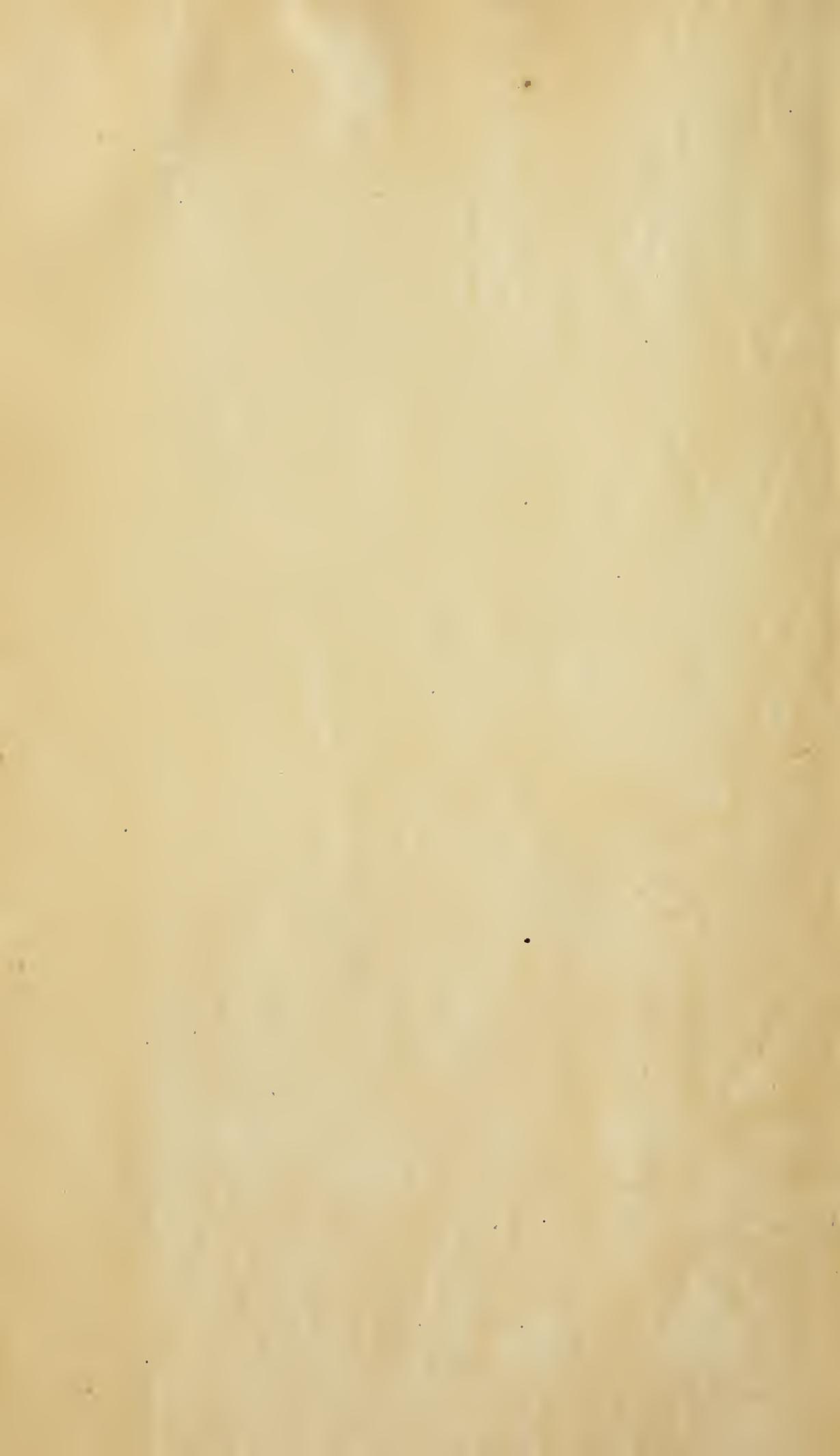


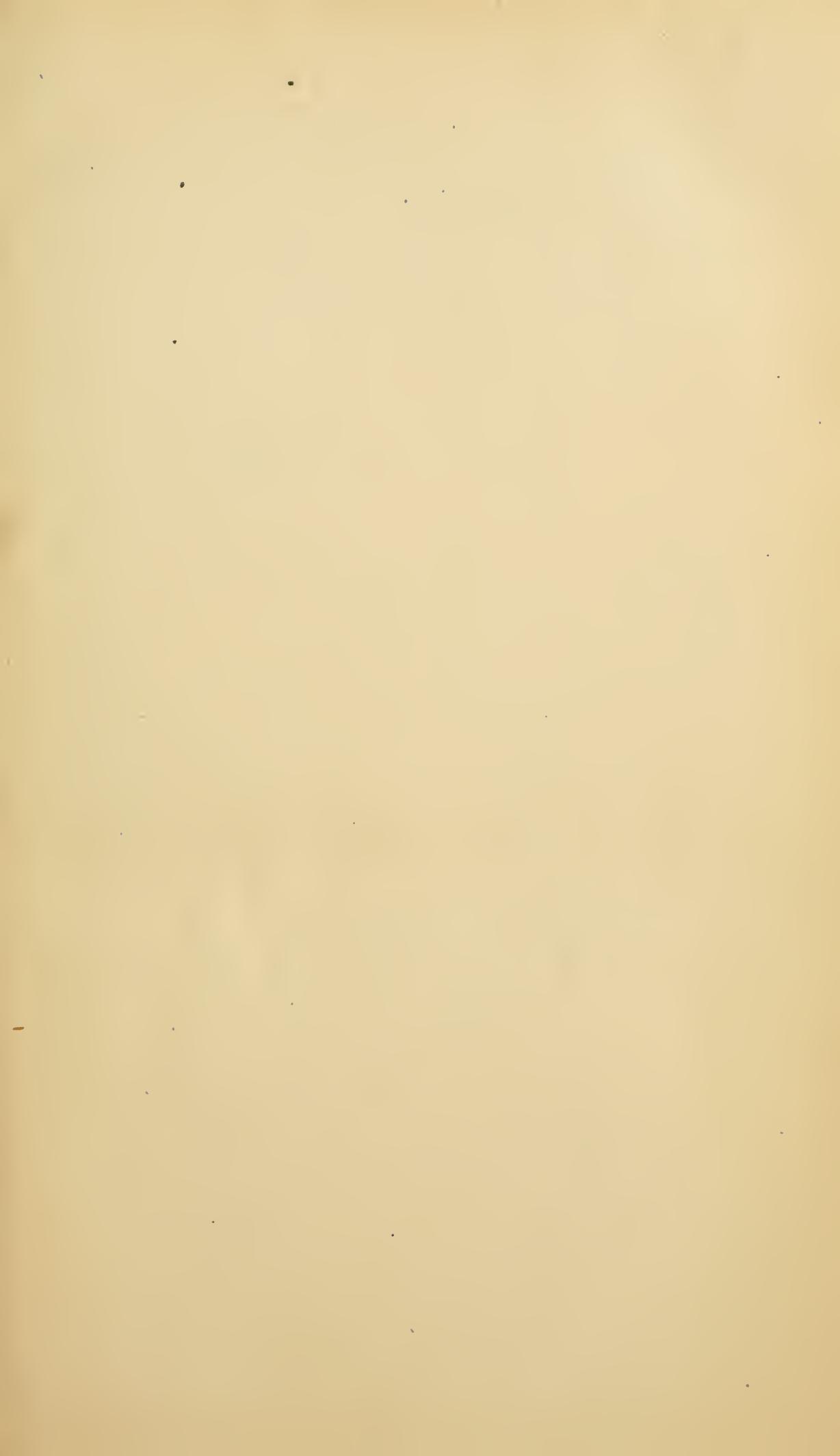
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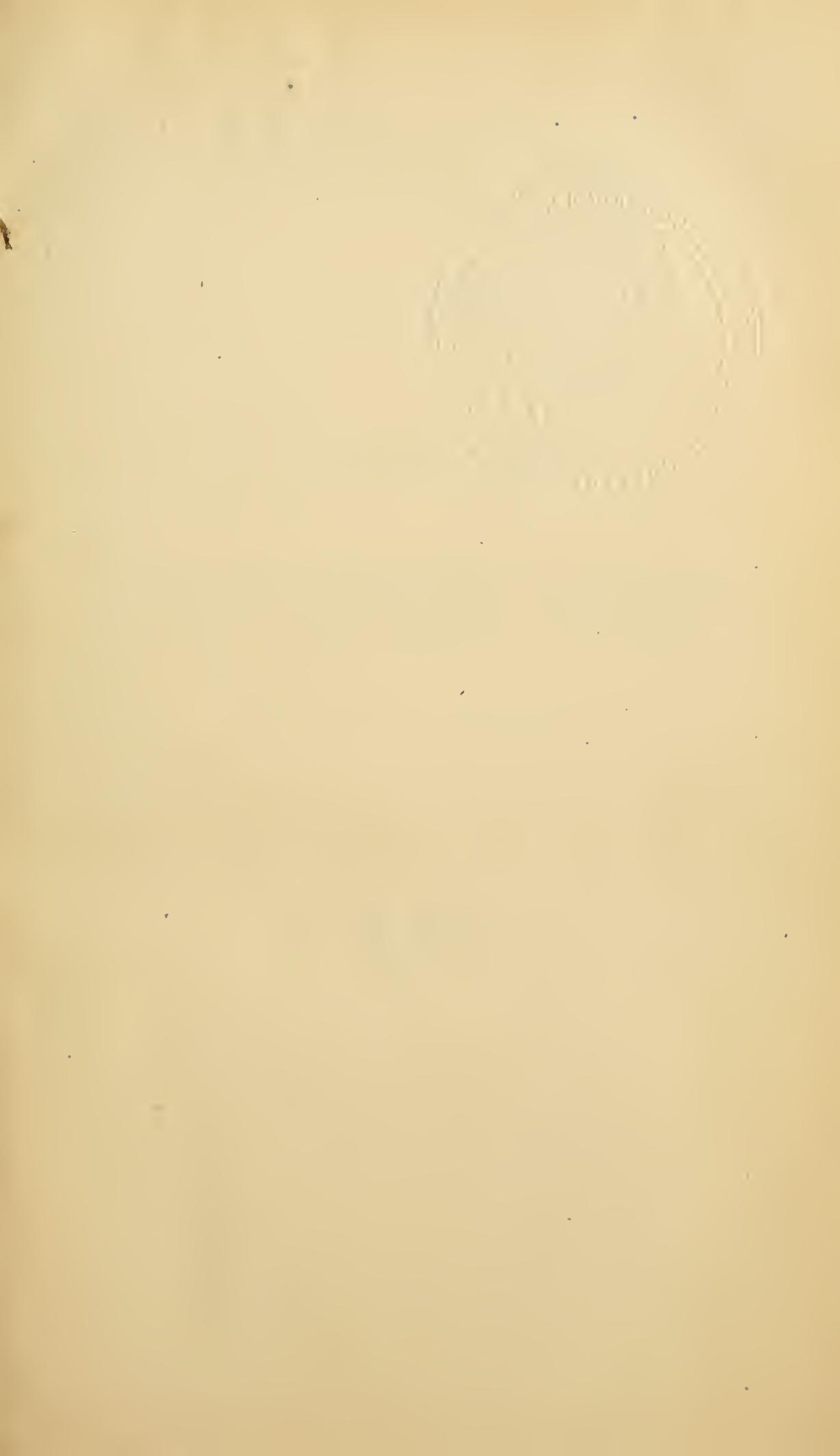


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TRANSACTIONS

OF THE

NORFOLK

AGRICULTURAL SOCIETY,

FOR

1861.

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Norfolk Agricultural Society.

REPORT OF THE PRESIDENT AND SECRETARY.

TO THE SECRETARY OF THE STATE BOARD OF AGRICULTURE.

SIR,—The Report of the Transactions of the NORFOLK AGRICULTURAL SOCIETY for the past year is herewith submitted:—

Notwithstanding the fact that during the year the country has been convulsed with civil war, and, consequently, nearly all branches of business have suffered extraordinary depression, the operations of this Society have been attended with gratifying success.

The Annual Exhibition was one of the best, in every point of view, that has been held since the organization of the Society, every department being well represented. The display of cattle was of especial excellence, and afforded unmistakeable evidence of the leading position which the County has attained in this important branch of agricultural pursuit. The Society were fortunate in securing the services of Professor Agassiz as the orator of the occasion, whose plain, practical discourse upon the first principles of agriculture was listened to with earnest attention and evident pleasure by the large and intelligent audience present. We regret that the imperative engagements of that gentleman have thus far prevented his compliance with our urgent request for the publication of his address in the accompanying volume, but we have reason to believe that the excellent suggestions with which it

abounded have already received the careful attention of many of our farmers.

The report of the Supervisory Committee, which is herewith given, exhibits gratifying evidence of the sure and steady progress of the County in agricultural and mechanical pursuits. It is indeed pleasant to realize amidst the crash of arms, in this conflict of sound government with the dark powers of treason and rebellion, that the arts of peace have not suffered from neglect, but that the duties and responsibilities of those, who at their country's call left the plough in the furrow and took up the sword for the pruning hook, have been faithfully and conscientiously performed.

For more specific statements of the doings of the Society for the year 1861, we refer to the subjoined report and accompanying papers.

MARSHALL P. WILDER, *President.*

HENRY O. HILDRETH, *Recording Secretary.*

REPORT OF THE SUPERVISORY COMMITTEE.

The Supervisory Committee for the Norfolk Agricultural Society, submit the following report :—

The Committee deem it proper to notice some of the occurrences of the year 1861 which affected, more or less, the interest of agriculture. The first was the unusual scarcity of fruit, and the injury which some species of fruit trees sustained. At the season when leaves are usually put forth, people were struck with the deficiency of these organs on peach and cherry trees. On examination it was found that a large portion of the peach trees which had reached a bearing state, were killed, and that cherry trees were severely injured. It may be said that not a blossom was seen on either of these trees within fifty miles of Boston, except in a few cases of special protection. Of course, without blossoms there was no fruit.

But as the season advanced it was found that many of the cherry trees were either dead, or so much injured that their fruitfulness was ended. The short stems, which produce the blossoms, were generally killed, and it was several weeks later than usual when the trees began to put forth leaves, which, when they did appear, were curled and imperfect. In short, it was seen that a large portion of the better varieties of cherry trees had been fatally injured. Attention was, of course, turned to the causes of this disaster. It was easy to fix on three several changes in the atmosphere which would obviously be likely to inflict more or less damage on some kinds of vegetation. The first was the remarkably cold of the night of the 30th of September and the morning of the first of October, 1860. At sunrise on that morning, the thermometer indicated twelve to fourteen degrees of frost, and even more, in some localities in this County. Trees were in full foliage, and most autumn fruits were ungathered. Apples, as they hung on the trees, were frozen completely through. It is hardly probable that so great a degree of cold, unprepared as the trees were, could fail to do more or less injury.

But the trees were destined to pass through more severe ordeals. On the 7th of February, 1861, the thermometer at 2 o'clock in the afternoon stood at 46 in the shade ; at sunrise on the 8th it ranged, according to localities, from 20 to 30 degrees below zero—making a change of temperature of 66 to 76 degrees in eighteen hours, during most of which time a northwest wind of great violence prevailed. But still another trying change occurred. On

the 3d of March, the thermometer at 2 o'clock in the afternoon stood at 76 in the shade in Boston—a degree of heat perhaps unprecedented for the season of the year. But before the week was out, viz., on the morning of the 7th, the mercury was at zero and lower in this vicinity. It is difficult to say which of these remarkable changes caused most injury to fruit trees; it is not unreasonable to suppose that all of them had more or less to do with the destruction of fruit-buds and the general derangement of the functions of the trees which has been alluded to.

In this section, the injury to apple trees was mainly confined to the blossoms, the greater portion of which were killed. Pears, except the most hardy varieties, were considerably injured. The crop of apples was the smallest known here for many years. Of pears, there was a greater crop in proportion to the number of trees, than of apples; showing that, contrary to the common opinion, the former may be produced here with as much certainty as the latter.

During the past summer an insect called the “army-worm,” has appeared over the country from Virginia and Kentucky on the south, to the Canadas on the north. The name mentioned has probably been given, in different sections of the country, to several species of insects; but the one here specially alluded to, has been pronounced by Dr. Fitch, entomologist to the New York State Agricultural Society, and other entomologists, to be the *Leucania punctata*. It has, at various times, been a fearful scourge to farmers in some of the Southern States; but it has not previously been so common in this section and the country farther to the north, as to be generally recognized by the present inhabitants. It is the opinion of Dr. Fitch that it is not a new insect here, but that it is always to be found in particular localities, from which, owing to certain favorable points in the season, it from time to time spreads over the country. Whether this view is well founded, or not, might be settled by close observation of many persons from year to year.

The insect prevailed in some parts of Rhode Island to a greater extent than in any other portion of New England, though in some districts of Connecticut, and a smaller number in this State, it did more or less damage. Its appearance in this County in such numbers as to attract attention, was limited to a few places. We have heard of four only, viz., the farm of Caleb Stetson, in Braintree, that of E. P. Carpenter, of Foxboro', Alvord Baker, of West Dedham, and Francis Guild, of Dedham. In the first named case they appeared on spring rye, in all the other cases on oats. In no case did they do much damage beyond the field or crop where they first appeared; and, singular as it is, no traces of the insect

were noticed in the territory which separates or adjoins the localities mentioned.

The ravages of this insect have been such, in many instances, as to occasion great loss to the farmer; and hence no little anxiety is felt in regard to its appearance in future years. On this point, there are some important facts which should tend to lessen our fears. It is undoubtedly an annual insect; that is, its period of existence is limited to a year, though it is not certain that some of them do not pass the winter in the chrysalis state. It is not at all like the *Cicada septemdecim*, or seventeen-years' locust, as some have erroneously supposed. Yet it is remarkable that it has seldom, if ever, prevailed to a great extent on the same ground or in the same neighborhood, two years in succession. The reason for this is not altogether clear. There are some points in regard to the habits and economy of the insect, which, owing to the comparatively little attention it has hitherto received from skilful entomologists, are not thoroughly understood. During the past season, however, several competent gentlemen have devoted considerable study to it, and the result will undoubtedly be that the former mysteries will be unravelled. One interesting fact, however, in connection with its not appearing where it was numerous the former year, may be mentioned. It is frequently, perhaps generally, pursued by parasites, by which great numbers are destroyed. In some investigations made the past season by the Chairman of your Committee, it was found that at least two species of parasites attacked the worm in this neighborhood. These parasites are ichneumon flies. They sting the worm and deposit an egg in its body. This does not immediately kill the worm, or hinder it from developing itself to such a degree in the larva state that it passes in the usual way into the chrysalis—the specimens contain the parasitic egg, presenting, at first, no external differences from others. But in due time there emerges from the shell of the chrysalis, instead of an army-worm moth, a wasp-like fly. The egg which was deposited in the worm hatched there, and the parasite, gradually developing itself, fed on its victim; but, as if actuated by instinct, did not destroy it till the shell of the chrysalis was perfected, which served as a habitation for the parasite, while it consumed, as food, what was the body of the worm, and, if unmolested, would have become a moth. Mr. Walsh, of Illinois, who has written a valuable paper on the army-worm, states that in some localities where this insect prevailed to a great extent the past summer, its parasitic enemies were so numerous that it will not be likely to appear in numbers sufficient to do much damage next year. Whether this was the case in this section, we cannot positively say. We are at present unable to suggest any measures for destroying the army-worm, or of preventing its rav-

ages. When its economy is fully understood, we shall be able to judge better in regard to the best means of attacking it.

Another insect which was unusually numerous in this section and over a large portion of the New England States and New York, the past season, was the grain aphid—*Aphis avena* of some authors—a species of plant louse. It appeared in vast numbers on spring-wheat and oats, and for a while occasioned no little alarm. The injury it did, however, was generally less than was anticipated. The insect subsists by sucking the sap from the grain-heads, and when it becomes numerous while the crop is quite green, the grain is prevented from filling, and is more or less shrunk. It is assailed by various insect enemies, among which are several species of lady-bird (or bug), which in some cases destroy immense numbers of the aphid.

