. Davis,	50
2d, to J. M. Sawtelle,	25

FIELD BEANS.

1st premium, to O. Whitney, Jr.,	50
2d, to D. Battles,	25
Gratuity, to D. S. Eaton,	25
" " Charles Mason,	25

LIMA BEANS.

1st premium, to Charles Mason,	50
--------------------------------	----

SEED CORN.

1st premium, to Levi White,	1 00
2d, to L. Stockwell,	75
3d, to J. G. Woodward,	50
Gratuity, to A. F. Adams,	50
" " E. Bird,	25

WATERMELONS.

Gratuity, to T. Palmer,	50
" " L. Stockwell,	25

CITRON.

1st premium, to Walter Heywood,	50
For the committee,	

B. F. LEWIS.

ROOT CROPS AND CABBAGES.

Your Committee on Root Crops and Cabbages have attended to their duty, and report as follows: There was but a single entry, each, of potatoes, onions, carrots and cabbages; consequently *no competition*. The following premiums were awarded:

POTATOES.	
1st premium, to Cyrus Kilburn,	\$8 00
ONIONS.	
1st premium, to Lawrin Pratt,	<i>Harris on Insects.</i>
CARROTS.	
2d premium, to Lawrin Pratt,	3 00
CABBAGES.	
2d premium, to Lawrin Pratt,	1 00

WILLIAM BAKER, *Chairman.*

Cyrus Kilburn's Statement.—Potatoes.

The soil on which I raised my potatoes this year, is dark sandy loam. In 1863, I had potatoes on the same ground, applying twelve loads barn-yard manure to the acre. In 1864, had corn on the same ground, applying also twelve loads barn-yard manure. Last year, I plowed once, about seven inches deep, applied four loads compost manure in hill, and planted June 10, with one whole potatoe, of the Garnet Chili variety, in each hill, about eight bushels seed, and hoed with a hand hoe twice, without any cultivation otherwise. The lot planted was ten rods by four, and contained twenty-five rows lengthwise, and about ninety hills in a row, vines covering nearly the whole ground. Harvested in September, yielding eighty bushels.

Cost of plowing, - - - - -	\$1 00
Value of manure, - - - - -	4 00
Cost of seed, and planting, - - - - -	8 00
“ “ cultivating, - - - - -	3 00
“ “ harvesting, - - - - -	4 00
	\$20 00

Lawrin Pratt's Statement.—Onions.

Soil, sandy loam; have raised onions on the same ground several years, applying horse manure. For present crop, plowed twice, about three inches deep, two or three days before planting; also used horse hoe and brush harrow; spread three and a half loads of manure; cultivated with hoe and fingers, eight times. The piece contains twenty rods. Weight of crop, in September, 5060 pounds.

Cost of seed and planting, - - - -	\$ 4 50
“ “ plowing, - - - -	75
“ “ cultivating, - - - -	12 00
“ “ harvesting, - - - -	1 50
Value of manure, - - - -	7 00
	<hr/>
	\$25 75

Onion Raising in Northern Worcester County.—Statement of D. H. Merriam of Fitchburg.

The ground selected for the onion field lies on River street, in Fitchburg, about three feet above the Nashua river, and contains three acres. It has the appearance of having, at some time, been overflowed by the river. It is nearly level, and the soil is a sandy loam from one to three feet deep. It had been in grass for eight years, since it had been ploughed, and nothing put on to it during that time except one hundred and fifty bushels of ashes. In the fall of 1864, the Worcester North Agricultural Society ploughed about two-thirds of the ground from six to twelve inches deep, and the remainder was ploughed six inches deep, and late in December I put on to one acre fourteen cords of slaughter house and common barn manure, and left it in heaps of one cart load in a place, and in March, 1865, I put on to the other two acres twenty-six cords of mixed manure, consisting

of horse, hog, slaughter-house and cow manure, of about equal parts; and in the last week in March I spread the manure over the entire lot and harrowed the ground, both ways, with a cultivator harrow, which moved the ground about three inches deep, and covered the manure. I then picked off all the stone found upon the land, and removed all sods that had been disturbed by the harrowing, and placed them in rows about forty feet apart, and running from north to south. These rows of sods and coarse manure, that was unrotted, occupied about five feet in width, and in all about one half of an acre of land. Upon these rows of sods and waste manure, I raised 1250 cabbages, 120 bushels of tomatoes and 600 pounds of squashes. I raked the ground thoroughly with wood and iron rakes, and leveled the same, as nearly as could be, for the onion beds, and on the 14th day of April, I sowed one acre of the ground to onions, and in one week from that time, sowed one acre more, and on the 25th day of April, I sowed the remainder, using in all eighteen and one half pounds of seed. I was twelve hours in sowing the seed on the three acres, in rows one foot apart, with one of Harrington's seed sowers, which put the seed in about one half an inch, and rolled the ground by a roller attached to the same. I weeded the onions three times; once in May, once in June, and once in July. The first weeding was commenced as soon as the onions were of sufficient height to be plainly seen. They were much the best on the two acres where the manure was carried on to the field in the spring, and each of these two acres yielded at least one-third more onions than the one where the manure was carried out in the fall, and lay in heaps over winter; and the acre sowed first yielded the best of the three. I hired all the labor done on the land except the sowing of the onion seed, which I did myself. I paid for labor in the months of April and May, \$1.75 per day, and for the remainder of the season, \$1.50 per day, for men, and the same

for a horse, in preparing the ground. The onions were ripe and harvested the last of September.

AMOUNT AND VALUE OF CROP.

1050 bushels, 1st quality of onions,	-	-	\$1050	00
300 " 2d " " " -	-	-	150	00
120 " tomatoes,	-	-	110	00
1250 cabbages, -	-	-	120	00
600 lbs. squashes, -	-	-	18	00
Total value of crop,	-	-	\$1448	00

COST OF RAISING THE CROP.

40 cords of manure, at \$5.00 per cord,	\$200	00	
Labor of men and teams,	-	-	830 65
11 1-2 lbs. onion seed, -	-	-	89 12
Cabbage seed, -	-	-	50
Interest on land at \$200 per acre, -	36	00	\$1156 27
Net profits, -	-	-	\$291 73

In the above statement, no credit is given for the improved condition of the land, which is an item of considerable importance, as only a small portion of the manure is expended, and the land is cleared from stone and foul growth of weeds and roots, which will not impede the cultivation another year. I estimate the improvement of the land at \$150.00, which, added to the value of the crop over its cost, makes a gain of \$441.73.

D. H. MERRIAM.

FITCHBURG, November 27, 1865.

Note. Had this statement been received in season, it would have followed the report on *Experiments*, reference being made to it on page 37.—SEC.

LEOMINSTER, Nov. 15, 1865.

A. M. SAWYER, Esq.,

DEAR SIR:—At your request, I send you the report of Samuel M. Carter, of the product of one square rod of corn, selected from my field by himself.

Mr. Carter was a disbeliever in large crops, and was frequently heard to say that no one ever raised a hundred bushels of corn to the acre. To convince him, and others, like him, the subscriber told him that if he would come and select an average square rod, and dry it, to his satisfaction, shell it, weigh it and report it, he should have the corn. He accepted the terms and made the following report:

SOLON CARTER.

September 22, 1865, gathered one square rod of corn from the field of Solon Carter in Leominster, (an average rod to the acre,) containing 23 hills, producing 143 ears, weighing 50 3-4 lbs. *net*. October 24, 1865, weight of the above 41 3-4 lbs.; shrinkage 9 lbs.; 6680 lbs. corn and cob.
 Wt. of shell'd corn 35 14-16 lbs. = 5740 lbs. = 102 1-2 bushels.
 “ “ cob 5 14-16 lbs. = 940 lbs.

 6680 102 1-2 b. 56 lbs. ea.

SAMUEL M. CARTER.

The chairman of the Leominster town committee furnished the subscriber with the next three highest amounts raised in Leominster.

SOLON CARTER.

F. P. Farrington's corn weighed 27 lbs. 6 oz.; cob 4 lbs. 11 oz. = 78 12-56.

Geo. R. Carter's corn weighed 27 lbs. 4 oz.; cob 4 lbs. 7 oz. = 77 48-56.

Luke Buss's corn weighed 26 lbs.; cob 12 lbs. 6 oz. = 74 16-56.

BREAD, BUTTER, CHEESE, PICKLES, ETC.

The undersigned, chairman, by impressment of the Committee on Bread, Butter, &c., takes occasion to append to the list of awards, a few suggestions, derived, in part, from the ladies composing the committee. We found the usual display and variety of bread, all but one specimen of which conformed, so far as could be determined, to the rule, requiring the baking to have been done the day previous. This one was, of course, set aside. During our deliberations we learned, incidentally, that other loaves were quite warm when brought in during the forenoon. Not being able to detect the fact, at the time of our examination, we could not act upon it, and can only suggest that if any such should have been awarded a premium, the competitor fairly lies open to the charge of obtaining money under false pretences.

Ordinary fermented bread, although so very common, is an extremely artificial product. To obtain it, in perfection, requires a combination of knowledge derived from experience and skill, with care and watchfulness, such as almost nobody possesses. This may seem to be an over-statement; but where is the woman who, in bread making, *never* has "poor luck," especially when preparing for some special occasion? The processes and changes involved in the operation are so complex and subtle, that even chemistry, with all its searching detail, has not been able to note the transformations that take place, with certainty.

The simplest form of bread, such as was once universal, and is still, probably, prevalent over the greater part of the earth, is that known as unleavened; a very sweet and palatable food, but unsatisfactory in civilized life, because of the lack of teeth, time and muscular power required for its thorough mastication. Man has sought out many inventions, and among the rest was some improved form of bread. He desired a different texture, and, perhaps, a more digestible product. Accident, probably, first put him in the way of

obtaining it. Bread being mixed, but for some reason left unbaked, in consequence of a slight fermentation spontaneously taking place, showed him in what direction to push his inquiries, and gradually the multiplicity of processes now in use, were arrived at.

It may be well to note some of the more obvious changes that take place in flour, as a consequence of that kind of fermentation involved in raising bread. Flour of wheat is made up principally of starch and gluten, with a proportion of sugar. These substances undergo no change so long as kept entirely dry. When moistened, however, in a favorable temperature, a spontaneous change commences called fermentation. This requires considerable time, and is uncertain in its development. For this reason, some form of yeast or "risings," is added to start the fermentation at once, and carry it forward with certainty. The effect of this fermentation is first to convert the sugar of the flour into alcohol and carbonic acid gas, just as in the distiller's vat, the sugar of the molasses, when diluted with water and a ferment added, produces the same substances. The carbonic acid in the latter case escapes from the fermenting mass in minute bubbles of gas rising through the liquid, and the alcohol is afterward distilled in connection with water in the form of rum. In the case of the bread, the gas cannot escape in consequence of the tenacity which the gluten gives to the mass, and the minute bubbles expand or raise the bread in every part, giving it its peculiar porous character, which baking fixes and makes permanent. The alcohol is driven off by the heat required in baking.