In August the Committee visited the farm of E. R. Andrews, of West Roxbury, for the purpose of witnessing the operation of a reaping machine. It was the well known Buckeye Mower, with reaping apparatus attached. It was worked in a field of spring-wheat, which was estimated to yield about twenty-five bushels per acre, the crop for the most part standing tolerably upright. The machine was drawn by two horses, driven by Mr. Andrews himself, and the work was done in a satisfactory manner. It was the opinion of practical and experienced farmers, that the crop was secured with less waste than it could have been by the use of the cradle. In fact, a comparison made by cutting alternate breadths with the cradle and with the machine, resulted in showing that the quality of the work was in favor of the latter. Some of the Committee have had extensive opportunities of seeing grain cut by machines of various kinds, and have no hesitation in saying that where fields are large and free from stones, stumps, &c., and the surface is not very uneven, reaping machines can be used with economy. In this section of the country, grain is generally cultivated in rather small lots, and it is not unfrequently the case that the surface of the ground is broken by stones. How far reaping machines can be used to advantage under such circumstances, remains to be proved, as they have not as yet been tried sufficiently to justify a final conclusion. It may, however, be suggested, that if the farmer has a mowing machine and a reaping apparatus, that will enable him to cut his grain well, can be attached to it with moderate cost, it may be an object to do it, in many cases.

Mr. Andrews showed us Cahoon's machine for sowing grain and grass-seed, broadcast. It is a *handy* thing; is just slung over the shoulders of the sower who "goes forth to sow" with it filled with the seed, and by turning a crank sets in motion a gearing and

throws out the seed in a regular shower. Mr. A. informed us that he himself sowed all the grain and grass seed that was sowed on his farm last spring, amounting to twenty acres or more, with this machine. It sows much more rapidly than a man can sow by hand, and judging from the appearance of the grain we saw standing and from the appearance of the oat and barley stubble, where the crops had been cut, sows more evenly than is ordinarily sown by hand. It sows a breadth of two rods of wheat at once, and of grass-seed it sows one rod.

In our report of 1860, we spoke of some improvements by draining and irrigation made by E. L. Metcalf, of Franklin. Having been informed that Mr. M. was extending his operations, the Chairman of the Committee and the Secretary of the Society made another visit to Mr. M.'s farm in July, when they saw the drained land spoken of in the former report, with the grass crop of the season standing. No manure had been applied to any portion of it since the visit of the Committee in 1860. The crop, principally herds-grass and red-top, was a beautiful one—equal to two and a half tons or more to the acre, and so clean that not a weed, or any plant not purposely propagated, could be seen. The irrigated portion had been somewhat neglected, but still presented evidence of having derived important benefit from water; and Mr. Metcalf is so well satisfied of the great advantages of irrigation, that he has taken measures to introduce the system on a larger scale than is generally seen in this part of the country. He has dug a channel (it might almost be called a canal) five-eighths of a mile in extent, by which he will be able to turn the water of a brook over more than forty acres of dry land. A considerable portion of this land has heretofore been of a rough character, and at the time of our visit it was undergoing a smoothing process preparatory to being set to grass and irrigated. It is Mr. M.'s intention to let the water on several acres of this land in 1862, and in two or three years the whole tract will form the most interesting example of a watered meadow to be found, perhaps, in the State.

We may remark here, that Mr. M. was first struck with the advantages of irrigation by noticing the fertilizing effect of water from certain springs, particularly that from a fine spring on land which he now owns. It is on a hill-side, so far from the base that the water can be turned over several acres. He bought the land comprising the spring at *ten dollars an acre*. The soil is of rather a gravelly character, and would not be very productive under ordinary management. With a trifling outlay, the water from this spring produces grass which is equivalent to a *net income of more than ten dollars a year*. There are probably thousands

of springs in the County whose waters might be turned to as good an account.

The $26\frac{3}{4}$ acres of land on which Mr. Metcalf's experiments commenced—a lot having no connection with the 40 acres above alluded to, as in course of preparation for irrigation—did not, previous to 1858, produce enough to pay six per cent. interest on the purchase money—\$310. In 1860, the same land, according to Mr. M.'s account, gave a return equivalent to the interest on *six thousand seven hundred and thirty-three dollars*, excluding the labor of harvesting.

We may add that Mr. Metcalf has kept such strict accounts of his operations that he is able to know whether the outlay is profitable or not. It should be remembered, however, that in some instances a considerable expenditure is required for a year or two before any income can be realized. Time is required to bring unproductive land into a productive condition. It is a great point to be able to decide in advance, whether an operation involving expense is justifiable in reference to ultimate returns. In this Mr. M. has certainly evinced much judgment, his results affording a demonstrative example which has already had an important influence in stimulating others to make similar improvements.

After leaving Mr. Metcalf's farm, we made a hurried stroll over a portion of the farm of Walter H. Fisher, of Franklin. We had barely time to see that it was managed with great neatness. We had previously heard that Mr. F.'s motto is that he "can't afford to raise weeds," and our observations enable us to say that he *lives up to it*. In looking over his corn and potato fields, not a weed was visible, and his wheat, oats, and grass, were so perfectly free from foul plants, as to give rise to the remark, that all the crops ought to be saved for seed. The little time at our disposal prevented our gathering any statistics, or making more particular note of Mr. F.'s farm.

Several of the Committee had the pleasure of witnessing some experiments in irrigation in connection with the cultivation of pear trees, strawberries, various root crops, &c., on the farm of Artemas Newell, of Needham. The character of these experiments and their results, will be understood from the following communication, which, at the request of the Committee, Mr. N. has furnished for publication.

"What I have attempted to do in either of the improvements inquired about, has not been done in a very thorough manner, although the results have been sufficiently encouraging to convince me that if the work is properly pursued, it will ultimately be of

material advantage by increasing, to a large extent, the products of some of my land.

“That part of my land which I judged might be improved as to its general productiveness, by both drainage and irrigation, lies between the public road on the south and a pond on its northern boundary. A portion of the land, perhaps eight or ten acres, is a dry, gravelly loam, surrounded on every side by low meadow or peat bog, the water formerly standing or running some four or five feet below the level of the highest part of the land to be irrigated; consequently it *seemed* impracticable to use the water for that purpose. The centre or highest part of the land was cultivated and three or four acres planted with pear trees, between the rows of which were planted strawberries and currants, and in some instances potatoes, carrots and other roots. The other portion of the high land was devoted to grass or grain. The pear trees were planted in rows nine feet apart each way, giving eighty-one square feet to each tree, or 537 trees to an acre. Between the rows of trees, beds were prepared for strawberries by back-furrowing *very deep* to the centre, leaving beds just three feet wide, with a hollow between each bed and row of trees for the water to run in when needed. In the centre, between the trees in the rows, a currant bush is planted, thus giving as many of these as there are of the trees.

“In commencing the work, I first ascertained by levels whether I could drain the upper end of the lot, which is a deep peat bog—the surface of the mud and water there, being apparently much below the surface of any of the dry land. It was found practicable to drain it considerably by digging through the high part of the land for a distance of 600 or 800 feet towards the pond on the north, but impossible to carry the water to those higher portions where irrigation was most required. To obviate that difficulty, I caused the bog or basin at the head to be made deeper and larger, by removing large quantities of muck, which was used for compost, and this excavation opened numerous additional springs. Then the water was secured by damming up all old drains leading from the pond so formed, by which means the water rose to a sufficient height to carry it quite above the highest and driest part of the field.

“I describe these preliminary proceedings with some particularity as to the details, because they embrace the most important part of the process. Without those examinations, I should hardly have known from which end of my field the water would run, although the fall was abundant when it was made available. Judging from my own somewhat limited experience and observation in these matters, I think that even a superficial examination by the aid only of a common level, will show that there are many farms

in our County where irrigation can be successfully practised with trifling expense compared with the benefits, though the owners now look on the object as impracticable for such localities. There are but few farms that have not some facilities for irrigation, if they are sought for and made available. In some cases the sources whence water may be obtained are not on the land most requiring it, but by a small amount of labor a head may be raised where a supply is found in swamps or ponds, and by channels it may be conveyed to the places where it is wanted. It is not unusual to see water carried for miles along the sides of mountains and hills for the purpose of irrigation, in countries where the benefits of the process are duly appreciated. Here, we often see a brisk stream of pure water running through a dry pasture in a crooked channel. In many cases, if proper attention were given, it could without much expense be dammed and carried along the head of the descent and spread over the whole or a great portion of the pasture during several of the spring and fall months, and, perhaps, by opening the springs, a supply might be obtained that would continue through the summer.

“The eye, without any instrument, is not in all cases sufficient to show whether the ground is level or otherwise. It is often more apt to mislead than to afford a correct guide in regard to the surface of the land. Sometimes the raising of the source from which water is to be taken for irrigation, changes the course of streams. On a part of my own land where I first made the attempt to irrigate, the water in some of the channels ran east; but a change in the source causes them to run directly west, *in the same channels*.

“My plan for distributing the water, is to convey it from the reservoir to the upper end of the pear-tree lot, where it falls into an artificial channel or ditch, which extends across the lot at the ends of all the rows of trees, strawberries, &c. To that side of the ditch next the ends of the rows, is fitted a two-inch plank ten or twelve inches wide, set edgewise, and through the plank, at intervals of four feet and a half, corresponding with the distance of the rows from each other, a round drain-pipe of an inch bore is inserted, with a cork to each, by which the whole or any portion of them may be closed when desired. Each row of trees, strawberries, &c., is thus supplied with an equal quantity of water. When the water has run down the whole length of the rows, it falls into a similar ditch as that at the upper end, and is from thence distributed over the grass field below, or let into a reservoir in which is put strong manure, for the purpose of making *liquid manure*, which is distributed in rivulets over the mowing land—a method of *spreading* manure which is found to be of great advantage, and requiring little labor.

“That part of the water which is not taken into the head pipes as it passes, (and this is much the largest part,) falls into a channel which conducts it to another pear-tree lot arranged with strawberry beds, where a part of it is turned through channels between the rows, as before described, and a part runs into an artificial fish-pond, the out-flow of which is conducted to a small work-shop in the garden, and by means of an over-shot water wheel, six feet in diameter, turns grindstones, works a turning-lathe, circular saw, hay-cutting machine, corn-sheller, pump, &c., &c.

“In regard to some of the effects of irrigation, I consider the hay crop more than doubled by water alone, without the application of liquid or other manure.

“The pear trees, which are mostly on quince stocks, were imported from France, part of them planted in the spring of 1857, and the other part, from the same nursery, in the spring of 1859. They were two years from the bud. The principal fertilizer they have received is the water applied by irrigation, as before described. On some parts of the grounds the irrigation has been more thorough than on others. Under such circumstances the trees have made more than twice the growth of wood. The difference between those which have been *well* irrigated and those which have not, can be seen almost as far as the trees can be seen—the size and luxuriance being so much in favor of the former. The best trees are where there is irrigation on the surface and drain pipes laid directly under them, four feet below.

“Strawberries I plant between the rows of pear trees, in deep, light beds three feet wide only. By this arrangement the soil is never trodden down either in planting, weeding, trimming, or picking the fruit, and they are much more easily kept free from weeds. The beds are liberally supplied with strong manure, placed in one deep furrow in the centre of the bed, at least one foot below the surface. One row of plants is set directly over the manure, the plants fifteen to eighteen inches apart. They are set in the month of May. The hole for the plant is made with a tool like a marlin-spike, reaching down well into the manure. The roots are let down and the hole is carefully filled with fine earth without pressing, then soaked with water, and dry earth placed over top to prevent baking. The effect of placing the manure so deep, is to carry the roots of the plants through the manure to the soil in a dry time, to entirely cover the beds by autumn with most vigorous plants, and to keep the seeds of weeds and grass so low that they will do no harm. The fruit is mostly grown on the new plants, which have derived their vigor from the manure chiefly through the roots of the original plant, the runners from which are cut off in the spring for the convenience of weeding, &c.

“ Most of my strawberry-beds are watered liberally, by a constant flow of water along the channels, which have been described. The results are, that the berries are large and fair ; they do not ripen quite as early, but continue in bearing much longer ; the crop is certain, even in the dryest seasons, when those on dry land under ordinary management are cut off—sometimes before half the crop is matured. In fact, I deem irrigation almost indispensable for the successful cultivation of strawberries in dry seasons. We seldom find wild strawberries on very dry land ; they are found most luxuriant on moist land, which is an indication of the natural wants of the plant.”

Those members of the Committee who had the opportunity of going over Mr. Newell's grounds—and some of them repeated their visit—can bear witness to the flourishing condition of the pear trees, to the great productiveness of the strawberries, and the long time the fruit continued to be produced. It was the opinion of those who saw them that they had never seen vines so loaded with fruit. The Chairman visited the field after most of the strawberry vines in the neighborhood had ceased bearing—a pretty sharp drought having set in—and found Mr. N.'s vines still loaded with fruit in all stages, from the blossom to perfect ripeness. The young berries appeared to be swelling, and from the fresh and vigorous character of the vines, seemed in a fair way to mature perfectly, which, as Mr. N. has stated, was the result.

The Committee regard the experiments of Mr. Newell as of no ordinary interest, and they desire to express their thanks for his kindness in explaining the processes which he has adopted in irrigation, the results of which, in his case, increase, in an important degree, the evidence in favor of that practice. In the Report of 1860, we took occasion to speak of irrigation as a subject to which the attention of our farmers ought to be more particularly directed than it has hitherto been, inasmuch as it furnishes, in many instances, the cheapest means of increasing the yield of crops. We trust that the examples which we have brought forward, will have the effect to stir up the minds of our farmers to the benefits they may derive by the adoption of this mode of fertilization.

The Committee visited Foxboro' in August, where they saw and learned much of interest, particularly in reference to the rise and progress of a branch of business which, in a pecuniary view, has been of much consequence, not only to that town, but to the eastern section of the State, and more or less so to New England and to the country at large. We allude to the braiding of straw and the manufacture of straw bonnets and hats. Few of the pres-

ent generation, probably, realize the great benefit which has been derived by the population of this section within the last sixty years, from this business. In the Transactions of this Society for 1859, some account was given of its origin ; but it is believed that a more particular history of some points connected with the business will be read with interest. In the visit alluded to, our attention was naturally directed to an establishment which has been justly regarded as one of the most attractive, both in a utilitarian and ornamental view, that exists in the country. We mean the "Union Straw Works." The Committee took an external and internal view—really no trifling labor—of the noble building, under the guidance of Mr. E. P. Carpenter, one of the proprietors. Instead of attempting a description of the numerous objects and points to which their attention was drawn, they submit the following communication, which furnishes much matter suitable to be preserved in the archives of the Society :—

"The notice of the origin of straw-braiding in this County, published in the Transactions of the Norfolk Agricultural Society for 1859, seems to contain about all the facts known touching the business in its earlier years. Straw-braiding commenced in Foxboro' about the year 1800. Misses Mary Clark and Anna Leonard were the first braiders. They learned of braiders in Wrentham, who had learned the art of Miss Sally Richmond, of Providence, R. I., she having learned of the original inventor, Miss Betsey Metcalf, then of Providence, now Mrs. Baker, of West Dedham, Mass., who, still in the enjoyment of health and mental vigor, rejoices, as in the days of her youth, in the 'opportunity of doing good.'

"Preparatory to braiding was the process of splitting the straw, and for this purpose was at first used an appendage of that most complex of all machines, the human hand, viz., the thumb-nail. Afterwards the points of scissors came into use ; still later a very simple machine superseded the thumb-nail and scissors. This was no less than a common pin stuck through a piece of shingle, with which the straw was divided in the middle, repeating the process until the required fineness was obtained. This machine came into general use, but was in time displaced by a new invention of some aspiring young American, which consisted of several pins or points protruding through a small piece of wood, with a thumb-piece attached, which, in use, held the straw down to the points while the splitting was completed by drawing the straw horizontally through it. This machine, it will be perceived, was a compound of the two former, with an enlargement of the number of points. It is still in use.

"The straw used for braiding in the earlier years of the busi-

ness, was the stubble cut from the rye and oat fields after the grain had been harvested, or straw selected after the grain had been carefully beaten out over a barrel. Cutting the straw while the grain was in the milk, scalding and drying it in the sun, was soon discovered to be a great improvement, both as regards the cheapness of the straw and its whiteness and clearness, so essential to a handsome braid and a tasty bonnet. This method of curing braiding-straw, is followed at the present time. Who first cut and prepared it by this process, I have been unable to ascertain.

“Mr. Ezra Carpenter was the first *straw-merchant*. He bought the bonnets and took them to Boston on horseback in pannier baskets of the old style, and exchanged them for dry goods. Soon after this, Mrs. C. Metcalf, Capt. Sherman, Maj. Harts-horn, Stephen Rhodes and others enlisted in the enterprise on a limited scale, finding a market for their goods with larger manufacturers or dealers in Wrentham, Franklin and Dedham, or taking them to Boston or New York.

“The braids first produced were in imitation of those of which the imported bonnets were made, and the successful accomplishment of the object taxed the ingenuity of the first American straw-braider to the utmost, as she has informed us. In those times there was comparatively little change in the style of bonnets, and those who had become skilled in the manufacture were not liable, as now, to find themselves *hors du combat* in the tournament of trade by the production of some new form or style of goods.

“The bonnets were made or shaped by the eye of the sewer and the use of a measure, and not as now, by means of a shaping-block. The only machinery used in the finishing process was a flat or sad iron with a double handle. The art of bleaching was limited to fumigation by brimstone.

“In 1820, Mr. Daniels Carpenter, who had previously been a presser of bonnets, commenced business for himself, and the trade began to develop itself into larger dimensions. He was soon followed by Messrs. John Corey, the Sumner Brothers, Dr. Peck and others, who were known as the principal manufacturers of straw goods in Foxboro’, doing in the aggregate a large business, and finding a market for their goods in New York, Philadelphia and Baltimore.

“Previous to 1830 important improvements were made in the methods of finishing, various kinds of machinery, operated by water power, having been invented and used to much advantage. About the year 1830, a new impulse was given to the business by the introduction of new styles of braid, called the ‘diamond plait,’ ‘snake skin,’ &c., which were very fashionable. These were very coarse braids—the coarser the more fashionable—and

not being very costly compared with the prices obtained, the holders of the *balance sheets* were soon enabled to live in fine houses with pleasant surroundings, exciting the wonder of many a hardy yeoman to whom such a sudden accumulation of wealth was utterly incomprehensible. This prosperity, of course, diffused itself through all classes of the community; the children who braided, the women who sewed, and the men who did the more laborious work of finishing, all were to a certain extent blessed with this golden shower, and evidences of prosperity appeared in neat and tasteful cottages, with grounds ornamented by trees, shrubbery and flowers.

“The demand for goods of coarser grades having continued for several years, the styles changed; fashion became a more controlling element in the business, and our home supply being exhausted, foreign styles of *woven straw* or *lace*, were introduced, called ‘*Tuscan*,’ which have had a great run and yielded *very satisfactory profits*. This lace, at first imported, our ready Yankee ingenuity was soon able to produce from imported straw, and anon a thousand portable looms in a thousand dwellings were plied by matron and maid.

“This last-named Tuscan lace was superseded in turn by the same straw in braids or plaits, imported from Florence, and at the present time these are largely in use. At a still later period laces came again into vogue, but in numerous styles, and made from different materials—horse-hair being used in many kinds—and these have maintained their places to the present time. As the business has increased in magnitude, the variety of braids and laces has been correspondingly large, limited, indeed, only by the skill and taste of the braiders. To supply the demand, importations are made from Germany, Switzerland, England, and France, as well as Italy, and lately the Oriental Empires have been laid under contribution for their quota toward the general supply, until, at the present time, probably nineteen-twentieths of all the braids used in the business are of foreign production, and we see not why this will not continue to be the case, as the lack of material and the dearness of labor render the production of it in this country, except in limited quantities, impracticable.

“It will be readily understood that in this, as in other departments of business, competition has sharpened wits; that old methods have been abandoned; that new and improved machinery has been substituted for manual labor and the ruder inventions of the past; that order and system in the divisions of labor and the adaptation of means to ends, have been evolved as the results of the experience of years. In these regards, no persons, probably, have been more successful than Messrs. Carpenter, former proprietors of the Union Straw Works, in whom have centered the

experience of three generations in the business in the same family, and whose names, in connection with the straw business in this County, are too well known to need more particular mention.

“In 1853 these gentlemen projected the manufactory since known as the Union Straw Works, so called, because several firms doing business separately, here united in one. In 1856 these works were incorporated. The manufactory, which is the most extensive of the kind either in this country or Europe, consists of a main building five stories high, built upon four sides of a square, with a court in the centre, and, together with a bleachery and engine-house, occupies about one acre of land. Here the Messrs. Carpenter have brought to their aid the appliances of steam power and improved machinery to an extent hitherto unknown, and altogether too varied in character and purposes, and in many instances of too complicated construction, to justify an attempt at description in this communication. Every thing in regard to the manufacture of goods has been systematized; subdivisions of labor, forming various distinct departments, have been established; thorough systems of accounts adopted, so that not only the final cost of any lot or class of goods can be determined, but, so minute is the system, the cost of each individual hat or bonnet can at once be ascertained to the fraction of a cent, in any department where it may be found.