The principal change, thus far, is to deprive the flour of its saccharine matter, and it loses that sweet and relishing taste which unfermented bread possesses. Other changes supervene, and, in fact, take place simultaneously with the one here described. The starch of the flour is attacked and decomposed in some way not well understood, though it is probable that by the action of the ferment the starch is

changed into what is known as grape sugar, or diastase, and that in its nascent condition into alcohol and carbonic acid as before. Its decomposition certainly produces carbonic acid, which is the sole agent in expanding the mass. The alcohol also, that is formed during the process, the conditions all being favorable, goes through a further decomposition, and like alcohol elsewhere, produces vinegar. The bread, at this stage is found to be sour. If the whole should remain long enough, the vinegar thus formed and the gluten of the flour, which is the last to be attacked, both begin to decompose, and take on what is known as putrescency. It will thus be seen that the whole process involves, necessarily, a partial destruction of the sweetness and nutritive properties of the flour. Perfect success in bread making consists largely in being able to commence the baking at the moment when the least possible decomposition of the flour has taken place, consistent with a sufficient development of carbonic acid to give the bread its porous condition. Here is where failure is most liable to occur. Bread is generally over-raised for the sake of lightness. Many people habitually allow the mass to sour before baking, entertaining the idea that no injury is done so long as saleratus or soda can be added, for the purpose of neutralizing the acid. This, however, is an error, for not only is the acid produced at the expense of the sugar and starch of the flour, but the acetate of potash or soda, formed by the addition of one of these alkalies, is much more medicinal than nutritive.

All of the different ferments exert the same influence and produce the same effects, only in different degrees, except as they add a taste or quality of their own. The simpler the the yeast the better. Perhaps the most objectionable is that known as milk yeast, or milk risings. Milk tends to run into the acetous and putrefactive fermentation very readily, and gives to bread, under the most favorable circumstances, a fragrance of sour milk. So objectionable is it, that your committee instinctively laid aside every loaf contaminated

by it, and one member stated that she had served upon a similar committee a number of times, and the same action had been taken in every instance. Competitors may note the fact. Milk is by no means objectionable, when used in mixing bread, provided it is sweet, and the fermentation carried as far as possible before its addition.

One specimen, we noticed, had been treated by adding sugar to it. This, however, could not restore the natural sweet taste of the flour, but made it rather like cake.

In addition to the list of premiums, we desire to award an opinion that a specimen of factory cheese from Barre, was superior, but it being entered for exhibition only, by a dealer, we could not award it a premium.

The following awards were made:

WHITE BREAD.

1st premium, to Emma S. Alexander of Fitchburg,	\$2 00
2d, to Alice Wellington of Ashby,	1 00
3d, to Mary Galliher of Fitchburg,	50

UNBOLTED WHEAT BREAD.

Gratuity, to Miss W. Welch of Fitchburg,	50
--	----

RYE AND INDIAN.

1st premium, to Alice Wellington of Ashby,	2 00
2d, to Lucy Goodridge,	1 00
3d, to Mary C. Wellington of Ashby,	50

LUMP BUTTER.

1st premium, to Mrs. N. B. Reed of Princeton,	4 00
2d, to Mrs. J. S. Hartwell of Littleton,	3 00
3d, to Mrs. J. P. Reed of Princeton,	2 00
4th, to J. P. Davis of Ashby,	1 50

JUNE TUB BUTTER.

1st premium, to Fred. B. Harrington of Leominster,	3 00
--	------

CHEESE.

1st premium, to Fred. B. Harrington of Leominster,	2 00
--	------

PICKLES.

2d premium, to Mrs. N. S. Boutelle of Fitchburg,	\$0 50
3d, to Mrs. T. B. Woodward of Fitchburg,	25

HONEY.

1st premium, to S. H. Sprague of Westminster,	2 00
2d, to G. Merriam of Leominster,	1 00

CANNED FRUIT.

Gratuity, to Mrs. B. F. Lewis of Fitchburg,	1 00
---	------

CRAB APPLE JELLY.

Gratuity, to Mrs. Ward Russell of Ashburnham,	1 00
---	------

JABEZ FISHER, *Chairman.*

MECHANICS AND MANUFACTURES.

For Mechanics and Manufactures, the following awards were made:

Dr. Thomas Palmer, specimens of dental work,	\$3 50
Messrs. Whitney & Ball, specimens of dental work,	2 00
D. W. Crosby, spring bedstead,	1 00
S. G. Frost, specimens of harness work,	3 00
H. C. Murdock, improved skates	1 00
F. W. Andrews, ornamental brackets,	1 00
Mrs. J. C. Moulton, wrought chair,	1 00
Messrs. Partridge & Sawyer, case of gents' and ladies' boots,	3 00
Henry A. Goodrich, case of hats, furs and gloves, and robes,	5 00
S. G. Frost, pleasure wagon,	4 00
C. J. Delahanty & Co., all wool doeskins, tricot, and ladies' sacking,	10 00
L. J. Brown, specimens of ladies' clothing,	6 00
Beoli Company, cassimeres and beavers,	8 00

AGRICULTURAL IMPLEMENTS.

69

Fitchburg Woollen Mill Company, cassimeres,	\$8 00
Joseph Pierce, 2d, curried leather,	4 00
Messrs. Allen & Jewett, pianoforte,	8 00
B. F. Proctor, specimens of wood turning,	1 00
Messrs. Chickering & Sons, Boston, pianoforte, gra- tuity of	10 00

AMASA NORCROSS, *Chairman.*

AGRICULTURAL IMPLEMENTS.

The Committee on Agricultural Implements award as follows :

Knipper Mowing Machine Company, for mower,	\$10 00
Buckeye Mowing Machine Company, gratuity,	6 00
Nye & Clark Brothers, horse rake,	5 00
C. L. Fairbanks & Co., hay cutter,	3 00
Thomas Sheldon, ox yoke,	3 00
J. F. Sanborn, churn,	2 00
Gardner P. Hawkins, horse shoes,	2 00
Abel Marshall, horse hay fork,	1 00
J. F. Munroe, apple slicer, egg beater, &c.,	2 00
C. L. Fairbanks & Co., agricultural implements,	2 00
Proctor & Wright, agricultural implements,	2 00

WALTER HEYWOOD, *Chairman.*

FINE ARTS.

The extent and excellence of the display in this department, and the interest and appreciation it elicited from visitors present, gave gratifying evidence to your committee that the remarkable enterprise and progress of Northern Worcester

County in utilitarian spheres have, in no degree, hindered enthusiasm for the beautiful in Art.

The Oil Paintings presented were few in number, but well executed.

Some of the Crayon Drawings were admirable pieces; while the rest were commendable as early efforts.

The collection of Pencil Drawings was large. Three or four of the specimens were simply exquisite. Most of the others were by quite youthful contributors, and indicated a hopeful proficiency.

The trying labor of your committee lay in deciding upon the comparative merits of two full and elegant Photographic collections, presented respectively by our two most popular artists, Messrs. Moulton and Gott.

We felt great reluctance in undertaking such a hair-splitting ceremony. We seemed, at first, to be required to determine which was superior of two equals. Had we been allowed to accord equivalent honor to the two competitors, we should have been relieved. The excellences of one artist were essentially counterbalanced by different but equally important excellences in the other. Mr. Moulton's pictures were more distinct and forcible than Mr. Gott's. They *stood out* better than his from the back-ground. But Mr. Gott's were more graceful in posture, and more delicate in finish. They exhibited more refinement of taste.

In certain classes of pictures, one of the rivals excelled; in certain other classes, the other.

After prolonged examination of the work in detail, and careful comparison of class with class and collection with collection, your committee decided that, upon the whole, the preponderance of general artistic merit probably lay with Mr. Gott.

The committee award as follows:

PHOTOGRAPHS.

1st premium, to C. O. Gott of Fitchburg,	\$4 00
2d, to J. C. Moulton of Fitchburg,	2 00

OIL PAINTINGS.

Mrs. McIntire,	3 00
----------------	------

FANCY ARTICLES.

71

CRAYON DRAWINGS.

M. A. Kimball of Lancaster,	\$2 50
Mattie M. Hamilton of Fitchburg,	2 00
Abbie Ellis of Fitchburg,	1 75
Lizzie Adams,	,50
Ellen L. Smith,	,50

PENCIL DRAWINGS.

Mrs. Harwood,	3 00
Maria E. Tenney,	2 00
Nellie F. Lowe,	2 00
H. D. Moulton,	1 75
Myra B. Richardson,	1 25
Ella S. Wright,	1 25
Ella Norcross,	1 00
E. M. Lowe,	1 00
Alice Miller,	1 00
George Wilson,	75
Alvin K. Simonds,	75
Ida Howard,	75
E. M. Caldwell,	75
Annie M. T. Heywood,	75
Mary Buttrick,	50

PENMANSHIP.

I. R. Gilbert,	75
----------------	----

FANCY CROSS.

Julia Whitcomb,	50
-----------------	----

R. G. HUTCHINGS, *Chairman.*

FANCY ARTICLES.

The following awards are made by Committee on Fancy Articles :

Mrs. A. B. T. Ames, worsted chair,	\$1 00
Mrs. F. Parker of Templeton, ottoman,	25
Hattie S. Greenwood of So. Gardner, floral work,	75

Mrs. A. B. T. Ames, bracket,	\$0 50
John Marble, a blind boy, bead work,	37
Hattie E. Bancroft, watch case,	25
Fannie A. Bogert, tidy,	25
Hattie F. Kinsman, baby's sacks,	25
Mrs. Emory A. Clark, carriage blanket,	50
Mrs. Mary Tolman, worsted socks,	25
Fannie Cleaves, worsted work,	20
Mrs. S. E. Denton " "	37
Miss D. E. Sawyer, cricket,	25
Hattie E. Putnam, wax vases,	1 00
Mrs. N. H. Aldrich, wax flowers,	50
Miss Nellie E. Gleason, lamp mat,	20
Mrs. C. Tolman, socks,	20
Miss Mary M. Gleason, work basket,	50
Mrs. A. L. Howard, lamp mat and tidy,	75
E. L. Lewis, union house,	37
Miss Emma Welles, carriage blanket,	75
Miss D. E. Sawyer, handkerchief pouch,	20
Louisa C. Lowe, sofa pillow,	25
Mrs. B. F. Lewis, imitation marble cross,	50
Mrs. G. A. Torrey, perforated cross,	25
Mrs. F. McIntire, flannel embroidery,	75
Mrs. T. C. Kenyon, embroidered cape,	1 00
Mrs. N. S. Boutelle, skirt,	37
Mrs. Otis A. Wheeler, embroidery,	37
Mrs. S. C. Brigham, " "	37
Mrs. W. C. Upton, wrought skirt,	37
M. J. S. Abbott, embroidery,	37
Mrs. C. A. Mason, embroidered skirt,	37
Fannie A. Bogert, shell box,	50
Hattie F. Kinsman, worsted flowers,	75
Ellen Lowe, " "	50
Josie M. Whitney, " "	37
Mrs. J. U. Middleton, amaranths,	37
Mrs. H. H. Brigham, worsted wreath,	37

ESSAYS.