“In full operation these works give employment to about six hundred persons here, and at the branch establishments at Medfield and Nantucket, four hundred more. Besides these, work for sewing and other forms of labor is distributed in Foxboro’ and the neighboring towns, to about two thousand persons more in the aggregate. These latter, of course, in a majority of cases, only devote to this business the spare hours left from household duties. The value of the goods produced varies from one and a fourth to one and a half millions of dollars annually, the sales being correspondingly large. The amount paid out annually for labor is about \$300,000.

“The straw business here, it will be readily comprehended, constitutes the foundation of the prosperity of the town. The wages paid for labor have always been liberal, paid monthly, and never subject to indirect discount by being paid in orders on company stores or village trades.”

The Committee were much pleased with the numerous indications they saw of the benefits which the straw manufacture has conferred on the people of Foxboro’. The village in which the Union Straw Works are located is one of the pleasantest in the State. Its improvement within the last thirty years is striking

to those who can remember its former appearance. New and commodious houses for public worship have been erected on different sides of a public square which embraces several acres, laid off with avenues, adorned with shade trees, and enclosed with an iron fence of unique and handsome pattern—the expense of the square, in its present condition, \$10,000, having been borne by voluntary subscription. Among the public institutions may be mentioned a Masonic Hall, of large dimensions and tasteful design, and a cemetery of considerable extent, laid out and kept in a style seldom equalled in our rural districts. The streets are handsome, well graded, and bordered by fine trees. The dwellings are of varied character, from the neat cottage to mansions which, in style and finish, vie with those of our larger towns. Nearly every house has a garden, and fruits and flowers are cultivated with fostering care. As a whole, the village presents an air of thrift, refinement and happiness, which, as the result of the industry of the people, is deserving of high commendation.

The Committee were gratified in visiting the farm of Mr. E. P. Carpenter, where they saw some very valuable horses. His Morgan mares are almost models of the stock, and their progeny—an Ethan Allen stallion and filly from one, and a Black Hawk stallion from the other—show that they “have the blood in them.” There are few finer animals than these in the country. Mr. C. showed us also some Alderney cows and heifers of good appearance as to dairy properties. He is paying some attention to root culture, and his carrots and mangel wurzel were promising. He is making various improvements on his farm, in fencing, &c. His barn and its appendages are among the most convenient we have seen.

A delegation from the Committee made a brief visit to the farm of Otis Cary, of Foxboro', who has long been a prominent and efficient officer of this Society. Mr. C. is a worker in iron, being the owner of one of the oldest furnaces in the county. He has, however, a handsome farm of about a hundred acres, which is well managed. He has devoted attention to the cultivation of fruit, and has some thrifty apple and pear trees, which in favorable seasons are highly productive. He called our attention to a native grape-vine, which has attained such a spread of branch that in the season of foliage, it affords shade to the whole household, and without any expense, produces annually a large crop of fruit—not equal in quality to the Black Hamburg, of course, but quite palatable, and valuable for wine, jelly, &c.

The Committee desire to express their thanks to Messrs. E. P. and J. E. Carpenter, Mr. Cary, and other citizens of Foxboro,' for various kindnesses, and for facilities extended to them in obtaining valuable information.

The Committee have to report that one entry came before them for the premium offered by the Society for the best cultivated farm, viz., that of Dr. W. T. G. Morton, of West Needham. The entry having been at first overlooked, the farm was not visited until October, when a visit was made by the Chairman, in company with Mr. Newhall, who, besides being a member of the Supervisory Committee, is also Chairman of the Committee on Progressive Husbandry, under which head Dr. Morton had made an entry for the premium offered for the "best conducted and most improved farm during five consecutive years, commencing in the year 1861." Dr. Morton has made various improvements on his farm, particularly in the reclamation of swamp land, a tract of which lying near the homestead, formerly gave an unsightly aspect to the place. A small stream of water which passed through it has been made to work a hydraulic ram, which supplies water for the barn, and affords a handsome jet for a flower-border in front of the house. By digging out a portion of the muck, which was advantageously used in compost, a small pond has been formed, in which various species of fish are bred, and on the surface of which ornamental water-fowl take their sports. On either side of the stream and pond, the bog has been covered with sand and gravel to such an extent, that it has become solid land, and produces good crops of all kinds usually cultivated in this section.

Ten years ago, Dr. M. commenced the planting of willows on the borders of some of the wet land, partly for shade, and partly to support the banks of the stream and pond alluded to. For two seasons past, several cords of wood have been cut from them. In 1860 he set many willows, with the design of having them become permanent live posts for fences. On moist land they have grown well, but on the driest land they are not flourishing, and probably will not succeed. But from what we have seen here and elsewhere, we may venture the suggestion that the growth of willows for producing wood for fuel may be an object worthy of attention on some cold, damp soils, which are not and cannot readily be made productive in ordinary crops.

Dr. M. has made other improvements, the most important of which have been noticed in reports of other Committees who have been called to examine them. In reference to his claim for the premium for the best cultivated farm, we are of opinion that, though credit is due him for his enterprise in the operations to which we have alluded, yet on the whole the farm does not now

present such an example of culture and management as would justify us in making an award. But it will be remembered that he has enlisted for a five-years' term under another head, in which he will have the opportunity of demonstrating the results of "Progressive Husbandry," according to the plans which he has laid down.

SANFORD HOWARD, *Chairman.*

FARM IMPROVEMENTS IN FRANKLIN.

After the Report of the Supervisory Committee was written, the following communication was received. Referring as it does to important agricultural improvements in a section of the County from which the Society derives a substantial support, it is deemed worthy a place in the Transactions. It can scarcely be doubted that the example of the writer has had much influence in producing the improvements of which he speaks, although his modesty has prevented any allusion to his own deeds :

Having, in my rambles the past season, visited many of the farmers in the western part of Norfolk County, and spent with them many pleasant and instructive hours in viewing their farms, and learning their past experience in the different departments of their calling, I have taken some notes of what I saw. In no section have I found more spirit and energy than among the farmers of Franklin, of whom I speak in this communication. Although oppressed, in common with other classes, by the civil commotions of our country, they have nevertheless found time to make greater improvements upon their lands, their buildings, and their stock, especially in reclaiming waste lands, than they probably ever made before.

In giving a very imperfect detail of their reclaiming waste lands, I trust I shall be excused for making some personal allusions, for to withhold such examples would be a public loss. It is the duty of every people to know their resources, especially in times like the present, when the capacities of the country are to be taxed to their utmost. And, further, their example is worthy to be imitated by farmers generally. Most of the improvements of which I write have been made by men of limited means ; but what they have lacked in money has been made up in energy, which is an element as free to all as the air we breathe.

Elisha Bullard, a very worthy and intelligent farmer, has nearly completed the reclaiming of some four acres of swale and meadow land, a portion of which was very wet, and covered with hassocks

of the largest size. It has been drained at great expense, and the seeding is nearly completed. The work is done in a thorough manner, and will undoubtedly pay. Mr. B. is far advanced in life, and is single handed. The reclaiming of his land under the circumstances, shows energy and perseverance, which are characteristics of the man.

Joseph T. Bacon has commenced important improvements upon his land, which, if continued, will produce great results. This farm is considered one of the best in town.

Stephen W. Richardson, whose farm was noticed in the Report of the Supervisory Committee for 1860, has made great improvements upon his farm by draining and reclaiming lands which were comparatively worthless, and bringing them into a state of great productiveness. The yield of crops upon this farm has been greatly increased within a short time, showing what can be effected by intelligence and industry.

Charles Gowin has by draining, plowing and seeding by the usual methods, reclaimed about six acres of very unproductive swale land. This has been a successful experiment, adding greatly to his supply of hay, which was before scanty. This is the more worthy of note, as Mr. G. devotes himself mostly to mechanical pursuits, and these improvements have been made at times when not otherwise engaged.

Lucius Daniels has commenced reclaiming low meadow by digging a drain some five hundred yards in length. This with the lateral drains, will effectually drain some ten acres of very promising land. A portion will be seeded the coming spring, when, with the advantage of irrigation which he possesses, large crops of hay may be expected for an indefinite time. This experiment speaks well for Mr. D. It is his first season in laboring for himself, he having purchased the land of his father quite recently.

Improvements have been commenced by Waldo Daniels upon ten acres of land. The soil is well adapted to the growth of grain or grass. Mr. D.'s time is mostly devoted to teaching, but he intends to complete the drains the coming spring, when a portion of the land will be seeded to grass, while other portions will be under cultivation.

Energy and perseverance have been manifested by Jason Tower in ditching and reclaiming five acres, most of which was low, wet land, considered worthless for cultivation. A portion of this land was planted to roots and potatoes the past season, yielding a good crop. This land is thoroughly drained, and looks promising at this time.

Good progress has been made by W. C. Whiting in reclaiming meadow land by draining. Some portions of the land have been

gravelled upon the surface before seeding, and some plowed and seeded without gravelling. The result has so far been highly satisfactory to him.

Horatio Stockbridge, although in feeble health and single-handed the past season, has found time to dig four hundred yards of drain, and has made great progress in subduing land which will soon produce good crops of hay, where nothing of value grew before.

Peter Adams has caught the spirit of improvement which is manifesting itself in this vicinity. Mr. A. owns an excellent farm, but it is susceptible of great improvements, much of it being wet. Upon this he has commenced by digging a ditch about 550 yards in length, 3 feet wide by 3 feet deep, which will soon be completed by laying the drain with stone, Mr. A. finding plenty upon the land. This will drain a large tract of valuable land which before produced but little of value. There is no portion of this land reclaimed at the present time, but upon soil like this his ultimate success cannot be doubted.

Near the centre of the town there is a tract of about forty acres, mostly of low, wet meadow land. This land has six owners, by whose united efforts it has been drained, and about twenty acres reclaimed and seeded to grass. Great praise is due to these persevering men for their successful efforts in reclaiming this unproductive and unhealthy tract of land. The number of drains required to drain this tract is large, from its being very level, but the work has been nearly completed, and there is probably not two acres that cannot be plowed. This is probably the richest deposit of the elements of vegetation to be found in town, and will, when all is subdued, be a treasure to the owners.

There have been great improvements made upon five acres of land, it being about equally divided between swale, mud and peat soil, by Albert Ballou, he having recently purchased the farm, and commenced operations by draining. The peat bottom being too soft to plow, was grubbed over. The sods were taken from the land before seeding, leaving the surface too level for successful cultivation. This can be remedied by carting sand or other earth upon the centre of the beds, giving them a gentle slope to the drains.

There is probably no farm in the vicinity that has been improved in all its different departments so much as that owned by Walter H. Fisher. He commenced ditching and subduing his wet land some years since, and has continued the process until the present time, with highly satisfactory results. His farm is entirely enclosed and subdivided by stone walls which are entirely free from bushes and head lands. His cultivated fields are free from surface stones, they having been used in filling drains, or laid into

walls, leaving his field free from those impediments (so common in this region) to the successful use of the plow and scythe. We could but notice the care and taste manifested by him in planting shade trees by the roadside in front and in the vicinity of his dwelling. They add greatly to the beauty of the farm, and will soon become an ornament and luxury to him and the public. For the past two years Mr. F. has been engaged in reclaiming pasture land, and as usual with him, has succeeded beyond his most sanguine expectation, having taken the first premium on reclaimed pasture lands offered by the Norfolk County Agricultural Society the past season. Mr. F. has commenced draining some four acres of low wet land, a part of which will be seeded the coming spring. Every thing about the farm bears the impress of care. System is the order of the day. About mid-summer Mr. F. divided his farm with his son, Walter M. Fisher, who immediately commenced draining a tract of wet swale land, removing stone, and plowing a portion preparatory to seeding. This tract embraces about eight acres, and will, when reclaimed, be second to none upon the farm. His commencement in farming is indicative of future success.

Most of the improvements mentioned have been commenced within the pass twelve months, and if prosecuted to completion with the same energy and skill that has been manifested thus far, they will become a source of great wealth and happiness to the owners.

E. L. METCALF.

Franklin, Jan. 1862.



EXPERIMENTS ON MANURES.

The Committee of Experiments on Manures report that there have been but two applications for the premium offered by the Society, to wit, Charles Breck, of Milton, and Aaron D. Weld, of West Roxbury, both of which experiments were upon land planted with Indian corn, in conformity with the requisitions of the State Board of Agriculture.

It is hoped that the Society will continue the premium for a number of years, in order to arrive at a satisfactory result, and that a much larger number will be induced to enter the list in this very interesting and useful competition.

As it requires the experiment to be continued for two years on the same parcel of land to obtain the premium offered by our Society, little interest can be taken by the public in the *first year's* trial by so small a number of experimenters. Therefore, the

Committee recommend that the experiments be published in the transactions of the year, for future guidance.

For the Committee,

CHEEVER NEWHALL, *Chairman.*

Dorchester, Dec. 26, 1861.

STATEMENT OF CHARLES BRECK.

CHEEVER NEWHALL, ESQ., Dorchester:

DEAR SIR,—My experiment on manure was conducted in every respect according to the requirements of the *State Board of Agriculture*.

The piece of land selected as the one best adapted to the experiment was an old pasture, which had probably been used as such fifty years or more, and, consequently, no part of it had been affected by any application of manure before the present season. It contained 34 rods, and was divided into nine lots; five containing four rods each for the County and State experiment, three of four rods each for trial of superphosphate by the side of manure, and one of two rods with house ashes.

The land was of a light loamy soil, with a gravelly sub-soil. It was plowed between seven and eight inches deep. The result was as follows:—No. 1 had 116 pounds of corn on the cob, and 118 pounds of fodder, which was at the rate of 59.48 bushels of shelled corn, and 4720 pounds of fodder per acre. No. 2 had 128 pounds of corn on the cob, and 103 pounds of fodder, which was at the rate of 65.64 bushels of shelled corn, and 4120 pounds of fodder per acre. No. 3 had 118 pounds of corn on the cob, and 79 pounds of fodder, which was at the rate of 60.51 bushels of shelled corn, and 3160 pounds of fodder per acre. No. 4 had 56 pounds of corn on the cob, and 42 pounds of fodder, which was at the rate of 28.71 bushels of shelled corn, and 1680 pounds of fodder per acre. No. 5 had 23 pounds of corn on the cob, and 25 pounds of fodder, which was at the rate of 11.64 bushels of shelled corn and 1000 pounds of fodder per acre. The quantity of manure used was an even horse cart body full for each lot, or twenty feet, equal to 6 1-4 cords per acre. It was horse and pig manure, in which leaves had been freely used for litter. It was made the previous winter, and had been carted to the field a few weeks before using.

The average of the four lots on which manure was used was 53.73 bushels of shelled corn, and 3420 pounds of fodder per acre, or 42.09 bushels of corn, and 2420 pounds of fodder per acre more than on that where no manure was used.

Taking then No. 5, on which no manure was used, as the

standard of what the ground would produce without manure, we have a clear gain of 42.09 bushels of corn, which at \$1 per bushel is \$42.09
 And 2420 pounds of fodder, which at \$8 per ton, 9.68

51.77

From which if we deduct the value of 6 1-4 cords, of manure at 7 dollars per cord, 43.75

Leaves as profit which the manure brought over its cost, \$8.02
 Or if we take that which appeared to be the most judicious application of the manure, we find a clear profit of \$22.73 per acre.

The value of the crops on the several lots, by the above estimate, is as follows:—

On No. 1, where the manure was turned under at the first plowing, \$78.36. On No. 2, on which the manure was plowed in at the second plowing, \$82.12. On No. 3, where the manure was cultivated in, \$73.15. On No. 4, where the manure was spread upon the surface after planting, \$35.43, and where there was no manure, \$15.64.

The calculation of the corn was made by taking 78 pounds of corn on the cob as equal to one bushel of shelled corn.

In continuation of the experiment, No. 6 had a small handful of Coe's superphosphate in the hill before planting, which was well mixed with the soil, and also a small quantity spread upon the surface at the first hoeing, and mixed with the soil. No. 7 had the same spread upon the surface after planting, and again after the first hoeing. No. 8 had the same spread on the surface after the first, and again after the second hoeing. No. 9 had ashes spread on the surface after the first and second hoeing. The superphosphate used was 800 pounds per acre, and the ashes, 80 bushels per acre.

No. 6 had 55 pounds of corn on the cob, and 47 pounds of fodder, which is at the rate of 28.20 bushels of shelled corn and 1880 of fodder per acre. No. 7 and 8 were so nearly alike that they were harvested and weighed together. They had each $57\frac{1}{2}$ pounds of corn, and $46\frac{1}{2}$ pounds of fodder, at the rate of 29.84 bushels of shelled corn and 1860 pounds of fodder per acre.

Average of the lots 6, 7 and 8, 29.29 bushels of corn, value, \$29.29

“ “ “ “ “ 1866 lbs. of fodder, at \$8 per ton, 7.46

36.75

Deduct as before the produce of No. 5, 15.64

21.11

From which deduct the superphosphate, 20.00

\$1.11

And we have as the value of the superphosphate,

No. 9 had 19 pounds of corn on the cob, and 21 pounds of fodder, which is at the rate of 19.48 bushels of shelled corn and 1680 pounds of fodder per acre.

Value calculated as above,	\$26.20
Deduct No. 5 as before,	15.64
	<hr/>
	10.56
80 bushels ashes at 1s. per bushel,	13.33
	<hr/>
Which leaves No. 9 in debt at present,	\$2.77

Thus the account stands at the present time. The past season has been a very dry one, and undoubtedly has affected the crops very much; but whether it has one kind of manure more than another, it is impossible at present to determine. I am inclined to the opinion that the superphosphate has been affected by it more than the other manure, from the fact that in many hills of potatoes which were planted with it, it remained without much alteration at digging time; and possibly it may show itself to better advantage in the succeeding crops than it has at the present time; if so, due notice will be taken of it. One thing, however, is certain this year with me, it has not paid for using; while the other manure used, except the ashes, has paid a handsome profit in the present crop, with a fair prospect of more to follow.

The lots were all planted with yellow corn the 21st of May, and cultivated and hoed twice. It all came up very nearly the same time, and looked very much alike; but soon Nos. 2 and 3 went ahead of the rest, which continued for several weeks; then No. 1 began to go ahead, and the latter part of the season appeared to be the best, which is accounted for by the fact that there was more fodder than on either of the other lots. The last of September the corn was cut up and stacked on the adjoining land, and October 2 the piece was ploughed and sowed with rye and grass seed, which at the present time look well, and very much alike on the whole piece.

Synopsis of the Weather.

May was a dry month, although we had good showers in each third.

June, 1st third, moist; 2d third, dry; last third, moist.

July, " " dry; " " dry; " " dry.

Aug., " " dry; " " dry; " " dry.

Sept., " " dry; " " dry; " " dry.

The average of the thermometer for May was 54.13°, which was nearly two degrees less than the average of the last twelve years, and about two degrees colder than the last two years.

The average of June was 65.43°, which was a little lower than the average of the last twelve years, yet a little warmer than for the last two years.

The average of July was 71.17°, like June, a little lower than the average of the last twelve years, and about two and a half degrees higher than the last two years.

The average for August was 66.92°, about one degree colder than the last twelve years, and three degrees colder than last year.

The average of September was 60.63°, which was about two degrees colder than the last twelve years, and about one degree warmer than either of the last two years.

Respectfully yours,

CHARLES BRECK.

Milton, Nov. 20, 1861.

Recapitulation.

	Weight of corn on the cob.	Weight of fodder.	Bushels of shelled corn per acre.	Weight of fodder per acre.	Value of corn per acre at \$1 per bushl.	Value of fodder per acre at \$8 per ton.	Total value per acre.
No. 1,	116 lbs.	118 lbs.	59.48	4720 lbs.	\$59.48	\$18.88	\$78.36
No. 2,	128	103	65.64	4120	65.64	16.48	82.12
No. 3,	118	79	60.51	3160	60.51	12.64	73.15
No. 4,	56	42	28.71	1680	28.71	6.72	35.43
No. 5,	23	25	11.64	1000	11.64	4.00	15.64

STATEMENT OF AARON D. WELD.,

CHEEVER NEWHALL, Esq. :

DEAR SIR,—I shall confine myself to the simple statement. I selected a level piece of land from a field of six acres, containing one hundred square rods, and divided it into five equal parts of twenty square rods each.

The character of the soil is rather heavy than otherwise, loamy, dry and retentive of manure.

The last crop from the field was grass, one half ton to the acre, having been down to grass seven years without top dressing.

Six feet of well rotted stable manure were applied to lots No. 1, 2, 3 and 4 each. No. 5 had no manure. No. 1 was spread, and the whole piece ploughed eight inches deep. No. 2 was then spread, and the whole piece cross ploughed four inches deep. No. 3 was then spread, and the whole piece harrowed. May 16th, the five lots were planted with corn in hills 3 1-2 feet by 2 1-2 feet, and the manure then spread on to lot No. 4.

The piece was cultivated and hoed June 14th and 26th.

One third of each lot I have taken as the basis of my calculations.