73

Kate L. Drew, hair wreath,	\$1 25
Mrs. J. R. Gilbert, millinery,	1 50
Mrs. B. H. Bush of Westminster, mat,	75
L. J. Brown of Fitchburg, dress goods,	50
Mrs. P. Hill, patch work quilt, first prize,	2 00
Misses Emily and Louise Skinner of Princeton, patch work quilt, (4894 pieces), second prize,	1 00
Mrs. M. A. Edgecomb, bed quilt,	37
Mrs. L. S. Gilbert, bead basket,	50
M. J. S. Abbott, quilt,	50
Mrs. Sarah Rice, (74 years,) rug,	50
Mrs. Levi Morgan, two rugs,	37
Mrs. J. E. Manning, afghan,	1 00
Mrs. M. Freeman, table covering,	50
Mrs. E. Torrey, tidy,	25
Mrs. Mary Tolman, carriage robes,	37
Warren B. and Walter Page, squirrels and cage,	40
W. K. Wright, turtle shell box, gratuity,	75

HERBERT W. KIMBALL, *Chairman.*

ESSAYS.

The Committee on Essays respectfully report :

That the only essay offered, is deemed not of a character so well adapted to the wants of the society and its constituents, as to warrant the publication of it.

They, therefore, award no premium.

For the committee,

CHARLES MASON, *Chairman.*

COMMITTEES' REPORTS.

After careful deliberation, your committee have awarded the first premium, of \$10.00, to Jabez Fisher of Fitchburg, for his report on farms; second premium, of \$6.00, to Solon Carter of Leominster, for report on grain; third premium, of \$4.00, to Jabez Fisher of Fitchburg, for report on bread, butter, cheese, &c.

Favorable mention should be made of the reports on apples, peaches, plums and quinces; gardens; plowing; stallions; and fine arts. Much credit is due to most of the chairmen for their neat, gentlemanlike work, rendered in season. And it is to be regretted that a few return a few *pencil marks*, scarcely legible, which they would be ashamed to meet the second time.

For the committee,

A. M. SAWYER.

Analysis of Premiums and Gratuities Awarded.

Amount awarded for plowing at the exhibition, - - - - -	\$17 00
“ “ fancy articles, - - - - -	30 00
“ “ fine arts, - - - - -	36 00
“ “ committee’s reports, - - - - -	20 00
“ “ agricultural implements, - - - - -	38 00
“ “ neat stock, - - - - -	235 50
“ “ horses, - - - - -	105 00
“ “ sheep, - - - - -	26 00
“ “ swine, - - - - -	24 00
“ “ poultry, - - - - -	18 00
“ “ grain, - - - - -	50 75
“ “ root crops, - - - - -	40 25
“ “ fruits, - - - - -	64 75
“ “ flowers, - - - - -	9 04
“ “ butter and cheese, - - - - -	15 50
“ “ bread, - - - - -	7 50
“ “ mechanics and manufactures, - - - - -	79 00

Premiums and gratuities were paid to three hundred and seventy-seven persons, and the amounts distributed as follows :

Fitchburg, - - - - -	\$508 42
Princeton, - - - - -	127 00
Leominster, - - - - -	75 00
Lunenburg, - - - - -	71 75
Westminster, - - - - -	28 00
Sterling, - - - - -	22 00
Ashburnham, - - - - -	14 50
Groton, - - - - -	10 00
Ashby, - - - - -	7 50
Harvard, - - - - -	7 00
So. Royalston, - - - - -	6 00
Winchendon, - - - - -	5 00
Littleton, - - - - -	5 00
Templeton, - - - - -	4 00
Bolton, - - - - -	4 00
Lancaster, - - - - -	2 50

1865 {	Amount of premiums offered, - - - - -	\$1359 25
	Amount of premiums and gratuities awarded, - - - - -	967 50
	Amount of premiums and gratuities paid, - - - - -	897 67
	Amount of permanent fund, - - - - -	5300 93

in account with Worcester North Agricultural Society, Cr.
1864.

Dec. 7.	By paying J. J. Piper, for printing and advertising,	\$13 25
Dec. 27.	Litch & Sawtelle for nails,	42
1865.		
Jan. 4.	W. F. Day for 80 dinners at fair, 1864,	50 00
Feb. 28.	E. & J. Garfield, for printing bill,	302 75
Apr. 10.	A. M. Sawyer for postage bill,	11 96
July 4.	J. J. Piper adv'g notice of meeting,	1 00
Sept. 28.	" " " " " cattle show,	9 00
" "	A. M. Sawyer, postage, band, &c., &c.,	55 82
Oct. 5.	N. H. Whiting, for writing one day,	3 75
" 6.	Frg't on piano and use of singing books,	7 40
" 14.	T. Younglove, labor and cash paid do,	17 74
" 16.	W. F. Day, for entertainment at show,	55 50
" 21.	A. Marshall, for setting and removing pens, &c.,	35 00
Nov. 7.	Fairbanks and Parkhurst, tending scales,	1 00
" 11.	F. Nourse, for premium on colt, 1864, (vote of trustees,)	2 00
" "	J. P. Reed, keeping cattle at show,	7 50
" 20.	A. S. Dole, hay furnished cattle in 1864-5,	2 00
" 22.	A. M. Sawyer, services as Sect'ry, 1865,	50 00
" 30.	J. Garfield, for printing and advertising,	47 00
" "	J. J. Piper, for advertising meeting, &c.,	4 00
" "	For twenty-seven certificate stamps,	1 35
" "	Premiums awarded Sept. 27, Nov. 11 and 25,	897 67
Dec. 6.	Amount carried to new account to balance,	5300 93

\$6877 04

PAST PRESIDENTS, ORATORS AND SECRETARIES.

OF THE

WORCESTER NORTH AGRICULTURAL SOCIETY.

PRESIDENTS.

- 1850-1.—ABEL F. ADAMS, Esq., of Fitchburg.
1852-3.—HON. IVERS PHILLIPS of Fitchburg.
1854-5.—HON. MOSES WOOD of Fitchburg.
1856-7.—THOMAS R. BOUTELLE, M. D., of Fitchburg.
1858-9.—HON. JABEZ FISHER of Fitchburg,
1860-1.—THOMAS BILLINGS, Esq., of Lunenburg,
1862-3.—LEWIS H. BRADFORD, Esq., of Fitchburg.
1864-5.—HON. OHIO WHITNEY, JR., of Ashburnham.
1866. —CAPT. JOSEPH UPTON of Fitchburg.

ORATORS.

- 1850.—HON. CHARLES HUDSON of Lexington.
1851.—HON. ROBERT RANTOUL, (appointment not filed.)
1852.—THOMAS E. PAYSON, Esq., of Rowley.
1853.—Rev. HORATIO STEBBINS of Fitchburg.
1854.—Gov. EMORY WASHBURN of Worcester.
1855.—HON. N. P. BANKS of Waltham.
1856.—CHARLES L. FLINT, Esq., of Boston.
1857.—JUSTUS TOWER, Esq., of Lanesborough.
1858.—No appointment made.
1859.—HON. GEORGE S. BOUTWELL of Groton.
1860.—DR. GEORGE B. LORING of Salem.
1861.—HON. A. H. BULLOCK of Worcester.
1862.—REV. A. N. ARNOLD, D. D., of Westboro.
1863.—LUTHER H. TUCKER, Esq., of Albany, N. Y.
1864.—No appointment made.
1865.—No appointment made.

SECRETARIES.

- 1850-1.—NATHAN UPHAM of Fitchburg.
1852. —JOSEPH PIERCE of Fitchburg.
1853. —CHARLES W. WILDER of Fitchburg.
1854-5.—THOMAS R. BOUTELLE of Fitchburg.
1856-7.—JABEZ FISHER of Fitchburg.
1858-9.—WILLIAM G. WYMAN of Fitchburg.
1860-1.—WILLIAM G. WYMAN of Fitchburg.
1862-3.—WILLIAM G. WYMAN of Fitchburg.
1864. —LEWIS H. BRADFORD of Fitchburg.
1865-6.—ALVIN M. SAWYER of West Fitchburg.

L I F E M E M B E R S .

In the following list the Post Office address, when it differs from the *residence*, is given in italics after the name, abbreviated when the residence forms a part of the Post Office address, as *So. G.* for South Gardner, *S. Vill.* Shirley Village. The * indicates that the person is dead; *r* indicates that the person has removed, but that the present residence is unknown. If errors occur, or if the residence or Post Office address of members is changed, a FAVOR will be conferred by notifying the Secretary of the fact.

ASHBY.

Burnap Israel H.*
 Burr, John ✓
 Burr, Joseph.*
 Burr, Levi
 Damon, Samuel R. ✓
 Davis, John ✓
 Davis, Jonathan P.
 Fay, Dennis ✓
 Foster, Jesse ✓
 Foster, Joseph ✓
 Gates, Howard ✓
 Gates, Paul ✓
 Gibson, Samuel P.*
 Hapgood, William G. ✓
 Hayward, Joel ✓
 Hayward, John ✓
 Hayward, Paul ✓
 Hayward, Samuel ✓
 Hodgman, Luther ✓
 Hubbard Augustus ✓
 Hubbard, George B. ✓
 Johnson, William ✓
 Kendall, George ✓
 Kendall, James O. *r*
 Lawrence, David ✓
 Patch, Jonas ✓

Proctor, D. A.
 Smith, Levi ✓
 Spencer, Hobart ✓
 Wallis, Benjamin ✓
 Wellington, Liberty ✓
 Wellington, Luke ✓
 Wright, Charles H.
 Wright, Francis W. ✓ 34

ASHBURNHAM.

Barrell, Nahum ✓
 Brown, C. H. ✓
 Cummings, John L. ✓
 Davis, John C. ✓
 Eaton, N. L. ✓
 Ellis, Daniels, Jr. ✓
 Frost J. Milton ✓
 Foster, Jerome W. ✓
 Green, Hosea ✓
 Harris, Humphrey ✓
 Houston, Horace W. ✓
 Howard, George ✓
 Howe, Addison ✓
 Howe, Perley ✓
 Lane, Elias* ✓
 Marble, Warren ✓
 Maynard, Antipas ✓
 Merritt Simeon ✓

Russell, Ward
 Russell, Franklin
 Samson, George G.
 Ward, Alvin
 Ward, Isaac D.
 Ward, Stephen
 Whitmore, Alfred,
 Whitmore, Enoch*
 Whitney, Amos
 Whitney, Merrick
 Whitney, Ohio
 Whitney, Ohio, Jr.
 Whitney, Waldo F.
 Wilker, John
 Wilker, Joseph W.
 Willard, John*
 Willard, Merrick
 Winchester, Charles
 Winchester, George C.
 Woodward, John G. 38

BOSTON.

Farwell, Lyman
 Haskins, F. W.
 Lucas, Edmund G.
 Simons Alvan
 Tilden, William P.
 Whittemore, Belcher & Co. 6

FITCHBURG.