September 14th the corn was cut at the butt, shocked and weighed, with the following result:—

Lot No. 1 weighed 865 pounds.

“ 2	“	1005	“
“ 3	“	895	“
“ 4	“	790	“
“ 5	“	580	“

October 1st it was husked and weighed, and a portion shelled to estimate upon, with the following result:

	1-3 of Lot.		6 2-3 Rods.		20 square Rods.		Acre. Estimated. Shelled.
	Actual wt. In ear.	Estimated Shelled.	Estimated Shelled.	In ear.	Estimated. Shelled.		
	lbs.	lbs.	lbs.	bush.	lbs.	bushels.	
Lot No. 1, . . .	230	170	690	8	30	68	
“ “ 2, . . .	274	202	822	10	6	80 ⁴⁸	
“ “ 3, . . .	253	187	759	9	21	74 ⁴⁸	
“ “ 4, . . .	200	148	600	7	24	59 ¹²	
“ “ 5, . . .	167	123	501	6	9	49 ¹²	

Weight of Stover.

	1-3 of Lot. Actual Weight.	6 2-3 Rods. Estimated.	20 square Rods. Estimated.	Acre. Estimated.
Lot No. 1, . . .	635 lbs.		1905 lbs.	7 ¹²⁴⁰ tons.
“ “ 2, . . .	731 “		2193 “	8 ¹⁵⁴⁴ “
“ “ 3, . . .	642 “		1926 “	7 ¹⁴⁰⁸ “
“ “ 4, . . .	590 “		1770 “	7 ¹⁶⁰ “
“ “ 5, . . .	413 “		1239 “	4 ¹⁹¹² “

The whole piece was sown to winter rye and herds grass seed September 20th. About five pecks of rye, and a fraction over one bushel of herds grass seed to the acre.

Synopsis of the Weather.

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

I marked off one additional lot which is numbered “6,” and cultivated that, as is the usual practice on the farm—precisely like No. 3, except that we apply to the hills about two cords of night-soil and meadow mud well mixed, to the acre. The result of this lot was as follows:—

Sept. 14th, weight of corn and stalks, Lot No. 6 weighed 840 pounds.

Weight, husked and shelled.

	1-3 of Lot.	6-8 Rods.	20 square Rods.		Acre.
	Actual wt. In ear.	Estima. Shelled.	In ear.	Estimated. Shelled.	Estimated. Shelled.
	lbs.	lbs.	lbs.	bush. lbs.	bushels.
Lot No. 6, . . .	254	187	762	9 21	74 ⁴⁸

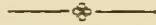
Weight of Stover.

Lot No. 6, . . . | 586 lbs. | 1758 lbs. | 7⁶⁴ tons.

All of which is respectfully submitted,

AARON D. WELD.

Weld Farm, West Roxbury, Dec. 12, 1861.



MUCK AND ITS USES.

BY SANFORD HOWARD.

Perhaps some definition should be given, in the first place, of the term muck. In England it is applied to the ordinary manures of the farm; hence the adage—"Muck is the Mother of Money." In our country, or at least in this section, the term is commonly applied to the substance of bogs and swamps, including, in many instances, what would be called peat in other countries. It is seldom that much discrimination is used in its application, and it is therefore made to comprehend substances which differ greatly in composition and value. As a matter of course, the estimation in which farmers hold what is called muck, varies widely. One man says it is worthless, or nearly so, while another considers it of nearly equal value with farm-yard manure. This discrepancy may be accounted for in part by the difference in quality of so-called muck, in part by the manner in which it is used, and in part by the character of the soil to which it is applied.

To further illustrate the subject, we may consider the origin of the different kinds of muck. That which is most common in this vicinity is found in bogs or swamps, which in their natural condition produce chiefly vegetation of a low order. All localities where it is found have too much water for the growth of valuable plants. Where the water is stagnant, moss is often found as the principal vegetable growth. Different species of this plant, in fact, form so large a portion of the vegetation of bogs, that in England such places are frequently called "mosses." The moss obtains a hold, shoots up a little above the water, and as it grows from year to year, the lower portion settles down and decays—forms "muck." Thus the growth continues, and the decayed substance accumulates, becoming more solid with age and pressure, till at length it acquires the character of peat—may be cut in pieces, which will retain their shape when dried, and may be

used for fuel. In some instances we find that after bogs have acquired a certain degree of firmness, some trees will grow on them. The cedar swamps of this section may be cited as illustrations. The larch, hemlock and pine sometimes grow in such places, but where stagnant water abounds, are stunted and small.

It is evident that muck which is formed under such circumstances cannot abound in fertilizing matter. We know that the manure which is made by animals while eating poor herbage is of inferior quality compared with that made while the animals are fed with the best grasses, green or dry; but here is a case where the vegetation is so poor that it would be rejected by animals, and the manure it would make, on decomposition, must be correspondingly low in the scale of fertilizing power. The fragments of the trees alluded to can hardly improve it, as the resinous matter they contain resists decomposition, and they form, also, tannic acid, which is injurious to vegetation.

In other cases the substance of bogs has accumulated, and the quantity of water, from various causes, lessened, till other kinds of trees—as maple, birch and ash—take root and grow. The leaves and branches which fall from these trees and decay, form a richer substance than that of the moss and the cedar in the former case. If, from the absence of trees, herbage plants spring up, they are of a character which indicates the improvement of the soil over that on which moss is the principal growth. Muck from such localities, especially where there is something of a current to the water, is better than that from stagnant, moss-covered bogs. The motion of the water seems to wash out or prevent the formation of certain acids, which often lessen the value of muck.

In other localities we find something called muck, which originated in a way different from any yet noticed. I allude to the contents of basins which occur in upland woods. These receive the wash of the surrounding land, with which is mingled the leaves and branches of hard wood trees in various stages of decay. In many instances water is retained by these basins for only a portion of the year, and their contents undergo a decomposition similar to that which would take place in a farmer's barn-yard or hog-pen. A kind of muck is formed in such cases which is far superior to that from swamps and bogs. I have known cases where an application of it to land planted with corn, produced equal effects on that and the succeeding crops, with the same quantity of good barn-yard manure applied under similar circumstances.

So much for the different articles called muck. Their chemical composition undoubtedly varies considerably. Johnson's Farmer's Encyclopedia gives the result of the analysis of a sample of soil

from "an entirely barren peat moss," and also the result of an analysis of a sample from a "fertile moss," which are herewith appended. Two things are particularly observable in regard to these analyses, viz.: the much greater quantity of fine silicious sand in the fertile sample, and the difference in the condition of the vegetable matter, it being "inert" in the barren, and in a "decomposing" state in the fertile sample. Both lots are understood to be drained.

Sample from the Barren Lot.

	Parts.
Fine silicious sand,	29
Inert vegetable matter,	289
Alumina,	14
Oxide of iron,	30
Soluble vegetable matter, with some sulphate of potash,	11
Sulphate of lime (gypsum)	12
Loss,	15
	400

Sample from the Fertile Lot.

	Parts.
Fine silicious sand,	156
Unalterable vegetable fibre,	2
Decomposing vegetable fibre,	110
Silica (flint)	102
Alumina (clay)	16
Oxide of iron,	4
Soluble vegetable and saline matter,	4
Muriate of lime,	4
Loss,	2
	400

Dana, in his Muck Manual, gives a summary of the constituents of twelve samples of muck or peat from different localities in this State, from which it appears that in regard to "soluble geine," they varied from 10.00 to 48.80, and in "salts and silicates," from 6.00 to 40.55. But he does not particularly inform us in reference to the character of the localities from which the samples were taken.

It may be remarked that deposits of muck are sometimes underlaid by marl, abounding, in many instances, with the remains of crustaceous animals. In the Hudson river valley and other portions of New York, and in the westerly portions of this State, as well as other sections of this country, such deposits are not

rare. They are also common in England. The muck from such localities is generally rich; but where they can be drained to a sufficient depth, the marl or marly earth at the bottom affords a better soil for cultivation than the muck does. Hence, where extensive deposits of this description occur in England, the object is to get rid of the greater portion of the vegetable matter in the cheapest and most expeditious manner. In some instances this has been done by causing a stream of water to carry it away. These shell marl-beds often form the most productive and permanently fertile soils. The marl, too, frequently produces excellent effects when spread on land.

From what has already been said, it follows that the use of muck as a fertilizer should depend upon its quality, which, as has been shown, varies according to localities or the circumstance under which it is formed. That which consists principally of the leaves of hard wood trees (as previously described) is good manure in its crude state, though exposure to a winter's frost may improve it by pulverization, and making it more soluble by dissipating any noxious acid it may contain. But that which is taken from swamps, and especially from moss, generally requires more preparation to make it good manure. It is commonly used as an absorbent of urine and the liquids of the manure-heap. Simply as an absorbent it is valuable. Its affinity for ammonia is said to be greater than that of charcoal, which some chemists say will absorb ninety times its weight of ammoniacal gas. So far as muck is wanted merely for this purpose, it may be that the difference in its composition will not much affect its value; but as it is to be finally added to the soil, the ultimate result must of course depend on its composition.

There can be no doubt of the benefit of using muck in stables, manure-cellars and yards to such an extent as may be necessary to absorb the liquids and bring the mass of manure into a condition that will admit of its being readily carried to the field. In connection with this, another object is effected, namely: the preservation of fertilizing gases, which are to a certain degree fixed or retained by the muck.

We know that the use of muck, even for the purpose just mentioned, is objected to by some farmers. They say the poorest sand is better than any muck to mix with manure. Not having witnessed any experiments in reference to the subject, I will not venture to decide the question involved, though I cannot see how pure silicious sand can be worth much for manure. Still, I have so often heard the statement alluded to from respectable farmers, that I regard the matter as deserving investigation.

In comparing sand and muck, in regard to their value for mixing with manure, much, doubtless, depends on the character of the

soil to which they are applied. Muck tends to make soil more light, and where lightness is already a defect, sand saturated with urine might be preferable to muck used in the same way, because the former would produce more compactness. It can hardly be supposed, however, that the absorbent power of sand can be equal to that of muck in proportion to weight—sand being much heavier in proportion to its bulk, and of course more expensive to move. On a tenacious soil the muck would probably be better, on account of its producing more lightness and friability.

I am aware it is a common idea that muck is specially applicable to loose, sandy or gravelly soils. But the most beneficial effects that I have ever seen from the application of muck have been on clayey soils—the vegetable matter, on being mixed with the soil, breaking its tenacity, and keeping it sufficiently open and mellow at all times. In England the use of clay is regarded as of so much importance in bringing peat-bogs into profitable cultivation, that great expense is frequently incurred in depositing clay on the surface—the coating being sometimes three or four inches in thickness.

It is not improbable that even the poorest kind of muck, when divested of noxious principles, which, as before mentioned, they generally contain in their crude state, may contribute to the growth of plants by affording carbonic acid. Yet we have known cases where the benefit of applying that from mossy bogs unmixed with any other substance, though well prepared by the action of the atmosphere, was not equal to the cost of digging and hauling it a few rods. The explanation is, that there was carbon enough, or nearly enough, in the soil, and that the muck was destitute of other fertilizing elements. Had there been a deficiency of carbon, the benefit from the muck would probably have been greater. But carbon is not generally a scarce element in soils.

There seems to be reason in Dr. Dana's idea that the action of alkalies is necessary in many cases to develop the fertilizing elements of muck. This is more particularly applicable to the poorer kinds of muck—such as are obtained from swamps where resinous trees grow, and from mossy bogs. This alkaline action is necessary to destroy noxious acids (acetic, tannic, &c.) and to bring the muck into a condition in which it will decay faster, and by uniting with oxygen more readily form carbonic acid. Dr. Dana goes so far as to say that—"The power of producing alkaline action, on the insoluble geine, is alone wanted to make peat as good as cow-dung," and—"By the addition of alkali to peat, it is put into the state which ammonia gives to the dung." He argues that for all agricultural purposes, carbonate of ammonia and white or soda ash, are equal, pound for pound, and that pot and pearl ashes may be taken at one half more; that if to 100

pounds fresh-dug peat there are added 2 pounds soda ash, or 3 pounds of pot or pearl ashes, all the good effects of cow-dung will be produced. Following out the calculation, he prescribes for every cord of fresh-dug peat, 92 pounds of pot or pearl ashes, 61 pounds of soda, or 16 to 20 bushels of common house or wood ashes. Dr. D. mentions a case which throws some light on the principles laid down. It is as follows:—

“Mr. George Robbins, of Watertown, an extensive manufacturer of soap and candles and of starch, employs the refuse of these trades in enriching his land. It is believed his crops will compare with those of any of the best cultivators around him. He has not used for four years (from 1851 to 1855) a spoonful of manure made by any animal walking either on two legs or four. He keeps a large number of horses and hogs, and several cows, and uses not a shovelful of their manure, but, selling that, uses peat and swamp muck mixed with his spent barilla ashes. The proportions are one part of spent ashes to three of peat, dug in the fall, mixed in the spring. After shoveling it over two or three times, it is spread and ploughed in. The effect is immediate, and so far lasting.”

The preference which Dr. Dana gives to wood ashes or potash, in preparing muck for manure, seems to be justified by practical trials. The experience of Artemas Newell, Esq., of Needham, may be referred to as an example. He has used muck very extensively as an absorbent of the liquids of his horse and cattle-stables, pig-pens, &c., from which great benefit has undoubtedly been derived, and he has also tried it in combination with potash. In regard to the latter mode of preparing and using it, he has kindly furnished the following account:—

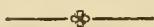
“The muck should be dug from its bed late in autumn, and be fully exposed to the frosts of winter before it is used. The reason why I prefer to have it dug at this season is, that if dug earlier and left on dry land, it sometimes becomes hard, like dry peat, and is, in fact, better for fuel than for manure. I deem it a waste of labor and money to use it in combination with potash or alkalis in any other form until it has been thus exposed and prepared.

“My method of combining the potash with the muck is, first to prepare a pile of muck, measure it, and make it into an oblong basin, the sides and bottom of which are as nearly as possible of the same thickness. I place a half-hogshead tub by the side of the basin, and fill it nearly full of water; then weigh and put into it thirty-five pounds of potash for each cord (or 128 cubic feet) of muck in the pile. When dissolved, the solution is dipped into the basin, and the muck from the outside of the basin is gradually thrown in as fast as it becomes saturated. After the liquid has all disappeared, the pile should be carefully worked over, and

should remain a day or two, or more, if convenient, and then be worked over again, when it may be used without delay. The potash I used was of an inferior quality, and cost about three and a half cents per pound.

“ I used muck as above prepared on an old pasture, which was planted the last of May, 1860. A shovelful of muck was applied to each hill—the hills being at the rate of 4,500 to the acre. The lot was planted to corn the first and second days of June. It was the large and *late* variety known as the ‘ smutty white.’ The result was a success, as I considered it, though the corn was not planted till the time of hoeing my other fields, and yet was the *only* corn I had that year that ripened sufficiently for seed. A portion of it was gathered before the 24th of September. The stalks were well grown, and the yield of grain above an average.

“ To me, since I have known how to prepare it, peat muck is invaluable. In the compost heap, in hog-pens, cow-stalls, and in its combinations with potash, soda-ash, guano, &c., it is in daily demand.”



SOILING CATTLE.

The Committee on Soiling regret that, in consequence of circumstances which cannot here be explained, the application of Mr. A. W. Cheever, of Wrentham, to be considered a competitor for the Society’s premium this year, was overlooked by them. Mr. C. had also requested that instructions might be given to him in regard to the most satisfactory method of conducting his experiments, and that by personal examination in the course of the season, the Committee would satisfy themselves and the Society of his manner of proceeding in the case.

Since the late annual exhibition, Mr. C. has reminded the Committee of his application and of his disappointment, and also furnished them with the subjoined statement of the manner in which he has proceeded in soiling his cattle, and of its results. We regard this statement as one of much value, and a plain indication of the probability that the applicant’s claim for a premium would have been successful. We have concluded, therefore, to publish it. We also append to it another statement, which, though not emanating from a member of our own Society, but printed in that excellent journal—the “ New England Farmer,” we think worthy of permanent record in our Transactions.

A portion of the Committee recently visited the farm of Mr. Cheever—too late, however, to observe the course he pursues in

the soiling of his cattle. But they had an opportunity to see the cattle, and observed convincing evidence of the care and attention they received. They could not but regret that particular instructions had not been given to Mr. Cheever in answer to his request, and had no doubt that such instructions would have been complied with to the letter.

Mr. Cheever and his worthy father, O. G. Cheever, have been for a few years prosecuting a course of farm improvements—by thoroughly draining and reclaiming lands—which have wrought as great a change upon their farm, and will, no doubt, present as beneficial results, as can be shown upon any similar farm in the County, or, indeed, upon any farm carried on with like limited means, and almost entirely by the personal labor of the occupants.

Repeated observation of these improvements, of the thoroughness of the operations on this farm, and of the intelligent and careful management of every part of the establishment, demands something more than a passing complimentary notice of it. And we feel that, in justice to his claims, and to the interest which it is the aim of this Society to foster and promote, we cannot do less than to recommend that a gratuity of ten dollars be paid to Mr. Cheever for his experiment in soiling his cattle, and the statement he has furnished of the manner and results of his experiment.

We also recommend that the notice given this year of his intention to compete for the premium for the best experiment in soiling cattle, be considered as extended to the coming year.

For the Committee,

CHARLES C. SEWALL.

STATEMENT OF MR. CHEEVER.

Wishing to make some experiments in feeding cows on grain crops, &c., I sent a notice to the Secretary of the Society, which he was desired to accept as the first step toward an entry for premium for the best experiment in soiling cattle. I also requested the Committee, through him, to make any suggestions they might think proper in relation to the matter. As I waited to hear from the Committee, I neglected to commence at the proper time to weigh, and measure, and keep an accurate record of dates, &c. Therefore I have now no such statement to make as I intended and hoped to have. But I will tell you, in a general way, what we have been doing, not only during the present, but in past years also.

My father's farm, on which I am a laborer, is not naturally good pasture land—being too cold and wet to produce sweet feed,

unless drained and cultivated. It is too strong, also, to be worth reclaiming for pasture alone.

On this account we have for several years been trying to work into a course that would leave us less dependent on pasture for support of our stock. As a preliminary step, we set apart a number of acres as *unimprovable*; where the growth of wood should be encouraged, instead of our former practice of mowing the bushes, and pulling up the young pines every year or two. We then devoted a liberal share of our mowing lots to pasture, and commenced making thorough work with the remaining mowing and tillage land—such as draining, clearing off surface rock, and removing inside stone walls. In this way we are now fast getting our tillage land into one entire lot, which very much reduces the cost of cultivation. After having cleared and drained our tillage land, at very considerable expense, it seemed that we ought to make it produce larger crops than it had done before. This could not be effected, of course, without manure; and of this we found it impossible to make a sufficient supply during the winter season. We have, therefore, fed our cows this summer on green food more than usual, always in the stall. Let me here say, by the way, that I am convinced that much of the prejudice against corn fodder for cows is owing to the fact that most of those farmers who think green cornstalks will dry up cows and lessen the quantity of milk, or, at any rate, can do them no good, are in the habit of feeding their cows in the pasture—throwing the corn over to them directly from the field where it grows—thus tempting them to hang around the field the remainder of the day, instead of going off and feeding contentedly.

We have fed, this summer, green oats, clover, southern corn, and the tops of turnips and mangolds. We have made no accurate experiments by which to determine the comparative value of each sort of feed. We prefer a variety and change of feed, and are inclined to the opinion that good English hay may well form a large part of the food of milch cows in summer—perhaps with as much economy as any of the green food. It ought always to be on hand, to be fed when the days are rainy, and when the cows have become too much relaxed by the use of green food. Our cows have run in the pasture a part of every day through the season. They are put into the barn and milked at five o'clock in the afternoon, and turned out again at from eight to twelve o'clock in the morning—according to the weather and the amount of feed in the pasture. We have also given to them a mess of shorts or meal every morning until fall, when pumpkins took the place of grain.

Our cows lie on a floor, four feet eight inches in length, back of which is a gutter, twenty inches wide and six inches deep, where

the droppings fall. These are removed several times daily, and the floor is sprinkled with a few shovelfuls of sand to keep it sweet and clean as possible. The manure falls into a cellar, where it is worked over by hogs, and mixed with dry loam to absorb the urine. In order to have this dry material to compost with, we have built a tight shed adjoining the stable, where, in dry weather, is laid up enough loam to last several months. It requires a much smaller quantity of dry than wet loam to absorb the urine, and of course, the compost will be less "extended."