Ackley, N. F.*
 Adams, Abel F.
 Aldrich, Lucius
 American Rattan Company
 Arnold, William E.
 Atherton, Shepard F.
 Bailey, E. F.
 Bailey, G. F.*
 Baldwin, Joseph
 Ball, William
 Ball, S. B.
 Barker, Lorenzo
 Battles, David
 Beaman, Aaron F.*

Benjamin, Levi*
 Billings, Charles J.
 Blood, H. A.
 Boutelle, David
 Boutelle, N. S.
 Boutelle, T. R.
 Boutelle, Mrs. T. R.
 Bradford, Lewis H.
 Bradford, Mrs. L. H.
 Brewer, Henry*
 Brigham, Charles,
 Brown, James D. r
 Brown, Horace H.
 Brown, L. J.
 Brown J. S.
 Bullock, Laban
 Burnap, Edwin S.
 Burnap, Samuel
 Buttrick, Francis, Jr
 Caldwell, Enoch
 Caldwell, Thomas C.
 Carleton, Ira & Co.
 Carpenter, Daniel M.
 Caswell, Hosea M.
 Caswell, Nathan
 Caswell, S. Melville
 Childs, S. Austin,
 Choate, John
 Clifford, William J.*
 Coggshall Henry F.
 Comee, William W. r
 Conn, John A.
 Conn, Reuben R.
 Colony, George
 Cotting, William W. r
 Cowdin, Natt
 Crehore, Warren A.
 Crocker, Alvah
 Crocker, Ephraim*
 Cross, Daniel
 Cushing, Joseph
 Damon, Albert B.
 Daniels, Thomas E.

- Davis, Alonzo
 Davis, Charles
 Davis, Elnathan
 Davis, Joel
 Day, Leonard*
 Day, William F.
 Delahanty, Charles J.
 Dickinson, Elijah M.
 Dole, A. S.
 Dole, S. M.
 Downe, Levi*
 Downe, William S.*
 Drew, William B. S.
 Eaton, Daniel S.
 Eaton, Thomas S.
 Emerson, Alfred
 Emory, Charles A.
 Emory, Daniels*
 Fairbanks, Lyman N.
 Fairbanks, Charles L.
 Fairbanks, J. H.
 Farwell, Elijah C.
 Farwell, Samuel
 Farnsworth Thomas
 Fessenden, Charles
 Fisher, Jabez
 Fitchburg, Town of
 Frost, S. Gilman
 Frye, Geo A.
 Fuller, Hubbard B.
 Gage, Moses M.*
 Gage, Mrs. M. M.
 Garfield, J. F. D.
 Gilbert, Ivar R.
 Gibson, Thomas
 Goodnow, Silas H.*
 Goodrich Edwin A.
 Goodrich, Henry A.
 Goodrich, Alonzo P.
 Gould, William
 Gott, Calvin O.
 Graves Howard M. r
 Hale, Samuel
 Hardon, J. J.
 Harris Gordis D. r
 Harris John M.
 Hartwell, Isaac
 Haskell, Jacob
 Hawes, Samuel
 Hawkins, Gardner P.
 Hayward, Calvin,*
 Heard, Jared M.*
 Heywood, Walter
 Hitchcock, Alfred
 Holden, Marquis L.
 Hollis, John W. r
 Hubbard, Addison
 Ide, Charles*
 Jewett, George
 Kendall, Levi
 Kendall, Oliver
 Kimball, Herbert W.
 Kimball, Alpheus*
 Kimball, A. P.
 Lane, James B.
 Lane, Mrs. J. B.
 Lewis, Mrs. B. Prank
 Lewis B. Frank
 Leathe, William M.
 Leverett, James W.
 Litch Aaron K.
 Livermore, Charles r
 Lowe, Daniel*
 Lowe, David
 Lowe, Henry J.
 Lowe, John
 Lowe, Willard H.
 Lyon, Moses G.
 Manning, Abel
 Manning, Elson W.
 Manning, Joseph E.
 Marshall, Alfred A.
 Marshall, Abel
 Marshall, Chederlaomer*
 Marshall, Jonas A.
 Marshall, Joseph A.

- Mason, Charles
 Mason, Caroline A.
 McIntire, David
 McIntire, Farrington
 McIntire James
 Merriam, David H.
 Messenger, Daniel
 Messenger, Horace P.
 Miller, Alfred
 Miles, Eugene T.
 Montjoy, George W.
 Moulton, J. C.
 Munroe, James F.
 Nichols, Lyman
 Norcross, Amasa
 Nutting, George F.
 Nye & Clark Brothers
 Osborn, Abram
 Page, Hale W.
 Page, Joel
 Palmer, Thomas
 Partridge, Asa
 Patch, Lyman
 Perkins, Francis*
 Phillips & Hammond r
 Pierce, James,
 Pierce Joseph, 2d.
 Pierce, Joseph
 Piper, John J.
 Pratt, Lawrin
 Pratt, Silas
 Prentiss, Benjamin
 Prichard, John
 Pride, William M.
 Proctor, Benjamin F.
 Proctor, John B.
 Proctor, Mrs. J. B.
 Proctor & Wright
 Putnam, James P.
 Putnam, Salmon W.
 Rice, Oran S. r
 Richardson, J. B. r
 Ruggles, F. L.*
 Ruggles, Otis T.
 Ruggles, Solomon W.*
 Sabin, John P.
 Safford Benjamin
 Saunders, Charles r
 Sawtelle, Charles
 Sawtelle, John M.
 Sawyer, Alvin M.
 Sawyer, Asa
 Sawyer, Charles B.
 Sawyer, Charles K.
 Sawyer, John
 Shattuck, Samuel,*
 Sheldon, Francis
 Sheldon, Josiah*
 Sheldon, Thomas
 Shepley, Stephen
 Simonds, Abel
 Simonds, Joseph F.
 Smith, Edward,
 Smith, John
 Smith, Joseph
 Smith, William P.
 Snow, C. H. B.
 Snow, Benjamin
 Snow, Benj. Jr.
 Snow, Francis H.
 Snow, Peter S.
 Stearns, Daniel
 Stearns, Varus
 Stickney, George O.
 Stiles, James F.
 Stiles, Mrs. J. F.
 Stockwell, Loriston
 Stone, Norman
 Stone, Alanson, Jr.
 Spaulding, Z. P.*
 Sprague, Leander
 Stevens, Levi
 Society, First Universalist
 Taylor, Stephen
 Tenney, Jonathan L.
 Thurston, Abel*

- Thurston, Cyrus
 Tolman, Jacob
 Torrey, Ebenezer
 Torrey, Mrs. E.
 Towne, Abial J.*
 Towne, George E.
 Towne, William B.*
 Tuttle, Lewis G.
 Twichell, John M.
 Upham, Nathan
 Upton, John
 Upton, Mrs. J.
 Upton, Edwin
 Upton, Joseph
 Upton, Thomas
 Upton, Warren C.
 Vose, William H.
 Wallace, Merrick
 Wallace, Rodney
 Wallace, Waldo
 Ware, Samuel
 Ware, T. K.
 Warren, L. W.
 Wheeler, Benjamin
 Wheeler, Loring
 Wheeler, Samuel A.
 Wheelwright, George W. Jr.
 Whitcomb, Nathan.
 White W. Fred *r*
 Whitman, Jonathan
 Whitman, Augustus
 Whitney, Walter
 Wilder, Charles W.
 Willis, Henry A.
 Wilkins, Aaron
 Wilson, Timothy S.
 Wood, Charles H.
 Wood, Elliot*
 Wood, Moses
 Wood, Mrs. M.
 Wood, Nathaniel
 Woodbury, James M.
 Woodbury, William
 Woodbury, William, Jr.
 Woodward, Isaac B.
 Works, Benton T.
 Works, Daniel
 Works, Edwin D.
 Works, Geo. F.
 Wright, Alba C.*
 Young, Z. F.
 Younglove, T. 281
- GARDNER.
- Bancroft, Amasa
 Brick, A. H., *South G.*
 Bush, C. W.
 Collester, Thorley*
 Greenwood, Calvin S., *So. G.*
 Heywood, Levi
 Heywood, Seth
 Hill, Edwin
 Hill, Henry C.
 Hill, John W.
 Hubbard, George B.
 Nichols, Washington
 Parker, David
 Sawin, John, *South G.*
 Stevens, S. W. A., *South G.*
 Wood, Abel S.
 Wood, Asaph, *South G.* 17
- LEOMINSTER.
- Allen, Joel C.
 Boyden, Elliot E.
 Boyden, Charles C.
 Bennett, James
 Bird, Ebenezer
 Burrage, Emery
 Brown & Allen *r*
 Burrage, Leonard, *North L.*
 Carter, James H.
 Carter, Solon
 Colburn, Charles H.
 Cotton, Ward M.
 Day, N. C.
 Field, C. C.

Grout, George H.
 Gates, Augustus
 Gates, Edwin
 Gates, Whitney
 Harrington, Fred B.
 Haskell, Franklin L.
 Hosmer, William B.
 Jewett, Wade H. & Co.
 Lowe, P. H. W.*
 Marshall, James H.
 Merriam, C. H.
 Merriam, Gardner
 Morse, Augustus
 Morse, Gardner
 Morse, Estabrook
 Nichols, Edmund H.
 Nichols, John F.
 Nicholson, Charles r
 Pratt & Stocking
 Piper, Porter
 Putnam & Phelps, *North L.*
 Richardson, Sewall
 Stearns, Thomas*
 Stratton, Albert, *North L.*
 Whitney, F. W. & F. A.
 Woods, George 40

LUNENBURG.

Bailey, Samuel H.
 Beal, F. E. L.
 Billings, Thomas
 Brown, W. L.
 Fairbanks, John
 Graham, Ephraim, *Fitchburg.*
 Goodrich, Joseph
 Goodrich, Lewis A.
 Houghton, Edmund
 Houghton, Stephen*
 Johnson, Martin
 Kilburn, Cyrus
 Mandell, William A.
 Pitts, Lemuel
 Putnam, James
 Putnam, Daniel

Ramsdell, John*
 Ware, Lewis
 White, Levi 19

PRINCETON.

Beaman, G. S., *East P.*
 Benson, W. W.
 Boyles, Henry*
 Brooks, John*
 Brooks, John
 Brown, W. H., *East P.*
 Danforth, Nathan r
 Everett, Abram, *East P.*
 Everett, Israel, *East P.*
 Everett, Joshua T., *East P.*
 Everett, Mandell G., *East P.**
 Gregory, George M.
 Hastings, Solon S.
 Houghton, George W.
 Merriam, J. Edwin
 Mirick, Elisha G.*
 Mirick, Paul M., *East P.*
 Mirick, Sewell G.
 Nash, Samuel C.*
 Reed, Joseph P.
 Reed, Nathan B.
 Richardson, Sewell

Roper, John
 Roper, Wilkes
 Skinner, George O.
 Skinner, Harlow
 Temple, Jonas H.
 Watson, William W.*
 Whitcomb, Joseph, *East P.*
 Whitcomb, W. H., *East P.**
 Wilder, Mark, *East P.* 31

ROYALSTON.

Bemis, Otis, *South R.*
 Bullard, Ebenezer
 Clark, Edson
 Clark, Timothy
 Farrar, S. S., *South R.*
 Hale, Silas, *South R.*
 Jones Aaron, *South R.*

- Jones, Silas, Jr., *South R.*
 Partridge, L. W., *South R.**
 Raymond, Joseph
 Safford, Roby R., *South R.*
 Stockwell, Anna, *South R.*
 Turner, Ephraim, *So. R.* 13
- SHIRLEY.
- Chandler, George
 Chandler, John H.
 Davis, Alpheus B., *S. Vill.*
 Gardner, Jerome, *S. Vill.*
 Gardner, M. T., *S. Vill.*
 Going, John K., *S. Vill.*
 Hartwell, Nathaniel
 Holden, Nathaniel
 Page, George
 Parker, James O.
 Whitney, Thomas
 Wetherbee, Wm. H. *S. Vill.* 12
- STERLING.
- Barron, A. S.
 Baldwin, William
 Burpee, Edward
 Fitch, Charles B.
 Hastings, Rufus
 Heywood, Joseph P.
 Heywood, Moses B.
 Holbrook, Cyrus*
 Kendall, Ezra
 Kendall, George
 Loring, Charles H.
 Loring, Maynard
 May, John*
 Nourse, Franklin
 Osgood, Samuel
 Peck, W. D.
 Richardson, William B.
 Stephenson, John M.
 Sawyer, Jonathan M.
 Sawyer, Moses, 2d.
 Sawyer, Putnam
 Sawyer, William
 Sawyer, William Franklin
- Smith, Sidney
 Whitney, Joseph
 Wilder, Josiah
 Wilder, Sidney R. 27
- TEMPLTON.
- Bowker, Jonathan*
 Chase, Henry
 Davis, Joseph, *Baldwinville*
 Day, Gilman, *Baldwinville*
 Goldsmith, J. G., *Otter River*
 Richardson, John A.
 Sawyer, Edwin, *Baldwinville*
 Sawyer, Joshua, Jr.*
 Simonds, Warren
 Smith, Levi N., *Baldwinville*
 Stone, E. W., *Otter River*
- WESTMINSTER.
- Bacon, Edward
 Barnes, Adonijah
 Benjamin, A. W., *Wachusett Vil.*
 Brown, Timothy, " "
 Rigelow, Benson
 Chesmore, Reuben G., *Fitch'g*
 Cooper, Samuel*
 Cowee, Orange G.*
 Damon, Thomas
 Duncan, George N., *Fitchburg*
 Ellis, Preston
 Fessenden, John*
 Flagg, Otis
 Forbush, Joseph W.
 Hagar, Isaac r
 Howe, Franklin*
 Jackson, Levi*
 Kendall, George*
 Laws, David, *Ashburnham*
 Learned, John K.
 Merriam, Artemas
 Merriam, Caleb S.
 Merriam, Joel, Jr.
 Merriam, J. & O. M.
 Miles, Daniel, *Wachusett Vill.*
 Miles, Daniel C. " "

Miles, George		WINCHENDON.	
Miller, John C., <i>Wachusett Vil.*</i>	Brown, William, 2d.		
Minot, John	Cutter, John		
Page, Josiah, <i>West Fitchburg</i>	Forristall, John M.		
Page, Porter F. " "	Mason, Orlando		
Puffer, James	Murdock, Elisha		
Raymond, Aretas	Murdock, Ephraim, Jr.		
Raymond Asa, <i>Fitchburg</i>	Raymond, Paul, Jr.		
Raymond, Eli W. <i>Fitchburg</i>	Whitney, Giles H.		
Sprague, S. H., <i>Wachusett Vil.</i>	Vose, Reuben, Jr.		9
Towne, George W. r		WORCESTER.	
White, Marshall	Bullock, Alexander H.		
Winship, Handell	Boyington, John		
Winship, Sylvester	Brown, Alzirus		
Wood, Aaron	Chase, Anthony		
Wood, Allen B., <i>Fitchburg</i>	Howard, Justin		
Wood, Benjamin F.	Miles, Charles M.		
Wood, Timothy D.	Phillips, Ivers		
Wyman, Benjamin, <i>Wachusett Vill.</i>	Richardson, George W.		
Wyman, David r	Spooner, A. J.		
Wyman, Franklin, <i>Wachusett Vill.</i>	Wellington, Timothy W.		
	Wheeler, W. A.		
	Whitcomb, David		12

Martin Clifford, Amherst; William S. Merritt, Ashfield; Francis Conant, Boxboro; J. H. Reed, Bolton; R. S. Denney, Clappville; Amory Davidson, Clinton; Rodney Fuller, Dracut; Eli A. Hubbard, East Hampton; William Buckminster*; Henry G. White, Framingham; Charles L. Nutting, Hazen O. Bean, Groton; Trumbull Bull, Luke Divol, Josiah Puffer, Harvard; M. L. May, Hubbardston; Charles Flagg, South Lancaster; J. A. Harwood, Adam Thompson, Littleton; Albert Merriam, Lowell; John W. Piper, Lynn; Samuel Farwell, 2d, Lexington; John F. Ware, Milton; A. O. Cummings, A. C. & J. G. Wood, Millbury; David W. Blood, Pepperell; Edward Powers, Phillipston; John A. Rice, Quincy; Henry B. Jones, Townsend; Abram M. White, Asher Green, Mrs. Asher Green, West Townsend; Stephen Stanton, Wayland; Martin Harris, Warwick; Luther H. Tucker, Albany, N. Y.; Henry F. Kenney, Baltimore, Md.; H. W. Collin, Burlington, Vt.; Joel Foskett, Camden, N. Y.; Horatio Hill, Israel Longley, Elisha Garfield, Chicago, Illinois; Milton Frost, Detroit, Mich.; J. T. Densmore, Charles-

ton, N. H.; Nathan Whitney, Claremont, N. H.; Hiram W. Albee, Ludlow, Vt.; George M. Gage, Artemas F. Andrews, New Ipswich, N. H.; Solomon P. Burpee, J. M. Stuart, William B. Wood, New York City; Gilman Jones, New Buffalo, Mich.; Kendall Brooks, Philadelphia, Pa.; Oliver Howe, Titusville, Pa.; James L. Haynes, Peru, Vt.; Solomon F. Towne, Rindge, N. H.; Frank M. Proctor, Westmoreland, N. H.; Henry R. Phelps, Syracuse, N. Y.; Bailey, Cook & Co., Woonsocket, R. I.; William G. Wyman, Maine Prairie, Solano County, Cal.; Thomas B. Choate, Stockton, Cal.; Horatio Stebbins, San Francisco, Cal.; Henry W. Haskell, Marysville, Cal.; ~~Joseph W. Mansur~~, Kalamazoo, Mich.; Jacob Brown, Maysville, Mo. 64

Total number of life members, Jan. 1, 1866, 661

COMMITTEES AND PREMIUMS
FOR THE
FOURTEENTH ANNUAL EXHIBITION,
TO BE HELD AT FITCHBURG,
Tuesday, September 25. 1866.

No person will be allowed to become a competitor for any of the Premiums herein offered, unless he shall have made an entry for the same, with the Secretary, within the time prescribed for each class, nor unless he shall also have furnished all required statements relating thereto, within the specified time.

For the convenience of those who live at a distance, entries may be made by Mail; and all entries so made must be delivered at some post office one day previous to the expiration of the time specified, and must bear proof of having been so delivered either by postmark, or a certificate of registry from the Postmaster.

 Communications for the Secretary should be sent to *West Fitchburg*.

STOCK.

All entries for premiums under this head, must be made on or before the Friday previous to the show, except Horses and Poultry, which may be as late as the day previous, and all stock must be owned by the person who enters it.

All persons who are required to furnish a statement, must do so to the Secretary at the time of making the entry.

All live stock must have been raised by the person entering the same, or owned by him at least three months next previously, except in the case of mis-mating oxen and horses, rendered necessary by injury or disease.

Each entry of stock for the pens must specify the breed of the animal, if known, and the age.

Fat cattle, working cattle and draught horses must be weighed on the same scale, in Fitchburg, and will be weighed free of expense.

The weight of all other stock will not be required.

The society will pay a reasonable sum for the keeping of all stock entered for premiums and driven over eight miles.

Forage Committee.—Abel Marshall, Abram S. Dole, Leonard S. Downe, Fitchburg. This committee are to provide places for keeping stock over night, when driven from a distance of more than eight miles. Competitors desiring to avail themselves of this offer of the society, must notify the Secretary at the time of entering their stock.

BLOOD STOCK.

Committee.—S. S. Hastings, Princeton; A. O. Cummings Milbury; Trumbull Bull, Harvard; Asaph Wood, Gardner; Estabrooks More, Leominster.

Durham Bulls, more than two years old,	1st premium,	\$6 00
	2d premium,	4 00
Yearlings,	1st premium,	5 00
	2d premium,	3 00
Calves,	1st premium,	4 00
	2d premium,	2 00
North Devon, more than two years old,	1st premium,	6 00
	2d premium,	4 00

Yearlings,	1st premium,	\$5 00
	2d premium,	3 00
Calves,	1st premium,	4 00
	2d premium,	2 00
Ayrshire, more than than 2 yrs. old,	1st premium,	6 00
	2d premium,	4 00
Yearlings,	1st premium,	5 00
	2d premium,	3 00
Calves,	1st premium,	4 00
	2d premium,	2 00
Alderney, more than two years old,	1st premium,	6 00
	2d premium,	4 00
Yearlings,	1st premium,	5 00
	2d premium,	3 00
Calves,	1st premium,	4 00
	2d premium,	2 00
Any other breed, pure blood, more than two years old,	1st premium,	6 00
	2d premium,	4 00
Yearlings,	1st premium,	5 00
	2d premium,	3 00
Calves,	1st premium,	4 00
	2d premium,	2 00

Authentic pedigrees will be required.

The committee may award gratuities for superior specimens of cows, heifers or heifer calves, of either of the breeds named.

GRADE OR NATIVE BULLS.

Committee.—Solon Carter, Leominster; Lyman N. Fairbanks, Fitchburg; T. D. Wood, Westminster; N. C. Day, Leominster; Edwin D. Works, Fitchburg.

More than two years old,	1st premium,	\$5 00
	2d premium,	3 00

Yearlings,	1st premium,	\$4 00
	2d premium,	2 00
Calves,	1st premium,	4 00
	2d premium,	3 00

These may be of any breed more than four months old.

MILCH KINE.

Committee.—A. G. Hill, Harvard; Whiting Gates, Leominster; Dennis Fay, Ashby; George O. Skinner, Princeton; Zopher Taylor, Harvard.

Herds of four cows or heifers, each,	1st premium,	\$10 00
	2d premium,	7 00
	3d premium,	4 00

The person receiving these premiums will not be allowed to compete for any other, with the same animals.

The committee will regard age, expense of keeping, &c.

Cows, for butter,	1st premium,	\$5 00
	2d premium,	4 00
	3d premium,	3 00
Heifers, three years old, for butter,	1st premium,	5 00
	2d premium,	4 00
	3d premium,	3 00
Heifers, two years old, for butter,	1st premium,	4 00
	2d premium,	3 00
	3d premium,	2 00
Cows, for milk,	1st premium,	5 00
	2d premium,	4 00
	3d premium,	3 00
Heifers, three years old, for milk,	1st premium,	5 00
	2d premium,	4 00
	3d premium,	3 00

Heifers, two years old, for milk,	1st premium,	\$4 00
	2d premium,	3 00
	3d premium,	2 00

Competitors for premiums on milch cows, whether for herds or single animals, and milch heifers, will be required to certify in writing, at the time of entry, to the weight of the milk, or to the weight of butter, as the case may be, during the six days commencing with the first Monday in June, and the corresponding six days in September; and to the manner of keeping and general management. Cows that calve near or after the first Monday in June, may be tried at another time.