As one chief object in soiling has been to increase the quantity of manure for use on the farm, I have kept an account of what we have made during the past six months—beginning in May—from five cows, two horses and four hogs. The manure is all made in one pen. We have carted out and have on hand twenty-six cords of what we consider good manure—valued at five dollars per cord. This is at the rate of just one cord per week from May to November. Two-fifths of a cord were used in July for a second crop of corn fodder. Seven cords were used for rye in September, and the remainder we are now ploughing in for a crop of corn next year—thus getting a good part of spring's work done in the fall, which could not be done if, as formerly, we depended only on our winter's stock of manure for the next summer's crop.

A. W. CHEEVER.

Wrentham, Nov. 21, 1861.

[From the *New England Farmer*.]

SOILING COWS.

Mr. Editor,—In the summer of 1860 I attempted to ascertain the amount of extra labor it would take on a common farm to soil, or stall-feed, a small herd of cows; but finding it difficult to separate that labor every day from the ordinary labor of the farm, I was obliged to content myself with noting the time occupied on a few days on different seasons, and under different circumstances, as to the luxuriance of the feed to be cut, and so estimate the average time. I kept eight cows through the summer. In June and July, two and a half hours a day were sufficient for getting the feed to the barn, giving it out to the cows, watering them, and managing the compost heap. In August, three hours a day; and in September, owing to the partial failure of some crops sown for use at that time, it took about four hours. The crops which failed to do as well as was expected were oats and millet. My favorite crop for the summer feed of milch cows, after several years' experience, and trying a variety, is clover. Like all other plants,

this is liable to failure ; but if it shows well in the spring, is on good soil, and has been well manured, there is, in my experience, hardly any crop that yields so large a return for the labor bestowed. On the 9th of June, 1860, when the clover had just begun to blossom, the produce of seven and a half rods weighed 1415 pounds. This is at the rate of 30,186 pounds, or a little more than 15 tons to the acre, at the first cutting. My eight cows (of about average size) ate 1200 pounds of that clover in one day. An acre like this would therefore feed one cow 201 days, at one cutting. I did not weigh the second cutting, but think the amount taken off was at least two-thirds as large as the first, or 20,000 pounds, and the third not less than 15,000 pounds—a total for the whole season of about 65,000 pounds, or 32 1-2 tons of green fodder, of the best quality, from one acre—equal to the feed of one cow for 433 days, allowing, as above, 150 pounds a day.

To ascertain the amount of hay in this fodder, I dried 100 pounds, which then weighed but 17 pounds, showing that it contained, green, 83 per cent. of water, above what remains in what we call dry hay. So each cow ate daily equal to 25 1-2 pounds of hay, mixed with 124 1-2 pounds of water.

Those who have committed blunders are permitted, I believe, to caution others against falling into the same wrong courses. My faith in clover, as above expressed, was so strong at the beginning of the season just past, that, trusting in the fine promise of my fields in the early spring, I neglected to prepare for a sufficiency of other crops to keep up a convenient supply of green fodder for the whole season. The first cutting of clover was good, and the weather such in the early part of June as to give good promise for the future ; and thinking I had an abundant supply, I cut and hayed some that was beginning to fall down about the middle of June. But immediately after, there came on a spell of very warm and dry weather, that so scorched the surface of the ground as to prevent the starting of the expected second growth, or at least so checked it that there was but a very light crop, and consequently I came sadly short of feed, and was obliged to use much grass that was intended for hay, and use it, too, when it had become too ripe to serve the purpose well, the cows looking discontented when it was placed before them. The season's experience has convinced me strongly that it is unsafe to indulge a sanguine faith in a close calculation. It is best to make a liberal allowance against the uncertainties of the weather, for the surplus is always available for hay.

M. P.

Concord, October 31, 1861.

EGYPTIAN CORN.

BY SANFORD HOWARD.

The term Egyptian corn has been applied to various grains. It has been applied to a variety, or perhaps to more than one variety, of Indian corn (*Zea mays*), and many readers may recollect the numerous complaints of imposition in regard to corn sold under this name at an enormous price, a year or two since, in Illinois. But to call any kind of Indian corn, or maize, *Egyptian* corn, is improper, as it is strictly an American plant, and was wholly unknown in the Old World till after the discovery of this Continent.

With more propriety has the term been applied to some kinds of *Sorghum*, a genus of grasses, the species of which have been sometimes referred to the genus *Holcus*, and sometimes to *Andropogon*. It may be remarked that the term *corn*, in a general sense, signifies the cereal grains. Of the genus *Sorghum*, there have been introduced into this country the common broom-corn, the so-called Chinese sugar-cane, the Imphee, Guinea-corn, Egyptian-corn, &c.—all brought from Asia or Africa. They all bear a close resemblance to each other—as much so as do the different kinds of Indian corn—and it is not improbable that they are merely varieties of a single species.

The introduction of different kinds of *Sorghum* into this country is not of so late a date as many persons suppose. It is said that Dr. Franklin introduced broom-corn towards the close of the last century. Even the Chinese sugar-cane, which was so much talked about a few years since, was cultivated here forty years ago. It was distributed under the names of Egyptian millet (or Egyptian purple millet) and chocolate-corn—it being claimed that from the seeds, when roasted like coffee, a decoction resembling chocolate could be prepared. (See *American Farmer*, vol. IV, (1822,) page 326, and the *Massachusetts Agricultural Repository and Journal*, vol. VII, page 348). It was cultivated in small patches in this vicinity, and corresponded in all respects to what is now called Sorgho, *Sorghum*, Chinese sugar-cane, &c.

The so-called Egyptian corn, dourra, or durra, was also introduced many years ago, cultivated as a curiosity for a while, and then abandoned. But as comparatively few people take much trouble to inform themselves in regard to things of former days, plants which have been tried and found not adapted to our purposes, are frequently introduced and disseminated as being new and valuable. Sometimes, however, the same thing is, after a lapse of time, disseminated under a different name. Thus, in the case of Egyptian corn, or dourra, and the Chinese sugar-cane, they were formerly called *millet*, as before mentioned, that being a

common name for several species of the genus *Holcus*, to which these were referred—being distinguished from other kinds by the terms great millet, Indian millet, &c.

I received from the Patent Office last spring, through Mr. Hildreth, the Secretary of the Norfolk Agricultural Society, a package of the so-called Egyptian corn, a portion of which was planted, and in due season produced “seed after its kind.” It was planted on the 25th of May, and by the 10th of October the crop was generally ripe enough to save by cutting the stalks at the ground, allowing the heads the benefit of the sap while drying; but at least ten days more would have been required to bring it to the same state of maturity that grain usually is in at the time of harvest. The stalks were from seven to nine feet high, generally producing, like the broom-corn, one head or panicle each. A large proportion of the heaviest heads turned down soon after emerging from the sheath, presenting, in connection with the stalk, the form of a shepherd’s crook. The grain is white, in shape resembling the broom-corn, but destitute of the firm outer coating which characterizes that grain. When fully ripe it separates very easily from the palea or chaff, which does not entirely cover it. It would probably make a wholesome bread. From time immemorial, it has formed the principal food of the fellahs, or lower classes of Egypt, and has always been used to some extent by the general population of that country. It is found with wheat, lentils, &c., in packages taken from mummies, even from those of the oldest date. It was no doubt cultivated in the days of the Pharaohs, and may have been one of the kinds of “corn” which Joseph’s brethren went down into Egypt to buy.

The plant has a few peculiarities which increase its value for certain localities:

1. It stands drought remarkably well. Growing on rather sandy soil, that cultivated by me was not apparently affected by the severest drought of the past season, though the leaves of Indian corn on the same ground “rolled” considerably for several days before rain came.

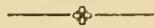
2. After the first and main head has passed a certain stage—so far as noticed after the grain had commenced hardening—another head appears, starting generally from the second or third joint from the top. These, in several instances, were in blossom at the time the main heads were ripe enough to cut, and if the season were prolonged to the extent it is in Egypt, a second crop would probably be produced after the heads first formed had ripened sufficiently to be cut.

3. About the time the second crop of heads appear, numerous suckers start from the roots and lower part of the stalk, growing

with great rapidity, having attained, in several instances, the height of two or three feet. Lesser shoots spring from the joints of the main stalks. These young stalks or suckers are tender, have numerous blades or leaves, and would probably make good winter fodder for cattle.

As to the value of the grain as food for stock, I can form no particular opinion. Fowls are very fond of it, eating it as soon as it is in the "milk." But I know no reason why it should be better than broom-corn, except that it is free from the tough husks of the latter, which renders it more palatable, and more easily masticated and digested. The seed of the Chinese sugar-cane has also the same objection as broom-corn; but some of the Imphée seed separates easily from the husk.

On the whole, I see nothing in this Egyptian corn to justify the idea that it could be made an article of profit, as compared with Indian corn, in any part of the country, though it might be worth while to try it on some of the deep, rich soils of the West.



IMPROVING MEADOW AND SWAMP LANDS.

It has been well said that the man who can make two blades of grass grow where one grew before, is a benefactor to his country. This applies with particular directness and force to the man who is successful in reclaiming sunken swamps and wet meadows and miry bogs, and by skill and industry, as if by the stroke of an enchanter's wand, converting them into fertile fields, bearing heavy crops of edible roots, grass or grain.

The introduction of railroads, which, avoiding the rural villages, hamlets and cultivated farms, on the old highways in New England, run through pathless forests, lonely valleys, unfathomable bogs, and almost impenetrable swamps, brings to view and causes a keen observer to realize the vast amount of unproductive land—nearly a million of acres to the share of Massachusetts—which is now to be found in New England, and which, if brought into cultivation, would greatly add to the wealth of the country, and increase the population, by keeping at home a great number of enterprising and able men, who have heretofore wandered abroad in search of an opportunity to exercise their energies.

It should also be taken into consideration that a large portion of these sunken swamps and drowned meadows, unlike the Great Dismal Swamp of Virginia, or the Everglades of Florida, can be drained with comparatively little difficulty; and by labor judiciously applied, may be transformed into tracts, not only suitable

for cultivation, but in many instances boasting of a depth and richness of soil far superior, it may be, to the long cultivated arable lands on higher grounds.

For these reasons, any well-directed experiment in draining swamps and improving unproductive lands is deserving of particular favor, and our Agricultural Societies throughout New England, as well as every farmer who rejoices in the substantial prosperity of the people, have taken a deep interest in the subject, and have sought to furnish aid and encouragement to those enterprising men who have taken hold of the work in good earnest, and instead of adding to the extent of a farm by buying of a straitened neighbor additional acres of worn-out soil at a low price, which would be dear as a gift, have converted their own alder swamps or water lots, the chosen resorts of reptiles, into rich soil, suitable for tillage, and of permanent fertility, thus setting examples well worthy of imitation.

The "Committee on Improving Meadow and Swamp Lands," have been called upon to exercise their duties but in a single instance the present season—that of an entry by Dr. W. T. G. Morton, of Needham, for "*the best experiments in reclaiming Wet Meadows.*" The Committee accordingly visited Dr. Morton's farm on the 15th of August last, and made a careful examination, not only of that portion of the land, one acre, which was entered for a premium, but of other portions that have been reclaimed. These consist of between five and six acres of swamp meadow, all of which ten years ago were nearly submerged in the fall and spring, and wet through the summer, producing nothing but cranberry vines, ferns, noxious weeds, low bushes and tussac grass—(*dactylis cœspitosa.*)

A sluggish, shallow brook ran through the swamp, and the first act of the owner was to enlarge this stream and increase its depth—he fortunately having command over the outlet—and then by means of blind ditches, at right angles and also parallel with the brook, the swamp was completely drained. After plowing some parts of the soil, and removing incumbrances, he hauled up on the meadow gravel and loam, from a hill in the neighborhood, covering the surface to a depth of from four to six inches. Then making it smooth and level, he sprinkled over it some top-dressing, and sowed grain, or grass seed. The noxious plants were in this way extirpated, and the portions of meadow laid down for grass, now produce every year from two to three tons of excellent hay.

The work of reclaiming these meadows has been going on since 1851, and now, having been completed, adds greatly to the value of the farm, and furnishes a reservoir of grass which is unlikely

to fail in the dryest season, and a rich soil which is particularly favorable to the cultivation of vegetables.

It must be difficult to estimate accurately the expense of this whole improvement, as the operation has been so long going on, and the work has been done at odd times, and probably much of it at seasons when men and teams could be employed without neglect of other and more necessary work. But the result of the experiment shows what may be done in similar situations, where land is more valuable.

By constructing a dam, and flowing back the water, Dr. Morton is able to irrigate these reclaimed meadows in a time of drought, or overflow them at will, which gives him a great advantage over those who have not such means of moistening the soil. One acre of these meadows which has lately been reclaimed, and for which a premium is now claimed, was planted with potatoes the present year—the Davis seedling—and the tubers had been moistened from time to time, by the rising of the water, and your Committee can bear testimony by actual inspection, to the giant growth, the large size, and unusual quantity of potatoes, which were produced on this piece of irrigated soil. A magnificent specimen of these potatoes was exhibited at the late Agricultural Fair, to the great admiration of the lovers of this valuable esculent.

A detailed statement from Dr. Morton, of the mode of operation, the expenses attending it, and the produce of this one acre the present year, accompanies this report, in accordance with the rules of the Society, by which it will be seen that the experiment has not only been completely successful, but also *profitable*. Your Committee, therefore, conceive Dr. W. T. G. Morton to be entitled to the first premium of ten dollars, for “the best experiment in reclaiming wet meadow,” and respectfully recommend that it be awarded accordingly.

JOHN S. SLEEPER, *Chairman.*

Roxbury, November, 1861.

STATEMENT OF W. T. G. MORTON.

The meadow land which I had reclaimed, contains about five acres, and is situated in the most valuable part of the farm, and was continually saturated with water from numerous springs. The mud averages about four feet in depth. One acre, situated at the base of a high ledge, is eight feet deep. This is the acre I submit my account upon.

The natural products of the land were brakes, meadow cabbages, moss, &c. I found trees eight feet under the surface, which we cut out by the shovelful, as we did the mud.

In 1854 a ditch four feet wide and four feet deep, was cut through the centre, and left open. Cross drains were cut to it, and filled with stone. Adjoining this acre, and for the purpose of more effectually draining it, we proceeded with one-half an acre to an acre in this wise—cut a canal the depth of the mud, six to eight feet, and eight feet wide around the acre, so as to leave it in the shape of an egg. The brook which fills this canal with water has sufficient fall to enable us to entirely drain the island and most of the other portions of the meadow. We annually draw the water off, and cut a slice from this island in the fall for our supply of mud in the spring, and keep the water at such height as best promotes the crops. About five acres of this has now been gravelled, and seeded with oats and grass seed. The oats grew five feet high, and we have cut from two to three tons per acre from it. Nearly two acres were plowed last fall, and manured this spring with a compost of barn-yard and pig-stye manure and loam, spread upon the surface and harrowed in.

It was planted with potatoes and garden vegetables. One acre of it produced one hundred and sixty-five bushels of Davis seedlings.

The account of expense and products is annexed.

Respectfully submitted.

W. T. G. MORTON,
 “*Etherton Cottage,*” *West Needham.*

Statement of the Expenses and Value of the Crop.

First ploughing,	\$ 7.00
Second ploughing,	3.00
Seven cords of compost,	30.00
Carting and applying manure, furrowing and planting,	11.00
Seed,	5.00
Furrowing and planting,	3.00
Cultivating,	2.50
Hoeing—first time,	11.00
Cultivating,	1.00
Hoeing—second time,	3.00
Harvesting,	15.00
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	\$91.50

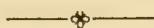
The expense of “gravelling” was thirty dollars; and “filling drains,” fourteen dollars—both of which, being *permanent* im-

provements, should hardly be included among the items of expenses for the crop the present year.

Cr.

By 165 bushels of Potatoes, at 50 cents,	. . .	\$82.50
“ 100 bushels of Turnips, at 10 cents,	. . .	10.00
“ 500 pounds of Squash,	. . .	5.00
“ one-half of the manure,	. . .	15.00
		<hr/>
		\$112.50

In addition to these results, should also be included four hundred cords of mud, which were taken from the drains, and were estimated at one dollar a cord, over and above the labor of taking out.



REPORT ON PASTURE LANDS.

The Committee on Pasture Lands report: That an increased interest has been manifest during the past year in the object connected with their duties. The importance of having better pastures is conceded by all with whom the Committee have conversed upon the subject. Can our pastures be improved, and at the same time pay the outlay for the improvement? has been the question. If the expense were more than the profit, still the uniform testimony is, that the improved pasture is three hundred per cent. better for grazing. But the statements of those who have experimented with their old pastures, give proof that there is a clear profit in the breaking up and planting the hard soil, and preparing it suitably for the use of stock. The more thoroughly the land is worked, the larger the profit; and one of the Committee expressed the opinion that the somewhat remarkable balance in favor of Mr. Fisher's improvement, is attributable to the thorough pulverization of the soil. The figures of Mr. Smith show a handsome net profit for two successive years in the reclaiming of his pasture, and certainly afford encouragement to any one who is hesitating in regard to beginning such an improvement. Gen. Pond has for a series of years been in the practice of improving one acre each year of the rough soil, so that he now is able to exhibit an improvement upon a large scale. His returns, taken in the aggregate, give a profit also for the two last years, and he is of the opinion that he can pasture three times the number of cattle where he has made the change. The Committee need only refer to the favorable returns made by the applicant for premiums, as inducements to those who may be withheld, through fearing cost, from making similar

trials, and they cannot but hope that many will be found to follow such good examples. The Committee award:—

To Walter H. Fisher, of Franklin, the first premium of \$10.

To Abner L. Smith, of Dover, the second premium of \$5.

For the Committee,

BENJ. G. KIMBALL, *Chairman.*

Needham, Nov. 30, 1861.

STATEMENT OF WALTER H. FISHER.

The piece of pasture land that I offer for premium, contains about fifteen acres. I will now give you a description of the pasture as it was when I commenced operations. None of it had been disturbed by the plow for at least an age, and part of it never. Most of it was in a very rough condition. It was covered with black moss, laurel and bushes, and was stony. The whole would not pasture four head of cattle. It was supposed that a portion of it never could be plowed.

The character of the soil is somewhat varied. There are three high bluffs or gravelly knolls which I did not think it advisable to meddle with, containing perhaps one acre. In one corner of the pasture there is about one acre of rough, rocky swale, a portion of which I have plowed, drained and re-seeded.

The soil generally is of a rich, strong loam, being, as I think, on a very retentive subsoil. In June, 1860, I commenced by plowing about six acres (with one yoke of strong, heavy cattle) which lay until August, when I gave it a good harrowing. In the month of November I picked off all the loose stones, and cross plowed, plowing it a little deeper than at the first time. Where there were bushes and bogs I burned all that I could. In the spring of 1861 I harrowed it with the Bucklin harrow, and then plowed for planting. I then planted about five acres in corn, at the distance of three and one-half feet each way, manuring with well rotted stable manure, one shovelful to the hill. Before the corn came up I applied a small handful of wood ashes to the hills. I also planted about two acres with potatoes, a part of which was manured in the hill with coarse stable manure, the rest with plaster and ashes. The corn was hoed and cultivated twice; the potatoes once. In the fall of 1860 I sowed about one and a half acres in rye, and seeded to grass.

The balance was plowed up in June, 1861, and I am preparing for a crop in the same manner for next year.

The two acres of potatoes were dug in September, and the land seeded to grass, which looks very promising for a crop at the pres-

ent time. My object was a thorough renovation, whether my first crop paid or not.

My account with the pasture is as follows:—

Expenses.

One and one-half acres sowed to rye.	
Plowing and harrowing,	\$ 5.00
Rye and grass seed,	2.00
Cutting and threshing,	5.50
Plowing and harrowing two acres for potatoes,	6.00
Seed potatoes,	10.00
Furrowing and planting,	5.00
Hoeing once,	2.50
Harvesting,	10.00
Manure, plaster and ashes,	17.25
Five acres of corn, pumpkins and beans.	
Plowing and harrowing three times,	30.75
Manure and ashes,	50.00
Furrowing and planting,	15.00
Hoeing twice, and harvesting,	22.00
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Total amount of expenses,	\$181.00

Profits.

By 13 bushels of rye,	\$13.00
1500 pounds straw,	7.50
156 bushels large potatoes, 40 cts per. bushel,	61.60
38 bushels small potatoes, 25 cts. per bushel,	9.50
180 baskets sound corn,	90.00
52 baskets soft corn,	12.00
13 loads pumpkins,	13.00
3 bushels of beans,	7.50
2 tons stalks,	20.00
2 tons husks,	12.00
	<hr/>
Total amount of profit,	\$246.10
Deduct expenses,	181.00
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Leaves a profit of	\$65.10

In conclusion I would say that the fear of making my report too lengthy has prevented me from giving you a more full detail of my process of cultivation. I leave the Committee to judge whether it has been thorough and safe for farmers to follow. I think I can truthfully say my object has been fully attained, which was a thorough renovation of worthless pasture, with the least outlay of money.

WALTER H. FISHER.

Franklin, Nov. 23, 1861.