HEIFERS.

Committee.—A. J. Sawyer, Harvard; J. H. Temple, Princeton; Emory Burrage, Leominster; Addison Howe, Ashburnham; Oscar F. Woodbury, Fitchburg.

Intended to be kept for the Dairy.

Two years old,	1st premium,	\$4 00
	2d premium,	3 00
	3d premium,	2 00
Yearlings,	1st premium,	3 00
	2d premium,	2 00
	3d premium,	1 00

HEIFER CALVES.

Committee.—J. M. Sawyer, Sterling; Augustus Gates, Leominster; Josiah Page, Westminster; Paul M. Mirick, Princeton; Lorisston Stockwell, Fitchburg.

Calves more than four months old,	1st premium,	\$4 00
	2d premium,	3 00
	3d premium,	2 00

Calves more than four months old, raised by hand,	1st premium,	\$4 00
	2d. premium,	3 00
	3d premium,	2 00

WORKING OXEN.

Committee.—Ezra Kendall, Sterling; Daniel Putnam, Lunenburg; W. W. Benson, Princeton; George G. Samson, Ashburnham; Moses B. Hayward, Sterling.

Working Oxen,	1st premium,	\$7 00
	2d premium,	6 00
	3d premium,	5 00
	4th premium,	4 00
	5th premium,	3 00
Best Teamster, if a minor,	1st premium,	5 00
	2d premium,	3 00

The working oxen will be tried, attached to loads weighing, including the cart, one-third more than themselves.

STEERS MORE THAN TWO YEARS OLD.

Committee.—A. B. Davis, Shirley Village; Emory Farmer, Harvard; Thomas Sheldon, Fitchburg; N. B. Reed, Princeton; Alfred Marshall, Fitchburg.

Three years old,	1st premium,	\$5 00
	2d premium,	4 00
	3d premium,	3 00
Best teamster, if a minor,	1st premium,	4 00
	2d premium,	2 00

The three years old steers will be attached to carts, and tried like the oxen, on the same ground; the cart and load to equal the steers in weight.

Two years old,	1st premium,	\$4 00
	2d premium,	3 00
	3d premium,	2 00
Trained, two years old,	1st premium,	4 00
	2d premium,	2 00

YEARLING STEERS AND STEER CALVES.

Committee.—Joel Page, Hosea M. Caswell, Fitchburg; Charles H. Brown, Ashburnham; George W. Houghton, Princeton; Joseph W. Forbush, Westminster.

Yearlings,	1st premium,	\$3 00
	2d premium,	2 00
	3d premium,	1 00
Trained yearlings,	1st premium,	3 00
	2d premium.	2 00
Calves,	1st premium,	6 00
	2d premium,	4 00
	3d premium,	2 00
Calves, raised by hand,	1st premium,	6 00
	2d premium,	4 00
	3d premium,	2 00
Trained calves,	1st premium,	4 00
	2d premium,	3 00
	3d premium,	2 00

CALVES.

Committee.—Joel Merriam, Jr., Westminster; F. W. Wright, Ashby; Harlow Skinner, Princeton; Edward Bacon, Westminster; Walter Page, Fitchburg.

Best pen of calves, not less than four, \$10 00

Calves entered for this premium cannot compete for any other.

FAT CATTLE.

Committee.—Ivers Phillips, Worcester; John Lowe, William C. Emory, Warren C. Upton, Fitchburg; Marshall White, Westminster.

Oxen,	1st premium,	\$8 00
	2d premium,	5 00
	3d premium,	3 00
Cows,	1st premium,	6 00
	2d premium,	3 00
	3d premium,	2 00
Three years old steers or heifers,	1st premium,	6 00
	2d premium,	4 00

All competitors with fat cattle or swine, must furnish a statement to the Secretary, of the mode and expense of feeding.

SWINE.

Committee.—Herbert W. Kimball, S. M. Dole, Fitchburg; Levi Burr, Ashby; Lewis Morse, Lunenburg; Simeon Merritt, Ashburnham.

Must be entered like other stock.

Boars, more than one year old,	1st premium,	\$4 00
	2d premium,	3 00
Less than one year old,	1st premium,	3 00
	2d premium,	2 00
Fat hogs, more than eight mos. old,	1st premium,	8 00
	2d premium,	5 00
	3d premium,	2 00
Fat pigs, less than eight mos. old,	1st premium,	3 00
	2d premium,	2 00
	3d premium,	1 00
Breeding sows,	1st premium,	3 00
	2d premium,	2 00
	3d premium,	1 00

Weaned pigs, not less than four,	1st premium,	\$3 00
	2d premium,	2 00
	3d premium,	1 00

STALLIONS.

Committee—Alfred Hitchcock, Fitchburg; Edwin Gates, Leominster; Reuben W. Snow, Lunenburg; John M. Sawtelle, Fitchburg; S. W. A. Stevens, South Gardner.

All persons offering stallions, five years old and upward, will be required to exhibit specimens of their stock.

Stallions, 5 years old and upwards,	1st premium,	\$12 00
	2d premium,	8 00
Four years old,	1st premium,	6 00
	2d premium,	4 00
Three years old,	1st premium,	4 00
	2d premium,	2 00
Two years old,	1st premium,	4 00
	2d premium,	2 00

MARES AND SUCKING COLTS.

Committee.—James H. Marshall, Leominster; Mark Wilder, East Princeton; L. P. Comee, Fitchburg; Samuel Sprague, Westminster; Warren Page, Fitchburg.

The mares must be four years old and upward and accompanied with their colts.

Breeding mares,	1st premium,	\$6 00
	2d premium,	4 00
	3d premium,	2 00
Colts, less than one year old,	1st premium,	3 00
	2d premium,	2 00
	3d premium,	1 00

DRAUGHT AND FAMILY HORSES.

Committee.—Ohio Whitney, Jr., Ashburnham; Hale W. Page, Fitchburg; W. F. Sawyer, Sterling; James L. Cummings, Ashburnham; Shepherd F. Atherton, Fitchburg.

Draught horses will be tried, attached to a stone boat, loaded to weigh one-third more than the horses.

The same draught horse cannot receive a premium as a single horse, and also one of a pair, but a draught horse may compete as a family horse.

These must be four years old and upward.

Draught horses and mules, pairs,	1st premium,	\$6 00
	2d premium,	4 00
Draught horses, single,	1st premium,	5 00
	2d premium,	3 00
Best teamster, if a minor,	1st premium,	4 00
	2d premium,	2 00
Family horses, pairs,	1st premium,	7 00
	2d premium,	5 00
Family horses, single,	1st premium,	5 00
	2d premium,	3 00

COLTS.

Committee.—J. M. Harris, Fitchburg; Gardner Merriam, Leominster; A. B. Damon, Fitchburg; Joseph Cushing, Fitchburg; Calvin S. Greenwood, South Gardner.

Three years old geldings,	1st premium,	\$4 00
	2d premium,	2 00
Three years old fillies,	1st premium,	4 00
	2d premium,	2 00
Two years old geldings,	1st premium,	4 00
	2d premium,	2 00
Two years old fillies.	1st premium,	4 00
	2d premium,	2 00
Yearling colts,	1st premium,	4 00
	2d premium,	2 00

PREMIUMS.

SHEEP.

Committee.—William H. Vose, Fitchburg; Jesse Foster, Ashby; Aaron Wood, Westminster; A. B. Gale, Harvard; A. P. Goodrich, Fitchburg.

Flocks, not less than ten, owned

by one person,	1st premium,	\$10 00
	2d premium,	5 00
Bucks,	1st premium,	5 00
	2d premium,	3 00
Cossets,	1st premium,	2 00
	2d premium,	1 00

POULTRY.

Committee.—Edward P. Downe, Lyman Merriam, C. K. Sawyer, Fitchburg; Caleb S. Merriam, Westminster; Jackson Burr, Ashby.

Must be entered like other stock.

Barn-yard fowls, not less than six,	1st premium,	\$3 00
	2d premium,	2 00
Turkeys, not less than six,	1st premium,	3 00
	2d premium,	2 00
Geese, not less than six,	1st premium,	3 00
	2d premium,	2 00
Ducks, not less than six,	1st premium,	3 00
	2d premium,	2 00

TOWN TEAMS.

Committee.—William Woodbury, Jr., Fitchburg; John Cutter, Winchendon; Warren Simonds, Templeton; Leonard Burrage, Leominster; I. B. Woodward, Fitchburg.

For the best town team, not less than fifteen yoke of oxen from any one town,	1st premium,	\$25 00
	2d premium,	10 00

PLOWING MATCH.

All entries for plowing must be made on or before the Wednesday previous to the exhibition, and one dollar must

be deposited with each entry, to be returned to the competitor, if he plows, otherwise forfeited to the society.

No teams or parts of teams will be allowed to compete for more than one premium on plowing.

DOUBLE TEAMS.

Committee.—A. P. Kimball, Fitchburg; George Wood, Leominster; Perley Howe, Ashburnham; George Miles, Westminster; John May, Sterling.

Double teams,	1st premium,	\$7 00
	2d premium,	5 00
	3d premium,	3 00
Minors, with steers,	1st premium,	6 00
	2d premium,	4 00
	3d premium,	2 00

SINGLE TEAMS.

Committee.—Joel Hayward, Ashby; Levi White, Lunenburg; Charles C. Boyden, Leominster; James R. Bruce, Westminster; James Harrington, Fitchburg.

Single teams,	1st premium,	\$7 00
	2d premium,	5 00
	3d premium,	3 00
Minors, with steers,	1st premium,	6 00
	2d premium,	4 00
	3d premium,	2 00

HORSE TEAMS.

Committee.—John M. Forristall, Winchendon; John K. Going, Shirley; C. W. Jaquith, Fitchburg; Moses Sawyer, 2d, Sterling; Anan Stockwell, South Royalston.

Horse or mule teams,	1st premium,	\$7 00
	2d premium,	5 00
	3d premium,	3 00

CROPS.

All entries for Premiums in this department must be made with the Secretary, on or before June 1st, with the exception

of English turnips and cabbages, which must be entered on or before August 1st. Immediately after these dates the Secretary will transmit to all competitors a copy of the following blank form, adopted by the Trustees, to correspond with the requirements of the Board of Agriculture.

In pursuance of authority delegated to the Board of Agriculture, by chap. 24 of the Acts of 1862, Agricultural Societies receiving the bounty of the State, are required to make use of the following form, and be governed by its conditions, in the mode of ascertaining the amount of crops entered for premium :

Worcester North Agricultural Society.

Statement concerning a crop of _____, raised by Mr. _____ in the town of _____, 1866.

What was the crop of 1864?

What manure was used, and how much that year?

What was the crop of 1865?

What manure was used, and how much that year?

What is the nature of the soil?

When, and how many times plowed, and how deep, for the present crop?

What other preparation for the seed?

Cost of plowing and other preparation?

Amount of manure, in loads of thirty bushels, and how applied for the present crop?

Value of manure upon the ground?

When and how planted, and the amount and kind of seed?

Cost of seed and planting?

How cultivated and how many times?

Cost of cultivation, including weeding and thinning?

Time and manner of harvesting?