STATEMENT OF A. L. SMITH.

In continuation of the experiment on old pasture lands, I would respectfully submit the following statement. Of the four acres under cultivation, two acres were planted with corn; a half acre with Davis' seedling potatoes; 140 rods were sown with barley; and 100 rods with wheat. One bushel of red-top and a half-bushel of herds grass seed were sown with the wheat and barley. All the grain crops were affected by the drouth, and especially the wheat and barley. The remainder of the field will be laid down to grass the coming season. The bushes appear to be effectually killed out.

The expenses were as follows:

To plowing four acres,	\$8.00
“ furrowing two and a half acres one way,	1.50
“ 6 cords compost manure for corn,	30.00
“ 1½ cords strawy manure for potatoes,	5.25
“ applying manure and planting,	12.50
“ seed corn, 65 cts.; 4 bushels seed potatoes, 50 cts.,	2.65
“ pumpkin seeds, . . . . .	.12
“ cultivating and hoeing once,	5.00
“ cutting and binding stalks,	3.00
“ cutting corn and carting,	3.50
“ harvesting potatoes,	2.50
“ 1 bushel and 2 quarts wheat,	2.12
“ 1½ bushels barley,	1.35
“ sowing and harrowing barley and wheat, . . . . .	.75
“ harvesting barley and wheat,	2.50
“ threshing “ “	1.40
	<hr/>
	\$82.14

The value of the crops is as follows:

By 70 bushels corn, at 90 cts.,	\$63.00
“ stalks and husks,	18.00
“ 63 bushels large potatoes, at 40 cts.,	25.20
“ 5 “ small “ at 20 cts.,	1.00
“ 5 “ wheat,	10.00
“ 700 pounds wheat straw, at 40 cts.,	2.80
“ 9 bushels barley, at 90 cts.,	8.10
“ barley straw,	4.00
“ 3 loads pumpkins,	3.00
	<hr/>
	135.10
Deduct expenses,	82.14
	<hr/>
Net profit,	\$52.96

In justice to myself I should not charge anything for husking the corn, as it was all husked evenings, after the day's work was done.

Respectfully yours, A. L. SMITH.
Dover, Nov. 25, 1861.

STATEMENT OF GEN. LUCAS POND.

Mr. KIMBALL—Agreeably to your request, I will give my views on the renovation of old pastures. After an experience of twenty years in different ways, I have come to the conclusion that the one I entered for premium is the best, as it pays all the cost of labor and manure, and leaves the land in better condition than any other way that I have tried.

My practice has been to plow the pasture in the spring as soon as the frost is out of the ground and let it lie until it is dry; then harrow it over and let it lie until I have planted my corn; then harrow it well and furrow it one way $3\frac{1}{2}$ feet apart, with a good sized plow going twice in a row in order to make a deep, wide furrow. I then put the manure in the rows a little less than two feet apart, a good shovelful in a place. I select middle-sized potatoes, cut them in the middle, and place them on opposite sides of the manure, and cover them by placing the sods first round the hill, and then put on dirt enough to make a good large hill. In June I plow and hoe them once only. I use for manure two parts of stable manure, and one part coal dirt that has been used for burning charcoal; if that cannot be procured I would recommend meadow mud as preferable to loam. The next spring I lay it down in the usual way with oats, barley or rye, as the ground is best suited for. I prefer clover and Rhode Island for grass seed.

Statement of expense of labor, manure, &c., for one acre the present year:

Plowing,	\$5.00
Harrowing,	2.00
Planting,	10.00
Hoeing once,	3.00
Manure,	30.00
Digging potatoes,	18.00
Ten bushels of potatoes for seed,	4.00
	\$72.00
<i>Income.</i> —188 bushels of potatoes at 40 cents per bushel,	75.20
Balance in favor of crop,	\$ 3.20

Statement of expense of laying down an acre that was planted last year, adjoining the above:

Plowing, sowing and harrowing,	\$4.00
Two and a half bushels of oats,	1.00
Grass seed,	1.75
Harvesting and threshing,	8.00

\$14.75

Income.—35 bushels of oats, at 45 cts. per bush., 15.75
 25 hundred of straw, at 50 “ “ hund., 12.50

\$28.25

Expense, 14.75

Balance in favor of crop, \$13.50

Balance “ first crop, 3.20

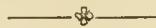
Balance in favor of both crops, 16.70

The above statement is as near correct as I could make it.

Very respectfully yours,

LUCAS POND.

Wrentham, Nov. 10, 1861.



REPORT ON GRAIN CROPS.

The Committee on Grain Crops report, that their duties have not been arduous. The few fields to which their attention has been called, although of very fair appearance, have been surpassed by many others in the County, whose luxuriant growth alone has attracted their attention—the owners thereof having no desire to shine on the records of the Norfolk Agricultural Society. The Committee would urge this portion of the farmers of the County to take a philanthropic view of the matter, and furnish to the Society the ensuing year a detailed statement of their process. From an examination of the reports of some of the oldest agricultural societies, and from their own recollections, the Committee are of the opinion, that while great progress has been made in most other pursuits, the process of raising grain among the best farmers, and the results, do not vary materially from those prevalent thirty years ago.

It is the opinion of many that the custom of charging the corn crop with but half the manure applied, is erroneous, a much larger portion being absorbed; and we notice that in the state-

ments given of the cost of subsequent crops of small grains, charges for manures left over from the preceding crop are seldom made.

The best mode of applying the manure, too, is a question of vast importance; and the Committee would advise all those who compete for premiums the ensuing year to apply to a portion of their field, manure in the hill only, and to the other a like application in the hill, with the addition of a good broad-cast dressing; and to note accurately the products, both in grain and fodder.

The specimens of grain displayed at the hall were very fine, and too numerous to particularize. We will only mention that the Java Wheat, from a five-acre field of E. R. Andrews, of West Roxbury, and the Spring Rye, from John Sias, of Milton, were of marked excellence.

We award to B. N. Sawin, of Dover, the first premium of eight dollars, for his field of Indian Corn.

To Aaron Bacon, of Dover, the first premium on his crop of Wheat—six dollars.

To B. N. Sawin, of Dover, the second premium on his crop of Wheat—"Harris' Treatise on Insects."

H. L. STONE, *Chairman.*

Grantville, Dec. 16, 1861.

STATEMENTS OF B. N. SAWIN.

INDIAN CORN.

My experiment in raising Indian Corn was made on one acre and eighty-four rods, as measured by R. Mansfield, Esq., the soil of a sandy loam, on which I raised corn last year.

The first week in May last I plowed the land once, with two horses, (plowed eight inches deep,) then carted on and spread seven cords of unfermented manure from the barn cellar, and harrowed it in with the Bucklin Harrow. I furrowed with a plow one way, and marked one way with cultivator teeth, making the hills two feet six inches apart, from the centre each way. May 16th I planted the whole field, put nothing in the hill but corn; a cultivator was used between the rows twice; the corn was raked with a garden rake, leaving the surface level; the top stalks were cut September 7th; the corn was harvested from October 14th to 20th. The Committee selected two rods in different parts of the field, which they considered a fair average of the field, which yielded 19 pounds *shelled* corn to the rod, and allowing 56 pounds to the bushel, gave 82 11-14 bushels. I found by measurement 130 baskets of ears—one basket shelled 20 quarts, which gave 81 1-14 bushels of shelled corn.

The expense of the crop was as follows :

Interest on land and taxes,	\$5.55
Plowing with two horses ten hours,	3.30
Carting manure and spreading,	3.78
Seven cords manure, at \$5.00,	35.00
Harrowing, \$1.10, and Furrowing, .77,	1.87
May 16th. Planting, one man ten hours,	1.50
17½ quarts seed, . . . . .	.70
June 9th. To cultivating, . . . . .	.60
“ 21st. “ raking one day,	1.25
July 9th, 10th. Cultivating and raking,	1.96
Cutting and binding stalks,	2.78
Harvesting corn,	6.65
	<hr/>
Total,	\$64.94

The value of the crop is as follows :

371 bunches stalks, at 2 cents each,	7.42
3,100 pounds husks, at 30 cents,	9.30
81 1-4 bushels corn, at \$1.00 per bushel,	81.25
Cr. By one-half of manure unspent,	17.50
	<hr/>
	115.47
Deduct cost of crop,	64.94
	<hr/>
Leaves a net profit of	\$50.53

WHEAT.

My experiment in raising Wheat was made on eighty-five rods of land, the soil consisting of a sandy loam, sub-soil clayey or hard-pan. It has been improved as a mowing field seven years, without any dressing—in 1859 was planted with potatoes, put at the rate of four cords of manure to the acre—in 1860 it was plowed, and planted with rutabagas and potatoes, with five cords of manure to the acre. The 2d and 3d days of May last I ploughed the land with one horse, and sowed one bushel of Java wheat.

Expenses of Crop.

To interest on land and taxes,	\$1.68
“ ploughing, .75, sowing and harrowing, .62,	1.37
“ one bushel seed,	2.00
Aug. 16th. To harvesting,	1.12
“ 23d. “ threshing and cleaning,	1.50
	<hr/>
	\$7.67

<i>Value of Crop.</i>	
7 1-8 bushels wheat, at \$2.00,	\$14.25
758 pounds straw,	4.86
	<hr/>
	19.11
Deduct cost,	7.67
	<hr/>
Leaves a net profit of	\$11.44
Yours respectfully,	B. N. SAWIN.
<i>Dover, Nov. 13, 1861.</i>	

STATEMENT OF AARON BACON.

The Wheat field entered by me for premium measures 147 rods. The soil is black, gravelly loam. It was planted with eorn in 1859—and 1860, ploughed and sowed 2 1-4 bushels of Java wheat, the last week in April.

<i>Expenses of Crop.</i>	
Plowing once,	\$1.87
Sowing,	4.50
Cradling and binding,	2.00
Threshing and cleaning,	2.00
Interest and taxes on land,	5.00
	<hr/>
	\$15.37
<i>Value of Crop.</i>	
10 1-2 bushels of wheat,	\$21.00
1,560 pounds of straw,	7.80
	<hr/>
	28.80
Deduct expenses,	15.37
	<hr/>
Net profit,	13.43
<i>Dover, Nov. 11, 1861.</i>	AARON BACON.



REPORT ON MIXED CROPS.

The Committee on mixed crops viewed the crops presented by Dr. W. T. G. Morton, of Needham, and recommend that the Society award him the premium of \$4.

For the Committee,

ELISHA WHITE, *Chairman.*

Canton, Nov. 25, 1861.

STATEMENT OF DR. MORTON.

In order to ascertain whether or not white beans and potatoes could be grown together profitably, I selected one half acre of good sandy loam which had been in corn the year before—this having been plowed the fall before—7 cords of barn-yard and pig-stye manure and mud were applied, one half in the hill and one half spread broadcast and harrowed in. May 9th the field was furrowed out both ways the usual width, and planted with Jackson white potatoes. The potatoes were hoed twice, the last time being June 23d, and beans planted between each hill at the same time. August 7th, 28 barrels of potatoes were marketed from this field, at \$1.75 per barrel. The beans were hoed at the same time the potatoes were dug, and turnips sowed. We harvested 7 bushels of beans and 100 bushels of turnips.

The account of expense and products is annexed.

Respectfully submitted,

W. T. G. MORTON,
 “*Etherton Cottage,*” *West Needham.*

—

Account of Mixed Crops.

Ploughing land,	\$7.00
7 cords compost,	34.00
Composting, carting out, spreading and har- rowing,	16.00
Planting,	5.50
Seed,	5.00
Cultivating and hoeing,	10.00
Harvesting,	7.50
	\$84.50
<i>Cr.</i>	
By 28 barrels of potatoes, \$1.75,	\$49.00
“ 108 bushels turnips, 10 cts.,	10.00
“ 7 bushels beans, \$1.75,	12.25
“ one half manure,	12.00
	\$83.25
Deduct expenses,	84.50
	\$1.25
Loss,	\$1.25

REPORT ON FRUIT.

The quantity of Fruit exhibited this year was less than usual, although the quality was excellent. Nature has given us frowns as well as smiles. The early frosts of the autumn of last year, which injured the unripened wood and tender shoots of thrifty trees, and the severely cold weather and sudden changes of the 7th and 8th of last February, which destroyed a very large proportion of the fruit blossoms of New England, were alike beyond the control of the horticulturist. The cherry, the peach and the plum have borne us no fruit. Even the hardy currant had its blossoms destroyed in exposed situations above the snow line. Apples and pears have entirely failed in most localities, although in some favored and sheltered gardens near the sea-shore, they have fairly rewarded the labor and care bestowed upon them.

Foremost among our contributors of apples for many years, stood Thaddeus Clapp, of Dorchester, who has, since our last exhibition, passed on before us to other labors; but the noble old trees, among which he passed his quiet and beautiful life, have not failed this year to bear witness again to his thoughtful care. As your Committee were about to enter upon their labors—fearing to find only a beggarly account of empty boxes—they were surprised and cheered to see the long table covered with apples from that well-sheltered orchard near Boston line, as fair and ruddy in appearance and as redolent of fragrance as though there had never been frost, or unfavorable weather, or noxious insects; and we stood a little while silently by the tempting display, feeling how fitting a memorial it was of our departed brother. May the apple blossoms drop lightly on his grave!

There were tempting displays of pears from several contributors, including some eighty varieties from the President of the Society, who declined as usual, to compete for the premiums; very fine foreign grapes grown by Charles B. Shaw, Esq., of Dedham; and native grapes from many contributors, comprising fine specimens of the Concord, Diana, Delaware, Rebecca, Hartford Prolific, and others. Among the new varieties of great promise, we wish to call attention particularly to the new hybrids exhibited by Col. Wilder, called Rogers' Hardy—Nos. 3, 4, 15, 19 and 33. The many excellent varieties of this fruit that have been produced in the last few years, show that we are on the right track in this branch of horticulture.

For contributions not otherwise mentioned, the Committee would thankfully mention B. F. Baker, James Prince and Wm. H. Mam,

of Dedham ; Lucas Pond, of Wrentham ; Robert and John Mansfield, of West Needham ; J. W. Brooks, of Milton, (fine display of Concord, Delaware, Rebecca, Diana and Hartford Prolific grapes ;) Otis Dean, of Foxboro' ; Cheever Newhall, of Dorchester, (fine apples and pears ;) H. L. Stone, of Grantville ; Henry Goulding, of Dover ; and Adoniram White, of Randolph. F. F. Hassam, of Dorchester, exhibited a case containing 130 specimens of fruit—modelled in some composition—very correct and beautiful imitations of nature.

PREMIUMS.

For the best collection of the most approved standard Apples, not less than twelve specimens of each variety, (33 varieties,)—1st premium to Frederick Clapp, of Dorchester, \$4. 2d and 3d premiums not awarded.

For the best single dish of not less than twelve*—a premium of \$2 to Frederick Clapp, of Dorchester.

For the best collection of the most approved standard Pears, not less than twelve specimens of each variety—1st premium of \$4 to Frederick Clapp, of Dorchester.

2d premium of \$3 to Francis Dana, of Roxbury.

3d premium of \$2 to Walker & Co., of Roxbury.

For the best single dish of Pears, † twelve specimens—To Alfred Clapp, of Dorchester, \$2.

To John H. B. Thayer, of Dedham, for a dish of very fine Bartlett Pears, and to J. W. Page, of Jamaica Plain—for two dishes, one of Urbaniste and one of Seckel Pears, we recommend a copy of "Downing's Fruit and Fruit Trees."

For the best exhibition of foreign Grapes—1st premium of \$4 to Charles B. Shaw, of Dedham.

For the best collection of native Grapes—1st premium of \$3 to George Davenport, of Dedham.

For the Committee,

CHARLES A. HEWINS, *Chairman.*

West Roxbury, Sept. 25, 1861.

* Gravenstein. † Duchess d' Angouleme.

REPORT ON FLOWERS.

“————— Who can paint
 Like Nature? Can imagination boast
 Amid its gay creation, hues like hers?
 Or can it mix them with that matchless skill,
 And lose them in each other, as appears
 In every bud that blows?”

The exhibition of Flowers was generally admitted to excel that of any previous year.

The collection might have been divided into three classes:— First, the splendid exotics from the hot-house, many of which were of extraordinary beauty.

We embrace this opportunity to express our obligations to those gentlemen who offer their rare, curious and expensive plants for exhibition, at our festival.

Second, numerous varieties of roses, verbenas, pansies, dahlias, hollyhocks, and other flowers, that are commonly grown in florist's gardens. Among these were many that challenge our admiration for their size, symmetry, colors and fragrance; and we are gratified to perceive that year by year the number and comparative excellence of this class are increased.

Third, the wild flowers of this vicinity, including several kinds of asters, gentian, arum, and others equally desirable. This list might be greatly extended with advantage to our exhibition. We hope on future fairs to see more of the charming flowers that grace our woods and meadows.

Fortunately we have no prejudices to contend against in the cultivation and show of flowers. Here and there we may find a man who would plow up the domestic flower garden and plant it with potatoes; but this class of men is nearly extinct. We have learned that whatever makes home attractive, tends to promote virtue and increase happiness; tends also to retain our youths within the reach of domestic influences, and to bind them to the scenes and duties of their early lives. Who can doubt that our homes are made more cheerful and interesting by the flowers, few and humble though they may be, that are tended by our families? Their culture is a source of innocent pleasure; nor is it without intellectual activity in devising ways and means of increasing their size, beauty, or fragrance. Why should it not be so, when the love of flowers is one of the earliest developed sentiments of childhood? The young child gratifies his sense of the beautiful by eagerly grasping at a flower. At a maturer age we show the same sentiment by adorning our houses and the persons of those we love with these fair creations. We seem instinctively prompted to decorate the social board, the altar of religion, and the bier of

innocence and loveliness, with these frail yet touching symbols of purity. Possibly, too, they may have a higher end—appealing to our sensibility as revelations of the divine Ideal in these limited forms, speaking of Him in whose mind all ideas of the Beautiful originate, and foreshadowing unfading and eternal realities. Or as Ruckert sings :

“ The flowers will tell to thee a sacred, mystic story,
How moistened earthly dust can wear celestial glory ;
On thousand stems is found the love inscription graven,—
How beautiful is earth when it can image Heaven ! ”

ROBERT WATT, *Chairman.*

West Roxbury, Nov. 28, 1861.



REPORT ON BREAD.

Wheat Bread.

First premium to Mrs. Lewis Pond, of Foxboro', . . .	\$3.00
Second premium to Mrs. E. B. Metcalf, of Franklin, . . .	2.00

Wheat and Indian.

First premium to Mrs. C. C. Sewall, of Medfield, . . .	3.00
Second premium to Mrs. Nathan Longfellow, of Needham, . . .	2.00

Unbolted Wheat.

First premium to Mrs. Nathan Longfellow, of Needham, . . .	3.00
Second premium to Miss Mary Longfellow (fifteen years old), of Needham,	2.00

Rye and Indian.

First premium to Miss H. L. Pond, of Wrentham, . . .	3.00
Second premium to Mrs. Nathan Longfellow, of Needham, . . .	2.00

EDMUND QUINCY, *Chairman.*

Dedham, Sept. 25, 1861.



REPORT ON THE DAIRY.

Butter—best produce on the farm.

Second premium to E. T. Everett, of Wrentham, . . .	\$8.00
Third premium to John Mansfield, of Needham, . . .	5.00

Best box of twelve pounds.

First premium to Warren Sawin, of Dover,	5.00
Second premium to Lucy Green, of Dedham,	3.00
Third premium to Mrs. Nathan Longfellow, of Needham, Flint's Treatise on Dairy Farming.	

JEREMIAH W. GAY, *Chairman.*

Dedham, Sept. 25, 1861.



REPORT ON VEGETABLES.

The number of exhibitors in this department was thirty-three.

The specimens of vegetables and roots exhibited made a very respectable appearance, and were of superior character, considering the severe drought of the season.

To John Sias, of Milton, for the best collection and variety of vegetables, consisting of one hundred and two kinds, the Committee award the first premium—a silver cup of the value of ten dollars.

To W. T. G. Morton, of Needham, and A. D. Weld, of West Roxbury, each the Society's diploma and a gratuity of one dollar.

To Edward R. Andrews, for his Yellow Globe Beets, raised from seed imported by the Massachusetts Society for Promoting Agriculture—a diploma.

To A. D. Webber, of West Needham, for six squashes raised from one seed, whose united weight was 695 1-2 lbs.—a diploma and French's Treatise on Drainage.

To William Bullard, 2d, of Dedham, for the best collection of potatoes—a premium of five dollars.

To E. H. Blackman, of Sharon, a gratuity of five dollars, for four varieties of seedling potatoes—three years from seed—accompanied by a written statement. The specimens exhibited by Mr. Blackman are quite promising; and if, on further trial, they continue to increase in size, there is reason to hope that one or more of the varieties may prove to be superior to sorts now cultivated.

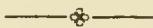
Many other contributors deserve the thanks of the Society—especially B. White, of Milton, for a fine display of White Mountain Potatoes.

In conclusion, the Committee would urge the farmers of Old Norfolk to have a little more ambition in the experiment of raising vegetables and roots. The Society offers to you thirty dollars a year in premiums for certain varieties, for which not a single dol-

lar has been awarded for the last three years. Will you not wake up, and make the Society pay over to you the full amount of premiums which they offer to you for the next year?

EPHRAIM WILSON, *Chairman.*

Dover, Sept. 25, 1861.

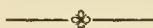


REPORT ON CRANBERRIES.

First premium to Nathan Longfellow, of Needham, . . . \$4.00
 Second premium to Hannah P. McIntosh, of Needham, . . . 3.00

ROBERT PORTER, *Chairman.*

Stoughton, Sept. 25, 1861.



REPORT ON BEES AND HONEY.

The Committee on Bees and Honey have examined two boxes of honey, presented by Mr. Mirick P. Sumner, of Dedham, and award to him the first premium of \$2.00.

Mr. R. S. Torrey, of Bangor, Maine, offered for inspection a bee-hive, invented and patented by him, and explained to the Committee its advantages. We were favorably impressed by its adaptation to the uses for which it is designed, its convenience, compactness and economy. We understand that it has given general satisfaction wherever it has been tried, and we advise the members of our Society and the public who are interested in the raising of bees, to examine it.

We award to Mr. Torrey the Society's diploma.

JOHN M. MERRICK, *Chairman.*

Walpole, Sept. 25, 1861.



REPORT ON HORSES.

The Committee on Horses submit the following report:

While we take pleasure in stating that some of the animals exhibited on this occasion,—particularly some of the Stallions, Mares, Colts and Fillies,—were of a character which would do credit to any exhibition, we cannot withhold the expression of our regret, that, considering the position occupied by the horse, both

in regard to practical utility and luxury, or amusement, so limited a representation of the stock of the County should have been made. We feel confident that the number of good horses within the territory comprised by the Society is such as to admit of a display far exceeding in extent and interest any that has hitherto been seen here. In reference to the accomplishment of this important object, we venture to offer a few suggestions.

More attention is required to secure from every town, suitable Trustees. If some man could be obtained in each town who would feel so much interest in the affairs of the Society that he would exert himself to induce the members to do all that is practicable, the result would be highly beneficial. A more full representation is desirable at the meetings for the appointment of Committees, and each member should feel under obligations to act on the maxim—"The right man in the right place."

We would further suggest that some alterations might be made advantageously, in regard to the management of this department. The Committees on the various classes have found themselves much incommoded, in the limited time at their disposal, by the pressure of their duties. To remedy this, we would propose that there be no public exhibition of speed on the first day of the show, and that the several Committees in this department devote the day to the examination of stock and the settlement of awards. It would be necessary that the members of the Committees be punctual in their attendance on this day, and with due promptitude in this point, and proper industry in the performance of their labors, the business might be done in a judicious and satisfactory manner. The importance of every competitor being promptly on the ground must be obvious to all. Competitors could facilitate the labors of the Committees by calling their attention, at a proper time, to the stock which they are to examine.

There are many important matters connected with the breeding and management of horses which demand attention; but the space proper to be occupied by this report does not admit of their discussion. It is hoped that the subject will in due time receive the consideration to which it is entitled, by a special essay in the Society's Transactions.

The Committee award the following premiums:

Stallions.—Thorough Bred and Part Thorough Bred, Four years old and upwards.

First premium of \$10 and diploma to E. P. Carpenter, of Foxboro', for his blood bay "Black Hawk."

Third premium of \$5 to Sam'l John Capen, of Dorchester, for his Black Hawk and Messenger.

Three years old.

Second premium of \$3 to Walter D. Ray, of Medway, for his Morgan colt, "General Putnam."

Two years old.

First premium to Oliver Dean, of Canton, for his young Black Hawk—\$3 and diploma.

Second premium to Charles F. Howard, of Foxboro', for his chestnut Black Hawk—\$2.

MARES AND FILLIES.

Thorough Bred and Part Thorough Bred—Three years old.

Second premium of \$3 to Samuel J. Capen, of Dorchester, for his Trustee and Messenger.

Two years old.

First premium of \$3 and diploma to J. H. Billings, of West Roxbury, for his Trustee and Balrownie.

Second premium of \$2 to Henry Blaney, of Brookline, for his Black Hawk.

Breed Mares of all work, with Foals at side.

First premium of \$7 and diploma to J. Pritchard, of West Roxbury, for his "Prince Albert and Balrownie."

Second premium of \$5 to S. B. Scott, of Franklin, for his Morgan and Messenger.

Third premium of \$3 to H. B. Fisher, of Wrentham, for his Morgan and Messenger.

Gratuity of \$3 to James McLain, of Dedham, for mare and colt—Morgan.

Three years old Fillies.

First premium of \$5 and diploma to E. P. Carpenter, of Foxboro', for his "Ethan Allen."

Second premium of \$3 to Calvin Richards, of Dover, for his "Abdallah."

Third premium of \$2 to L. B. Jones, of Dorchester, for his "Empire."

Two years old Fillies.

First Premium of \$5 to S. J. Capen, of Dorchester, for his "Flying Morgan."

Third premium of \$2 to Matthew Andrews, of South Walpole, for his "Boston."

One year old Fillies.

First premium of \$5 and diploma to E. P. Carpenter, of Foxboro', for his "Ethan Allen."

Second premium of \$3 to S. L. Thayer, of Stoughton, for his "Green Mountain."

Third premium of \$2 to Benjamin Neal, of Walpole, for his "Morgan."

Matched Horses.

First premium of \$10 and diploma to Thomas Adams, of Roxbury—Hambletonian and Messenger.

Gratuity of \$10 and diploma to Richard Holmes, of Roxbury. The Committee regret that they could not give Mr. Holmes a premium, as his horses were not of the required height.

Family Horses.

First premium of \$8 and diploma to B. Huntoon, of Canton—Grey Messenger.

Second premium of \$6 to Alexander Dickinson, of Jamaica Plain—Morgan Mare.

Third premium of \$4 to Dr. J. P. Paine, of Dedham—Black Roan, three-fourths thorough bred.

Roadsters.

First premium of \$8 and diploma to John M. Gay, of Stoughton—"St. Lawrence."

Second premium of \$6 to Henry Jones, of Stoughton.

Third premium of \$4 to T. W. Carpenter, of Foxboro'—Gray Gelding, half Morgan.

Gratuity of \$5, and the thanks of the Committee to B. R. Ballou, of Stoughton, for his Pacer.

Ponies.

First premium of \$3 to Hiram Gay, of Stoughton.

Second premium of \$2 to J. R. Gay, of Stoughton.

Diploma to Capt. Colton, of Newton, for his Mexican Pony.

Saddle Horses.

First premium of \$6 and diploma to E. R. Andrews, of West Roxbury.

Second premium of \$4 to Joseph Fisher, of West Dedham.

Single Farm or Draught Horses.

First premium of \$7 and diploma to James McLain, of Dedham.

Second premium of \$5 to Obed Baker, of West Dedham.

Pairs of Farm or Team Horses.

First premium of \$7 and diploma to A. T. Stearns, of Dorchester—pair of Stallions.

Equestrianism.

First premium of \$10 to Miss Hattie Carroll, of Dedham.
 Second premium of \$8 to Miss Lizzie Mercer, of Dedham.
 Third premium of \$6 to Miss Anna Metcalf, of Franklin.
 Diploma to Miss Gay, of Stoughton.

A. B. BALCH, *Chairman.*

Medfield, Dec. 1, 1861.



REPORT ON BULLS.

Whole number of entries, eleven.

Jersey—To G. G. North, of West Roxbury, the Society's diploma, for his fine Jersey bull, he having received the Society's first premium.

Ayrshire—First premium of \$5 to E. R. Andrews, of West Roxbury.

Second premium of \$3 to Henry Goulding, of Dover.

Devon—First premium of \$5 to Hiram B. Fisher, of Wrentham.

Kerry—First premium of \$5 to A. W. Austin, of West Roxbury.

Native or Grade—First premium of \$6 to H. L. Stone, of Grantville, for his Hungarian and Ayrshire bull, raised by himself.

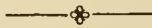
Second premium of \$3 to J. W. Gay, of Dedham, for his Jamestown bull.

Bull Calves—First premium of \$3 to W. T. G. Morton, of West Needham, for his Jersey bull calf, bred and raised by himself.

Second premium of \$2 to E. P. Carpenter, of Foxboro', for his Jersey bull calf four months old.

A. S. DRAKE, *Chairman.*

Sharon, Sept. 25, 1861.



REPORT ON COWS.

Milch.

Whole number of contributors, eight.

Ayrshire, 7 years—First premium of \$10 to Eliphalet Stone, of Dedham.

Durham and Ayrshire—Third premium of \$6 to W. T. G. Morton, of West Needham.

Cows.

Kerry—First premium of \$5 to A. W. Austin, of West Roxbury.

Jersey, 9 years—Second premium of \$4 to W. T. G. Morton, of West Needham.

Grade, 3 years—Second premium of \$4 to James McLain, of Dedham.

Third premium of \$3 to Eben Wight, of Dedham.

For the Committee,

J. W. GAY, *Chairman.*

Dedham, Sept. 25, 1861.

STATEMENT OF ARTHUR W. AUSTIN.

Mr. Austin has furnished, under date of Jan. 14th, 1862, the following facts in regard to his Kerry cattle :

“ I often had the milk measured during the past summer, and found it did not go below sixty quarts a day for five heifers of the first importation. On the 31st of May, the five alluded to, having in that month produced their first calves, gave 60 1-3 quarts, or an average of 12 quarts each. On the 14th of June, the same five gave 62 3-4 quarts. Three of them gave a fraction over 14 quarts each. I weighed the morning's milk, and the 31 2-3 quarts, wine measure, weighed 67 1-4 pounds. Of the two last imported heifers, one is fully equal to either of those of the first importation, in proportion to age, she being a year younger, and having given with her first calf over 10 quarts per day during the summer. I do not think the other one comes up to the standard, but she holds out well, and gives rich milk. The milk of all of them is of the first quality as to richness. Butter is obtained from the cream in a very short time. Late in October it required less than five minutes churning, by the clock, to bring the butter. A lady who sends for six quarts once a week, and who has had much experience, pronounces the production of cream marvellous. She says she skims it several times over. I have had excellent milkers of different breeds, and have always been particular as to *quality* more than *quantity*; but I obtain from these Kerry heifers as large a quantity of milk as could reasonably be expected, considering their size and age; and the quality certainly surpasses, on the average, any milk it has been my fortune to see. I have now, besides the imported stock, three pure-blood bulls, which will be a year old in the spring and summer of 1862, three pure-blood heifers and one steer of the same age,

one half-blood Kerry and Shetland steer, and three half-blood Kerry heifers. All have improved wonderfully under my winter regimen. We think all the imported heifers are in calf to Mountaineer, who is in fine condition."



REPORT ON HEIFERS.

Whole number of contributors, sixteen.

First premium of \$3 to W. T. G. Morton, of Needham, for his Jersey heifer.

Second premium of \$2 to P. O'Neil, of West Roxbury, for his Jersey heifer.

Native or Grade, 2 years old—First premium of \$3 to Henry Goulding, of Dover, for his Grade heifer.

Second premium of \$2 to William Lynch, of Dedham, for his native heifer.

Third premium of \$1 to John Gardner, of Dedham, for his grade heifer.

Heifers of all grades, 1 year old—To Jonathan Avery, of Needham, for grade heifer Jamestown—\$2.

To S. P. Mack, of Dorchester, for his Alderney heifer, 15 months old—\$1.

Heifers in milk—First premium of \$6 to Eliphalet Stone, of Dedham, for his Jamestown heifer.

Gratuity of \$3 to John Cawley, of Dedham, for his Jamestown heifer.

Gratuity of \$2 to Henry Grew, of Dorchester, for his grade heifer.

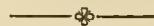
Gratuity of \$2 to E. F. Head, of West Roxbury, for his Devon and Kerry cow.

Gratuity of \$1 to Amos Barnes, of West Roxbury, for his grade heifer.

The above being all that the Committee consider have complied with the rules of the Society as regards written statements.

SAMUEL COOK, *Chairman.*

Milton, Sept. 25, 1861.



REPORT ON WORKING OXEN.

The Committee on Working Oxen submit the following report :

The whole number of entries for trial was four, including one pair of horses owned by Silas G. Williams, of Needham, which in drawing exhibited great strength. As no suitable preparation

had been made to test their strength, they were hitched to a stone drag and drew the whole load with as much ease as did the oxen on a cart. We recommend that in future, horses be allowed to compete with oxen, by an equal load on a cart.

The oxen exhibited great bottom in drawing, but in backing it was hardly satisfactory, owing, as we think, to defective training and the want of skill on the part of their drivers. Unnecessary whipping, and especially pounding about the head or on any other parts of the body, are not only unwise, but barbarous, in the extreme; and no man who practices such cruelty, or allows it in his driver, should be entitled to a premium. If they have been properly trained and are skilfully driven, the patient oxen will do all that can be reasonably required.

We award the following premiums:

First premium of \$8 to Benjamin White, of Milton.

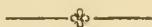
Second premium of \$6 to Luther Eaton, of Dedham.

Third premium of \$4 to Silas G. Williams, of Needham.

Fourth premium of \$3 to Horace and Moses Whiting, of Dedham.

WALTER H. FISHER, *Chairman*.

Franklin, Nov. 25, 1861.



REPORT ON STEERS.

Whole number of entries, three.

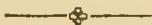
For best pair three-year-old and under four—First premium of \$5 to James P. Clark, of Medway—(raised by him.)

For best pair two-year-old and under three—First premium of \$5 to G. R. and W. R. Mann, of Sharon—(raised by them.)

One pair of twin steers were entered by E. E. Cowles, of Milton, four months old, for which no premium was offered by the Society; but the Committee recommend the award to him of a diploma.

LUTHER EATON, *Chairman*.

Dedham, Sept. 25, 1861.



REPORT ON SHEEP.

The Committee on Sheep would respectfully report that for several years they have come seeking sheep, but finding none. The present year they are happy to find that although the ninety-and-nine may be lost in the wilderness, there was at least one that

has not gone astray. Yet he comes in such questionable shape that your Committee were at a loss where to class him. He was labeled *South Down*; yet it appeared almost a libel upon that innocent race to see one of their number come with such a formidable pair of horns.

We trust that this may be the precursor of better times coming, when the subject of sheep-raising shall receive that attention which its importance demands.

Although precluded by the rules of the Society from awarding a premium, the Committee were unanimous in recommending that a diploma be given to Mr. George E. Holbrook, of North Wrentham, for his fine *Buck*, hoping that another season a sufficient number may return and be presented to entitle the owner to the first premium.

For the Committee,

CHARLES BRECK, *Chairman.*

Milton, Sept. 25, 1861.



REPORT ON SWINE.

[In consequence of the great length of this Report as originally presented, the Secretary has been compelled to avail himself of the permission freely given by the author to omit such portions as would not materially impair its practical value. This necessity would be a subject for deep regret, but for the fact that the report has been published in full by the newspaper press.]

The hog is an animal so interesting in his character, so welcome as an article of food among all Christian nations, and so important as an article of commerce in our own country, that the Committee on Swine can hardly be justified in laying before the intelligent members of this Society *only* a meagre outline of the awards of premiums. A due respect for this Society, a respect for the animals whose singular merits they have learned to appreciate, and a respect for themselves, require that they should say something in relation to the properties and character of this interesting quadruped.

The wild boar, which was formerly found in great numbers in Great Britain and Ireland, and was the undisputed monarch of the boundless forests in France and Germany, and wandered at large through uncultivated districts in all parts of Europe, was the prototype of the hog, which is now domesticated and so generally diffused. This animal was unknown in the New World when America was discovered by Columbus, although an animal of a different species, the peccary, and resembling the hog in general

appearance, and in some other respects, was found and still exists in Mexico and other central parts of the continent.

The wild boar of Europe, fine specimens of which are still found in the wild and woody regions of France and Germany, is a noble animal. Living chiefly on roots and vegetables, he roams fearlessly through the dense forest; and although fierce and formidable when provoked to anger, at other times he is inoffensive, disposed to attend to his own affairs, and let man and all other animals alone. The wild boar for the most part leads a solitary life, and armed with curvilinear tusks, sharp-pointed, and from six inches to a foot in length, is universally feared and shunned, excepting by men in grand hunting parties, armed to the teeth, and accompanied by a peculiarly large and fierce species of dogs.

Hunting the wild boar has ever been considered a deeply exciting and dangerous pastime, in which noblemen and monarchs, and mighty men renowned for courage and expert in warlike exercises, have in all ages delighted to partake. When attacked and roused to fury, the wild boar defends himself with matchless strength, perseverance and energy. With his enormous tusks he rips open the bodies of the dogs, gores the hunter who comes unhappily within his reach, and never yields till overmatched by numbers and pierced in the most vital parts with many wounds.

In a wild state the boar is strong and quick in his movements, and possesses all his senses in full perfection, and the free use of all his limbs. His activity is wonderful, especially when compared with the sluggish and unwieldy monstrosities which constitute the best breeds of hogs among civilized nations in modern times. His fleetness, when pursued in his native haunts by men and dogs, is almost equal to that of the deer or the greyhound; and he actually bounds through the thick forest at a pace which in a rough and uneven country leaves the well-mounted hunter far behind.

Du Chaillu, the celebrated traveller, whose recent explorations in the equatorial regions of Africa, have excited a deep interest among naturalists, says that he met with a species of hog in his rambles, of very large size, and which, when alarmed, would bound *ten yards at a single leap!* And he has often seen them, when hunted, leap across the Ovenga River, which by actual measurement was more than twenty-four feet from shore to shore!

Be that as it will, it is an undoubted fact that the wild boar of Europe is hardly inferior in strength and courage to the tiger or the grizzly bear; but he is a stranger to the treachery and cunning of the one, and the fearful and indiscriminate ferocity of the other. His character, while it excites fear and awe, cannot but command respect.

The flesh of the hog was rejected by the founders of the Jewish and Mahometan religion as unfit for human sustenance; but it is

now regarded as a favorite article of food in every part of Christendom, and the efforts of wise and good men—philanthropists of the true metal—have been for ages directed to the domestication of this animal, improving the breed, changing its habits, and making it more worthy of the glorious fate to which it is destined from its birth.

Although the hog in his natural condition possesses many noble characteristics, these traits, like the virtues of the red man of the western wilderness, disappear and dissolve beneath the sun of civilization! By being domesticated and brought into contact with man, he makes better pork and more of it; but his moral character is lamentably changed for the worse,—he becomes unwieldy, stupid, gluttonous and cowardly, and the more remarkable he is for these unamiable qualities, the more highly he is prized for pork!

The domesticated hog of Great Britain rises by almost imperceptible gradations from the small aboriginal hog of the Highlands of Scotland to an animal of much larger size, yet similar to it in figure, habits and instincts. The limbs are long, its bones comparatively large, its ears thick, flapping and pendulous, its snout attenuated, muscular and powerful, its shoulders low, its back arched and narrow, to the extremity of which is appended a stiff and straight tail. This species of hog is a prolific breeder, and if unmixed with other species, sometimes attains a colossal size. But its flesh is comparatively coarse; it is constitutionally lank, hungry and voracious, consuming enormous quantities of food, slowly accumulating flesh or fat, and making poor compensation in the bulk of its pork for the bulk of its provender. And the old Irish hog closely resembles the worst specimens of the ungainly-looking old British hog.

These unprofitable breeds of hogs were at an early period in our history imported into this country, and widely distributed among our people, and your Committee regret to be obliged to state that this breed, although every year becoming beautifully less, is not yet extinct, as may be seen almost any day by a visit to Brighton market, or by going back into the country and stealing a glimpse into the hog-pen of some farmer who, perhaps, prides himself on his agricultural knowledge, yet sets his face against progress, and who in this enlightened age ought to be ashamed of himself for encouraging the perpetuation of such a breed of swine among us.

In Great Britain, by the laudable efforts of enterprising agriculturists, who have adopted "progress" as their motto, but comparatively few of the old original breed of hogs are found. In many districts these monsters have been entirely obliterated by bold and continued crossing, or exterminated by the adoption of

better breeds. Yet in some places in England, and in more places in Ireland, they are still preferred to every other kind of hog by ignorant or narrow-minded men. We have some such in New England, who see ruin and sacrilege in any deviation from the practice of their fathers.