Cost of harvesting, including the storing and husking, or threshing?

Amount of straw, stover, or other product?

REMARKS.

Signed by

Competitor.

From actual measurement, I hereby certify that the land which the above crop of covered, contained rods, and no more.

From personal observation, we hereby certify that the above answers are true.

I hereby certify that the weight of the above crop, as ascertained by me, on the day , was pounds.

In ascertaining the weight of a crop, an average rod shall be selected, harvested and weighed, by one or more members of a committee, and the whole estimated by multiplying it by the number of rods.

The certificate shall state the weight of all crops only when in a merchantable state.

RULES OF MEASURE

Practised and adopted by the State Board of Agriculture :

Wheat, potatoes, sugar beets, mangel wurzel, ruta бага, white beans and peas,	60 lbs. to bushel.
Corn, rye, onions,	56 " "
Oats,	32 " "
Barley, buckwheat,	48 " "
Cracked corn, corn and rye and other meal except oat, and English turnips,	50 " "
Parsnips,	45 " "
Carrots,	55 " "

These forms must be returned to the Secretary on or before November 10th, with each question concerning the crop answered, and the certificates properly signed.

No person will be allowed to compete for more than one premium, with a crop raised upon the same field, however large, with the same treatment.

Committees should not encourage *the irregular* entry of *accidental* good crops.

GRAIN.

Committee.—Cyrus Kilburn, Lunenburg; D. C. Miles, Westminster; Abel Marshall, Fitchburg; Elliot E. Boyden, Leominster; N. S. Boutelle, Fitchburg.

Samples must be exhibited at the Fair.

The committee may award gratuities for valuable new varieties of grain.

For the largest crop of herds grass seed, not less than three bushels,

1st premium, \$5 00

2d premium, 3 00

Red top, not less than six bushels, 1st premium, 5 00

2d premium, 3 00

For the most profitable crops of corn, wheat, rye, barley and oats, one acre each; of cabbages, beans and flax, one-eighth acre each; the product of corn to be not less than 4320 lbs. on the cob; that of wheat, rye, barley and oats, not less than 1200 lbs. of grain each.

Corn, 1st premium, \$10 00

2d premium, 8 00

3d premium, *Grasses and Forage Plants.*

Wheat, 1st premium, 10 00

2d premium, 8 00

3d premium, *Grasses and Forage Plants.*

Flax, 1st premium, 10 00

2d premium, 5 00

3d premium, *Grasses and Forage Plants.*

Rye, 1st premium, 6 00

2d premium, 4 00

3d premium, *Grasses and Forage Plants.*

Barley, 1st premium, 6 00

2d premium, 4 00

3d premium, *Grasses and Forage Plants.*

Oats, 1st premium, 6 00

2d premium, 4 00

3d premium, *Grasses and Forage Plants.*

Field beans,	1st premium,	\$4 00
	2d premium,	2 00
	3d premium,	<i>Grasses and Forage Plants.</i>

ROOT CROPS AND CABBAGES.

Committee.—Ephraim Graham, Lunenburg; Daniel S. Eaton, Fitchburg; Warren Marble, Ashburnham; J. P. Putnam, Fitchburg; Edward Burpee, Sterling.

For the most profitable crops of potatoes, one-fourth acre each; of carrots, onions, beets and turnips, one-eighth acre each.

Potatoes, not less than 3000 lbs.,	1st premium,	\$8 00
	2d premium,	5 00
	3d premium,	<i>Grasses and Forage Plants.</i>
Carrots, not less than 5500 lbs.,	1st premium,	4 00
	2d premium,	3 00
Onions, not less than 2000 lbs.,	1st premium,	<i>Harris on Insects.</i>
	2d premium,	2 00
Sugar beets,	1st premium,	2 00
	2d premium,	1 00
Mangel wurzel,	1st premium,	2 00
	2d premium,	1 00
English turnips,	1st premium,	<i>Harris on Insects.</i>
	2d premium,	2 00
Turnips of any other variety,	1st premium,	<i>Harris on Insects.</i>
	2d premium,	2 00
Cabbages,	1st premium,	2 00
	2d premium,	1 00

FARMS.

Committee.—Abel F. Adams, Nathan Upham, Fitchburg; Thomas Billings, Lunenburg.

All competitors must make their entries on or before the first day of May. Each farm will be open to the inspection of the committee during the entire season.

For the best cultivated and man-

aged farm,	1st premium,	\$15 00
	2d premium,	8 00

GARDENS.

Committee.—L. H. Bradford, Oliver Kendall, Fitchburg; Martin Johnson, Lunenburg.

No person having received a premium for a kitchen or mixed garden shall be allowed to compete for another with the same land, within three years, except for a higher one.

Entries must be made on or before June 1st.

Kitchen or mixed gardens,	1st premium,	\$6 00
	2d premium,	4 00
	3d premium,	2 00
Flower gardens,	1st premium,	2 00
	2d premium,	1 00

EXPERIMENTS.

Committee.—J. A. Marshall, Levi Kendall, Jacob Haskell, Fitchburg.

All entries must be made at least one week before commencing the experiments.

Best experiment testing the value of corn and cob for fattening purposes, with the cob or otherwise,	\$15 00
Best experiment in steaming food for cattle and horses,	10 00
Best experiment testing the comparative value of drilling wheat or other grain to broadcast sowing,	5 00

There will be placed at the disposal of the committee, for the best and most reliable agricultural experiments, made in 1866, the sum of twenty dollars.

TOWN HALL.

No article intended for the hall will be entitled to a premium, unless it shall have been deposited by two o'clock, P. M., on Monday, from which time the hall will be occupied by the committees exclusively until half past six o'clock, when it will be opened to the public for the evening.

All articles must have been grown, manufactured or produced by the person entering the same for premium, and

should be plainly marked with the name and residence of the exhibitor.

A strict compliance with these regulations will be absolutely necessary.

APPLES, PEACHES, PLUMS AND QUINCES.

Committee.—M. T. Gardner, Shirley; Andrew Fairbanks, Harvard; Rodney Wallace, Fitchburg; Alfred Whiting, Oakdale; J. T. Everett, East Princeton.

APPLES.

For the best and largest exhibition of named varieties of three specimens each,	1st premium,	\$4 00
	2d premium, <i>Harris on Insects.</i>	
For 12 varieties of 5 specimens each,	1st prem. <i>Harris on Insects.</i>	
	2d premium,	2 00
	3d premium,	1 00
For 6 varieties of 5 specimens each,	1st premium,	2 00
	2d premium,	1 50
	3d premium,	1 00
For 3 varieties of 5 specimens each,	1st premium,	1 50
	2d premium,	1 00
	3d premium,	50
For the best exhibition of twelve specimens of Baldwins,	1st premium,	1 00
	2d premium,	50
Hubbardston Nonesuch,	1st premium,	1 00
	2d premium,	50
R. I. Greenings,	1st premium,	1 00
	2d premium,	50
Roxbury Russets,	1st premium,	1 00
	2d premium,	50

No person will be allowed to compete for a premium in more than one of the above classes, with the same specimens of fruit; and if the number of specimens exhibited does not correspond with these regulations, the fruit will be excluded from competition for the premiums.

PREMIUMS.

PEACHES.

For the best collections,		<i>Harris on Insects.</i>
For the best dishes or baskets,	1st premium,	\$2 00
	2d premium,	1 00
	3d premium,	50

PLUMS.

For the best collection,		2 00
For the best plates,	1st premium,	1 00
	2d premium,	50

QUINCES.

For the best dishes or baskets,	1st premium,	1 00
	2d premium,	50

In addition to the above premiums, there will be placed at the disposal of the committee for gratuities, ten dollars.

PEARS AND GRAPES.

Committee.—James Bennett, Leominster; Gardner P. Hawkins, Fitchburg; Amos B. Holden, Westminster; William D. Peck, Sterling; Cyrus Thurston, Fitchburg.

PEARS.

For the best and largest exhibition of named varieties, of three specimens each,	1st premium,	\$4 00
	2d premium, <i>Harris on Insects.</i>	
For 12 varieties of 5 specimens each,	1st prem., <i>Harris on Insects.</i>	
	2d premium,	2 00
	3d premium,	1 00
For 6 varieties of 5 specimens each,	1st premium,	2 00
	2d premium,	1 50
	3d premium,	1 00
For 3 varieties of 5 specimens each,	1st premium,	1 50
	2d premium,	1 00
	3d premium,	50
For the best exhibition of twelve specimens of Bartlett,	1st premium,	1 00
	2d premium,	50

Seckel,	1st premium,	\$1 00
	2d premium,	50
Flemish Beauty,	1st premium,	1 00
	2d premium,	50
Duchess,	1st premium,	1 00
	2d premium,	50
Louise Bonne de Jersey,	1st premium,	1 00
	2d premium,	50

No person will be allowed to compete for a premium in more than one of the above classes, with the same specimens of fruit; and if the number of specimens exhibited does not correspond with these regulations, the fruit will be excluded from competition for the premiums.

GRAPES.

For the best displays of Foreign Grapes,	1st premium,	\$3.00
	2d premium,	2 00
	3d premium,	1 00
For the best displays of Native Grapes,	1st premium, <i>Harris on Insects.</i>	
	2d premium,	2 00
	3d premium,	1 00
Best six clusters of Concord,	1st premium,	1 00
	2d premium,	50
Delaware,	1st premium,	1 00
	2d premium,	50
Hartford Prolific,	1st premium,	1 00
	2d premium,	50

In addition to the above premiums there will be placed at the disposal of the committee for gratuities, ten dollars.

ASSORTED FRUITS AND FLOWERS.

Committee.—Henry S. Jones, Fitchburg; Mrs. M. T. Gardner, Shirley; Mrs. Ohio Whitney, Jr., Ashburnham; Mrs. L. H. Bradford, Fitchburg; Mrs. William Baker, Lunenburg.

FRUIT.

For the best dishes or baskets,	1st premium,	\$2 00
	2d premium,	1 00

FLOWERS.

For best displays of named plants		
in pots,	1st premium,	2 00
	2d premium,	1 00
Best pair of parlor bouquets,	1st premium,	2 00
	2d premium,	1 00
Best pair of hand bouquets,	1st premium,	2 00
	2d premium,	1 00
For the best displays of cut flowers,	1st premium,	2 00
	2d premium,	1 00

In addition to the above premiums, there will be placed at the disposal of the committee for gratuities, ten dollars.

VEGETABLES.

Committee.—T. K. Ware, Fitchburg; George H. Grout, Leominster; Lawrin Pratt, Benj. Safford, Benj. Wheeler, Fitchburg.

Of squashes, pumpkins, cabbages and celery there should be six specimens in each lot; of cauliflower, three; of onions, beets, turnips and tomatoes, one peck in each lot; of field beans, one-half peck; and of Lima beans, two quarts.

For the best collections of kitchen		
vegetables,	1st premium,	7 00
	2d premium,	5 00
	3d premium,	3 00
Best collections of garden seeds,	1st premium,	5 00
	2d premium,	3 00
Collections of potatoes,	1st premium,	2 00
	2d premium,	1 00
	3d premium,	50
Marrow squashes,	1st premium,	1 00
	2d premium,	50

Hubbard squashes,	1st premium,	\$1 00
	2d premium,	50
Crookneck squashes,	1st premium,	1 00
	2d premium,	50
Pumpkins,	1st premium,	75
	2d premium,	50
Cabbages,	1st premium,	75
	2d premium,	50
Cauliflowers,	1st premium,	75
	2d premium,	50
Celery,	1st premium,	75
	2d premium,	50
Onions,	1st premium,	75
	2d premium,	50
Turnip beets,	1st premium,	75
	2d premium,	50
English turnips,	1st premium,	50
	2d premium,	25
Tomatoes,	1st premium,	50
	2d premium,	25
Field beans,	1st premium,	50
	2d premium,	25
Lima beans,	1st premium,	50
	2d premium,	25
Seed corn, in traces,	1st premium,	1 00
	2d premium,	75
	3d premium,	50

In addition to the above, there will be allowed for gratuities, ten dollars.

No person will be allowed to receive more than one copy of *Harris on Insects*; if more than one is awarded, cash will be paid instead, at the rate of three dollars per copy; and if any to whom a copy is awarded already has one, he may receive the copy awarded, or the cash as above, at his option.

BREAD, BUTTER, CHEESE, PICKLES, PRESERVES
AND JELLIES.

Committee.—George E. Towne, Fitchburg; Mrs. George O. Skinner, Princeton; Mrs. Abel Marshall, Fitchburg; Mrs. Lewis Ware, Lunenburg; Mrs. Benjamin Snow, Jr., Fitchburg.
Competitors will be required to furnish a detailed statement in writing of the process of manufacturing butter, cheese and pickles.

White bread,	1st premium,	\$2 00
	2d premium,	1 00
	3d premium,	50
Unbolted wheat bread,		1 00
Bolted rye bread,	1st premium,	1 00
	2d premium,	50
Rye and Indian bread,	1st premium,	2 00
	2d premium,	1 00
	3d premium,	50
Lump butter, not less than 12 lbs.,	1st premium,	4 00
	2d premium,	3 00
	3d premium,	2 00
	4th premium,	1 50
June tub butter, not less than 25 lbs.,	1st premium,	3 00
	2d premium,	2 00
	3d premium,	1 00
Cheese, not less than 50 lbs.,	1st premium,	2 00
	2d premium,	1 50
	3d premium,	1 00
Pickles,	1st premium,	75
	2d premium,	50
	3d premium,	25
Virgin honey in the comb,	1st premium,	2 00
	2d premium,	1 00
	3d premium,	50

In addition to the above, there will be allowed for gratuities, ten dollars.

MECHANICS AND MANUFACTURES.

Committee.—Ward M. Cotton, Leominster; Lorenzo Barker, Henry J. Kennedy, Fitchburg; George E. Burt, Harvard; Charles H. Merriam, Leominster.

Specimens exhibited must be manufactured by the competitor.

For the best specimens of mechanic and manufactured articles, exclusive of ladies' home manufacture, there will be placed at the disposal of the committee, the sum of \$75.

AGRICULTURAL IMPLEMENTS.

Committee.—Lowell M. Miles, Joseph Pierce, Fitchburg; Amos Whitney, Ashburnham; Edwin Richardson, William Kimball, Fitchburg.

Specimens exhibited must be manufactured by the competitor.

Best mowing machine,	\$10 00
Best farm wagon, for one or two horses,	10 00
Best ox cart,	5 00
Best horse rake,	5 00
Best team harness,	5 00
Best hay or straw cutter,	3 00
Best ox yoke complete,	3 00
Best churn,	2 00
Best set of horse shoes,	2 00
For implements not specified, to be awarded by the committee,	25 00

FINE ARTS.

Committee.—Alfred Emerson, Fitchburg; J. A. Loomis, Boston; Mrs. Charles Mason, Fitchburg; Mrs. George C. Winchester, Ashburnham; Miss Mary S. Haskell, Fitchburg.

Best collection by a daguerrean artist, 1st premium,	\$4 00
2d premium,	2 00
Oil paintings, 1st premium,	4 00
2d premium,	2 00

Best crayon drawing,	1st premium,	\$3 00
	2d premium,	2 00
Pencil drawing,	1st premium,	2 00
	2d premium,	1 00
Best specimen of penmanship, by a non-professional,		1 00

Specimens exhibited must be actually executed by the competitors.

In addition there will be placed at the disposal of the committee, the sum of twenty dollars.

FANCY ARTICLES.

Committee.—George A. Torrey, Mrs. Alvah Crocker, Mrs. Edwin D. Works, Mrs. Abel F. Adams, Mrs. A. M. Sawyer, Fitchburg.

For the best specimens of Ladies' Useful and Fancy Articles, of their own manufacture, including specimens of nice mending and darning, there will be placed at the disposal of the committee, the sum of thirty dollars.

ESSAYS.

Committee.—Nathaniel Wood, Jabez Fisher, Benj. Snow, Jr., Fitchburg.

All persons competing for these premiums must file their Essays with the Secretary on or before the 1st of September. Each Essay is to be marked with a motto or design, and accompanied with a sealed envelope containing a corresponding motto or design, and also the name of the author.

The envelopes of the successful competitors will be opened on the day of the exhibition, immediately upon the announcement of the awards.

For the best essays on some practical subject connected with agriculture, deemed worthy of publication in the Society's "Transactions,"

1st premium,	\$15 00
2d premium,	10 00

COMMITTEES' REPORTS.

Committee.—The President, two Vice Presidents and Secretary.

For the purpose of inducing the chairman of the several committees to take upon themselves more labor and care in elaborating their reports, the following premiums will be paid :

1st premium,	\$10 00
2d premium,	6 00
3d premium,	4 00

Reports in connection with awards made on the day of exhibition, must be delivered to the Secretary on or before October 25th. All others on or before November 15th.

Total amount of premiums offered for 1866, \$1477 75

 PROSPECTIVE.

For the best experiment to determine the economy of growing Indian corn as a part of a rotation compared with grass through a series of six years, the amount of manure applied being the same in both cases,

1st premium,	\$25 00
2d premium,	15 00

Entries must be made on or before July 1st, 1866.

APPLE ORCHARDS.

For the best orchards of not less than fifty trees, all having been set after January 1st, 1866, to be awarded in 1870,

1st premium,	\$25 00
2d premium,	10 00

PEAR ORCHARDS.

Committee.—J. M. Woodbury, Fitchburg; Seth Heywood, Gardner; J. E. Merriam, Princeton; D. H. Merriam, Farington McIntire, Fitchburg.

For the best orchards of not less than fifty trees, all having been set after January 1st, 1861, to be awarded in 1866,

1st premium, \$25 00

2d premium, 10 00

For the best orchards of not less than fifty trees, all having been set after January 1st, 1866, to be awarded in 1871,

1st premium, \$25 00

2d premium, 10 00

POTATOES.

For the best seedling potatoes, to be tested for not less than three successive years, \$25 00

FOREST TREES.

Entries must be made on or before the first day of June.

For the best plantation of any kind of Forest Trees, suitable for fuel or timber, raised from the seed, not less than five hundred in number, which shall be in the most flourishing condition in the fall of 1868,

1st premium, \$25 00

2d premium, 15 00

3d premium, 10 00

LIVE FENCE.

Committee.—A. F. Adams, J. A. Marshall, Fitchburg; Daniel Putnam, Lunenburg.

For the best experiment demonstrating the feasibility of substituting live farm fence for those in common use; the entries to be made on or before May 1st, 1863, or whenever afterwards planted, and the premiums to be paid in 1868:

1st premium, \$25 00

2d premium, 15 00

3d premium, 5 00

ICE HOUSES.

For the best constructed Ice House for family purposes, to be tested at least twelve months, \$5 00

R U L E S .

All teams entered for draught must have been owned by the person entering the same, for at least three months next previous.

All teams entered for plowing must be owned by the person entering the same, and the team must be driven, and the plow managed by him or by some one usually in his employ.

Different persons owning single teams may combine them for the purpose of plowing.

Any person competing for a premium, who shall serve on the committee having charge of the department in which he competes, shall retire from the committee while his own competition is in question.

The several committees will not consider themselves bound by the terms of the above offers, to award a premium for anything which they shall deem inferior.

Any person to whom a premium shall have been awarded, in consequence of any deception or misrepresentation used by him, shall not only forfeit such premium, but afterward be incapable of competing for the society's premiums.

All persons, (ladies and minors excepted,) not members of the society, to whom may be awarded a premium or premiums amounting to five dollars or upward, shall receive a certificate of membership for five dollars and the balance in cash. If the amount shall be less than five dollars, a deduction of fifty per cent. will be made, unless the individual chooses to make the amount up to that sum, and receive a certificate of membership.

All premiums not demanded on or before November 30th, will revert to the society.

OFFICERS OF THE SOCIETY FOR 1866,

ELECTED AT THE ANNUAL MEETING, WEDNESDAY, DEC. 6, 1865.

JOS. UPTON of Fitchburg, *President*.

ISAAC B. WOODWARD of Fitchburg, }
 CYRUS KILBURN of Lunenburg, } *Vice Presidents*.

ALVIN M. SAWYER of West Fitchburg, *Secretary*.

T. C. CALDWELL of Fitchburg, *Treasurer*.

TRUSTEES:

O. WHITNEY, Jr., Ashburnham.	J. M. SAWYER, Sterling.
J. C. DAVIS, Ashburnham.	WARREN SIMONDS, Templeton.
JOEL HAYWARD, Ashby.	D. C. MILES, Westminster.
DENNIS FAY, Ashby.	JOSIAH PAGE, Westminster.
S. W. A. STEVENS, So. Gardner.	JOHN MINOT, Westminster.
ASAPH WOOD, So. Gardner.	BENJ. WYMAN, Westminster.
JOSIAH PUFFER, Harvard.	JOHN CUTTER, Winchendon.
E. E. BOYDEN, Leominster.	J. M. FORRISTALL, Winchendon.
W. B. HOSMER, Leominster.	A. F. ADAMS, Fitchburg.
WHITING GATES, Leominster.	T. R. BOUTELLE, Fitchburg.
SOLON CARTER, Leominster.	L. H. BRADFORD, Fitchburg.
THOMAS BILLINGS, Lunenburg.	ALVAH CROCKER, Fitchburg.
DANIEL PUTNAM, Lunenburg.	JABEZ FISHER, Fitchburg.
J. T. EVERETT, East Princeton.	JACOB HASKELL, Fitchburg.
J. E. MERRIAM, Princeton.	LEVI KENDALL, Fitchburg.
J. P. REED, Princeton.	A. P. KIMBALL, Fitchburg.
ANAN STOCKWELL, S. Royalst'n.	ABEL MARSHALL, Fitchburg.
A. B. DAVIS, Shirley Village.	J. A. MARSHALL, Fitchburg.
J. O. PARKER, Shirley.	JOEL PAGE, Fitchburg.
CHAS. FLAGG, Sterling.	NATHAN UPHAM, Fitchburg.
EZRA KENDALL, Sterling.	WM. WOOBURY, Jr., Fitchburg.
FRANKLIN NOURSE, Sterling.	

THOS. BILLINGS, of Lunenburg, elected *Member of the State Board of Agriculture*, Dec. 6, 1865, for three years.