The Chinese, or, to speak more properly, the Siamese hog has been the main source of the variations and improvements in the modern breeds of British and American swine. These hogs are not large, but are compactly built, with small limbs, thin ears, thick necks, straight backs, few bristles, and with a little head so adjusted to the shoulders that when the animal is fattened, the whole snout except the tip looks as if it were absorbed into or swallowed up by the body. The animal is easily fattened, and its flesh is delicate and delicious.

This variety of the hog, when pure and unmixed, in consequence of its delicacy of structure and tenderness of constitution, is not well adapted for countries where the climate is much colder than Siam; but it has been largely distributed throughout the Indian Archipelago and Polynesia, and many of the eastern and central parts of Asia. Some specimens have been introduced into Europe, particularly into Great Britain, and also into this country, during the present century, and have been instrumental in correcting, to an astonishing extent, the bad properties, and improving the good ones of the aboriginal hogs of Britain and other domesticated descendants of the European wild boar, so far as quantity and quality of pork are concerned. The different breeds of hogs in Europe and America in this progressive age are numerous, and in many cases possess very distinct characteristics. Each particular breed has its advocates, insomuch that it is difficult to say which is the best. The distinguishing marks of excellence, however, are generally conceded to be fineness of bone, thinness of skin, fulness of head and cheek, shortness of neck, compactness of body, depth and expansion of sides, breadth of breast and loins, hardness of constitution, erect and thin ears, a snub-snout, a curly tail, and a strong tendency of the animal at an early age to entomb itself in its own fat.

In one important fact all writers on the subject of pork agree with wonderful unanimity, to wit: that in selecting a pig, particular reference should be had to the character of his tail. If it droops and drags upon the ground, or sticks out straight behind like the marlinspike of an "old salt," reject him at once. Ever choose one which has in his tail a graceful curl or a kink like a fanciful bow in the bonnet of a fashionable belle. Such a tail is indicative of a strong and straight back, a kind and cheerful disposition, and a healthy state, and gives assurance of a hog that will fatten easily and make capital pork. * * * *

Of the different kinds of breeds which are popular at home and abroad at this time, it may be that each one is essentially equal to another in value. Some one is prized for one set of circumstances and some for another; and while few breeds are unprofitable under any circumstances, even the best breeds are not good in all, and a farmer in selecting his breed of pigs should have particular reference to their special fitness, not only to the climate in which they are to be kept, but to the particular management they are to experience, the character of their intended food, and the precise purposes for which they are ultimately destined. One breed may thrive better on a farm situated on an elevated position among rocks and hills, and another on the warm, sunny and sandy plain. One kind may be the best to be closely imprisoned in a pen, and another to be allowed to roam at large in the pastures or the forest; one to furnish pork and hams for family use, and another to supply bacon and pork—to *sell*, like Peter Pindar's razors, which were not even fit to *scrape* a hog.

Therefore let no farmer condemn generally any particular breed, because it does not meet his expectations, and so far as *he* is concerned falls short of the high reputation the breed may have acquired. For this reason a hog possessing the delicate peculiarities of the "Improved Middlesex," or the famous "Suffolk," may be deservedly a favorite with many; the stout and hardy Berkshire with some, and the compact and trim-looking Mackay with others. There also may be some who would prefer the gigantic Cheshire, or the still more elephantine Rudgwick, which sometimes reaches the enormous weight of twelve or fifteen hundred pounds.

There is an old proverb which says "There is no accounting for tastes;" and while some may prefer a short, fat, dumpy animal, which resembles in shape, consistency and vitality, a huge lump of lard, others may prefer, as a mere matter of fancy, one which has some life, energy, mischief and muscle in its composition, which can break through a board fence, or leap over a stone wall, and when hungry can set up a squeal that may be heard for miles.

It should also be borne in mind, that for reasons well known to persons conversant with rearing stock, one breed of pigs will not retain its excellence forever. It will inevitably deteriorate, if kept pure and unmixed, in the course of a few years, although some of the characteristics may remain. Farmers will generally become aware of this through experience, if they have no other teacher; and this accounts for the fact that after a few years but very few specimens, *pure and unmixed*, of any particular breed of swine are found, which once may have enjoyed a high reputation. And hence the changes in the breeds of pigs which occur so frequently,

to the great wonder of those who, not aware of the reasons which influence the farmer, unjustly accuse him of as much caprice and mutability in the matter of hogs as a fashionable woman manifests in the matter of dress.

Your Committee could go on at a tedious and interminable length, and state many facts in relation to the qualities of various favorite breeds, and proffer wise counsel about the proper mode of feeding these animals, point out the vast difference between the value of food when raw and when cooked, estimate precisely how many pounds of pork, under proper management, can be made from a bushel of corn or a barrel of corn-meal, and descant learnedly on the subject of slaughtering, cutting up, salting down, or converting the hams and middlings of a hog into bacon, but we forbear, fearing that we should receive no thanks for our pains; and indeed, each intelligent farmer should look into the subject for himself, and form his own opinions in regard to the best and most profitable manner of raising his own pork, and encouraging the laudable propensity of the flesh to desert the cheap regions of the body of the hog, and agglomerate on those parts which are worth from a shilling to twenty cents a pound. We shall therefore content ourselves with throwing out a few hints relating to the proper treatment of hogs, with a view to improve the condition and increase the comfort of that animal during his brief life, and at the same time put money into the pockets of his proprietor.

All hogs should be kept comfortably warm and dry during the inclement seasons of the year. If they have little or no protection from the cold winds of winter, the sleet and the snow, except by huddling themselves together in heaps, and in spite of every ingenious device they can practice, often shiver and suffer amid the severities of the season, it is in vain to expect them to thrive even on an abundance of the best food that man can supply.

On the other hand, if they are exposed during the heats of summer, to the scorching and blistering rays of the sun, without any shady retreat, they will become unsightly in appearance, their food will cease to afford them nourishment, and they will often become afflicted with disease.

It is a mistake to suppose that hogs can thrive while breathing the dark and pestilential atmosphere of a close and uncleanly sty. They require a well-ventilated apartment, with open barred doors and windows that will ensure a liberal supply of fresh air, which is actually necessary in order to maintain their vigor, give them the full advantage of their food, and furnish full scope for their rapid growth and the free development of their merits.

It is another gross mistake into which a large portion of mankind have fallen to suppose that a hog is naturally fond of filth and uncleanness. This is a libel on the whole race. The wild

hog in the boundless forest is as neat in his person and as cleanly in his habits as any dandy among the quadruped tribe. The well known propensity of the domesticated hog to roll himself in the mud and cover himself with a coat of slime, is merely a proof that he requires protection from the rays of the sun and from the attacks of flies. It furnishes no evidence that he receives any positive enjoyment, or derives any permanent benefit from being daubed over with filth.

An allusion from Scripture is sometimes quoted as an illustration of the filthiness of the hog, but a sow that has been washed during the hottest season in this climate, and more especially in Palestine, will be sure to "return to her wallowings in the mire," not because she has a natural longing for filth, but because she feels scorched and blistered and sickened by the ardent rays of the sun. Indeed, a hog of any breed, although rejoicing at being accommodated with a filthy quagmire or a stagnant pool to bury itself in at noonday, would be far more grateful, healthy and happy if it could be furnished with shelter in winter, shade in summer, and a clean, dry bed in every season of the year.

The wild hog, although omnivorous, subsists chiefly on acorns and nuts and roots. His diet is mostly a vegetable one, and he eats his simple food in a decorous manner, such as might be expected from a rational quadruped. He is neither a gormandizer nor a glutton, and would turn away with disgust from such abominable food as is often thrown into the pen and pronounced "good enough for hogs." A large portion of the civilized world labor under a great mistake in supposing because a hog in a domesticated state will eat any kind of food rather than starve, that he therefore *prefers* food of a character which any other animal would reject, and looks upon decomposed vegetables and the most unsavory compounds as the choicest of luxuries. If we would develop to their full extent the good qualities and capabilities of this animal, we should see that he is furnished with a good supply of cleanly, palatable, nutritious food. And a *wide distinction* should be made by the lovers of pork between swine that have been properly nurtured and fed, and those which sleep in beds of filth, wallow in sloughs, and are fattened on garbage. It is only in this way the desirable reform in the treatment of hogs can be brought about, and the errors and abuses to which we have alluded be rooted out.

Your Committee have said that the wild hog enjoys the senses in great perfection, but in the domesticated state, the sense of smell is the only sense he possesses in any remarkable degree. His olfactory nerves are quite sensitive under any circumstances. He snuffs the tempest from afar, and indicates its approach by signs, when no threatening clouds are visible on the horizon. Di-

rected by this sense, with unerring sagacity he seeks for food beneath the surface of the earth, and his vexation, anger and regret may be imagined when, by the cruel insertion of a ring in his snout, a stop is put to his researches for palatable food which his keen sense of smell assures him is at hand, perhaps directly beneath his nose.

In some parts of France and Italy, hogs are regularly trained to hunt for truffles, a sort of mushroom of delicate flavor and highly prized, found beneath the surface of the ground. When the hog scents a truffle he expresses his satisfaction by a grunt, then digs up the ground with his snout, seizes the truffle carefully, and carries it to his master, who gives him a handful of grain as a reward.

And it is a well known fact that in the midland counties of England, some intelligent breeds of hogs have been trained to hunt for partridges, woodcocks, and other game, and have manifested the valuable qualities of thorough-bred and sagacious pointers. * * * * *

The loyalty of the hog is beyond question. He has great respect for the stars, and almost idolizes the *stripes*. Indeed, one of the swinish tribe was once publicly exhibited to the good people of Norfolk County, even in this highly favored town of Dedham, as a rare prodigy in the shape of a promising pig which bore a striking resemblance to the American flag—with stars about its head and stripes along its back and sides, a *living* emblem of Republican nationality. This *striped pig* received the homage of the admiring multitude with good-natured *grunts* of satisfaction, and offered *strong* inducements to his visitors to follow his example and get well *corned!* * * * * *

The hog may be regarded as an animal of inestimable value. It possesses extraordinary fecundity, lives and thrives on almost every variety of food, and converts a given quantity of aliment into fat sooner and more satisfactorily than any other created being. If it be true that every one has its mission, it is clear that it is the mission of the hog to eat and grow fat, and thus become converted into nutriment of the most juicy and luxurious description, to gratify the epicurean propensities of the genus *homo*. Other animals are known to be useful in various ways while they breathe the breath of life, but a *hog*—although erroneously, as I have endeavored to show—is regarded by the mass of mankind as of no value until he has “shuffled off this mortal coil!” When skilfully slaughtered and neatly dressed, almost every part of this animal may be made available for food, and the few parts which cannot be eaten may be profitably used for other purposes.

I have said that the flesh of the hog is forbidden as an article of food among the followers of Moses and Mahomet. But the genuineness of that piety may be well questioned which leads to such monstrous conclusions, and demands such a terrible self-sacrifice.

It is also the case that some descendants of Christian progenitors exhibit a strange and unconquerable dislike to *pork*, and turn away with disgust from a roasted *spare-rib* or a *shoulder* which has been well boiled after being judiciously *corned*. But learning and philosophy teach us that there are natural causes for what often appears to be an unnatural antipathy. There are few species of animal which have not an instinctive *aversion* to become *cannibals* and riot in their own flesh and blood.

Be this as it will, there can be no doubt that the flesh of a hog is grateful to a *well-regulated* palate, and highly nutritious; and that unfortunate man is greatly to be pitied, whether Jew or Gentile, who, instead of chewing, *eschews* the flesh of a hog. It constitutes a food particularly proper for persons employed in laborious occupations, and may not only be cooked in a great variety of ways, but furnishes "yoeman's service" in cooking other kinds of food. The question has been shrewdly put, "What could we do with all our beans without *pork*?" and the question may be regarded as a poser.

The flesh of the hog takes salt, and is susceptible to the anti-septic qualities of smoke, more easily and to a greater extent than that of any other animal, and hence forms the most important article among military and naval stores. Lard is used in a countless variety of preparations, and is often employed to throw light on a dark subject. Bristles are required in immense quantities, and many bales are imported from abroad to manufacture not only brushes of many kinds for household purposes, but articles of a more delicate nature, as the indispensable adjunct to a beautiful woman's toilet.

That the hog is a valuable animal so far as dollars and cents are concerned, may be shown by a few facts and figures which cannot be disputed:—

In 1850 the number of neat cattle of every description in the United States was 18,300,000, while in the same year the number of swine was 30,350,000, which at the very moderate average of one hundred and eighty pounds each, at only four cents a pound, will reach the enormous sum of 218,500,000 dollars.

In the same year, the cotton crop was worth only 98,600,000 dollars, and the value of hay was only 96,800,000. Hence, as few hogs are kept more than twelve months, we may safely calculate that the pork crop is worth considerably more than the united value of the cotton *and* hay crops of the United States!

A large portion of this is consumed in this country where Jews are scarce and Mahometans unknown. A certain amount, however, is carried abroad to benefit trade and navigation, and make happy the people of other lands. In 1857, the quantity of *bacon*, in the shape of hams and middlings, exported from the United States, was 44,000,000 of pounds, valued at 4,500,000 dollars; of *pork*, salted and packed, 144,292 barrels and half barrels, valued at 2,800,000 dollars; of *lard*, 40,000,000 of pounds valued at five millions of dollars—making an aggregate of property to the value of 12,500,000 dollars in the shape of bacon, pork and lard exported to foreign countries! So much for the commercial value of the hog. * * * * *

And it is a well known, but melancholy fact, and your Committee allude to it with feelings of mortification and regret, that in our beloved Commonwealth of Massachusetts the number of *hogs—quadrupeds*, covered with *bristles*—has been *diminishing* from year to year! In 1845, the number of swine in this State was 104,740, valued at about 800,000 dollars. In 1855, the number was reduced to 51,113, valued at 400,000 dollars,—a reduction of fifty per cent in ten years!

Your Committee have not *dared* to investigate this matter further, fearing and believing that the reduction is still going on. This is truly a sad state of things, and calls for the prompt and vigorous, if not *exclusive* action of all agricultural societies in the Commonwealth.

It will appear from what we have said that the subject of pork is not only replete with *unctuousness*, but is one of surprising weight and magnitude. The hog is an animal which deserves to be treated with respect and handled with tenderness. Although there may be *gammon* about him, and he is sometimes *sty*-led a *boar*, there is much *solid substance* in his composition, and abundance of *bottom*. He is a friend to equal rights, so long as he is deprived of the lion's share of the spoils; he is a friend to the weak and an enemy to the strong, so long as he is kept down among the weaker party; and although sometimes a *black* republican in appearance, he is a *red* republican in principle,—a Jacobin of the old French school,—so long as he is identified with the vulgar *swinish* multitude. But, like ambitious human beings, when he succeeds in getting to the top of the ladder—or, to speak more correctly, to the head of the *trough*, and can put both of his feet within, riot on good things and triumph over his fellows, he evinces little gratitude, but a *great deal of greediness*. *Forgetting his democratic proclivities and his groveling propensities*, he cocks his *snout* in the air, in the true aristocratic style, and would even barter his republic for a monarchy, banish Otho the First from his throne, and become the real *bona-fide king of grease*. * * *

But it is time for us in nautical parlance to go about on the other tack, run in for the land, look out for a safe harbor, bring our truant bark to anchor, carry our pigs to a good or a bad market, and abide the result.

It is with a feeling of pride and exultation which we know will be shared by every member of this association, that your Committee on Swine announce that the number of entries for premiums at the late agricultural exhibition exceeded the number of entries in 1860. And the angry *snort* or contented *grunt* which struck so sweetly and musically on the ear of every person of judgment and taste, and like a magic charmer attracted crowds of brave men and fair *women* to a particular portion of the grounds, gave evidence that the pens were well filled, and that there existed a laudable and increasing interest, and that there exists a commendable spirit of emulation, among the farmers of Norfolk County, in relation to the raising and perfecting the breed of this sterling animal.

And furthermore, the pigs on exhibition were not only numerous, but their general appearance and noble bearing proved that they were pigs of exalted rank. And although, for reasons already alluded to, we may not be able to state with precision the fractions of different favorite breeds to which they may have the honor to belong, yet we can say that they were all plump-looking, clean-limbed, well-behaved pigs, presenting pictures of thrift and contentment such as the eye delights to rest upon. The expression of their features was decidedly honest and prepossessing; their eyes twinkled like little stars; their cheeks expanded with good humor, and they gave promise of attaining in good time, and without any great pains or expense, all the noble qualities of the race, so far as *pork* is concerned.

In a word, these pigs, without resembling in form, figure or character, like some others of the tribe, the gaunt, osseous, restless, quarrelsome, saturnine Don Quixote, were counterparts of his jolly, fat, gluttonous, and self-satisfied Squire, the renowned and philosophical Sancho Panza. * * * *

Among the animals exhibited on this occasion were three pigs partaking largely of the Essex breed, and belonging to E. R. Andrews, of West Roxbury. These pigs were of the *colored* race, or rather of no color, being decidedly *black*, and strongly reminded your Committee of living *contraband* articles of war at the South. They were "looked down upon" by the inmates of the other pens, notwithstanding they were modest in their deportment, humble as Uriah Heep, and altogether unambitious, neither asking or expecting a premium. They gave promise of future excellence, and although they were awarded no prize, your Com-

mittee can solemnly asseverate that it was not in consequence of their complexions.

It will be seen by the awards recommended by the Committee that Needham—*West* Needham—can boast the enviable distinction of sweeping off nearly all the prizes—and it requires but little calculation to show that if Mr. Dewing, and Dr. Morton and Mr. Flagg, and other citizens of that highly favored town, continue the system of raising pigs which they have so gloriously inaugurated, the name of *Need-ham* for the town in which they reside will soon be singularly inappropriate.

The Committee respectfully report the following list of premiums :—

For the best Boar.

The first premium of six dollars to S. Dewing, of West Needham, for a Boar of the Suffolk and Middlesex breed.

For the best Sow.

The first premium of six dollars to S. Dewing, of West Needham, for a Sow of the Suffolk and Middlesex breed.

The second premium of four dollars to W. T. G. Morton, of West Needham, for a Sow of the Suffolk and Berkshire breed.

For Weaned Pigs.

The first premium of six dollars to S. Dewing, of West Needham, for pigs of the Suffolk and Middlesex breed.

The second premium of four dollars to A. H. and E. B. Metcalf, of Franklin, for pigs of the Columbian and Suffolk breed.

For Fat Hogs.

The first premium of six dollars, to S. Dewing, of West Needham, for a hog of the Suffolk and Mackay breed.

Also a gratuity of four dollars to W. T. G. Morton, for weaned pigs of the Suffolk and Berkshire breed.

JOHN S. SLEEPER, *Chairman.*

Roxbury, Sept. 25, 1861.



REPORT ON LIVE FOWLS.

The Committee on Live Fowls would report the whole number of contributors twenty-nine, and award the following premiums :

For the best collection—A premium of \$6 to Zebina Smith, of Dedham.

For second best collection—A premium of \$4 to H. D. Mack, of Dorchester.

Turkeys—A premium of \$4 to Lemuel Kingsbury, of Needham.

A premium of \$2 to W. T. G. Morton, of West Needham.

Geese—A premium of \$4 to G. E. Holbrook, of North Wrentham.

A premium of \$2 to W. T. G. Morton, of West Needham.

Ducks—A premium of \$4 to H. L. Stone, of Grantville.

A premium of \$2 to G. E. Holbrook, of North Wrentham.

Shanghai—A premium of \$2 to James Farrington, of Dedham.

A premium of \$1 to S. B. Harris, of Dedham.

Black Spanish—A premium of \$2 to C. B. Ward, of Dedham.

Dorkings—A premium of \$2 to Eben Wight, of Dedham.

A premium of \$1 to Zebina Smith, of Dedham.

Poland—A premium of \$1 to P. Conlen, of Dedham.

Bolton Greys—A premium of \$2 to Martha Clapp, of Dedham.

A premium of \$1 to L. J. Cole, of Dedham.

Bantams—A premium of \$2 to J. C. Inches, of Dedham.

A premium of \$1 to Timothy Mack, of Dedham.

Pigeons—A premium of \$2 to George Cartwright, of Needham.

A premium of \$1 to T. F. Hutchins, of Dedham.

ROBERT MANSFIELD, *Chairman.*

West Needham, Sept. 25, 1861.



REPORT ON PLOWING.

HORSE TEAMS.

The first premium of \$8 is awarded to John Bennett, of Dorchester.

Second premium of \$6 to Jeremiah W. Gay, of Dedham.

For the Committee,

CALVIN RICHARDS, *Chairman.*

Dover, Sept. 25, 1861.

SINGLE OX TEAMS.

The Committee on Plowing with Single Ox Teams report that the only entry was by Benjamin White, of Milton, to whom they award the first premium of \$8. The plowman and driver—Nicholas Martin—had been steadily employed by Mr. White nearly seven years. The plow used was Nourse, Mason & Co.'s Eagle Plow No. 20.

The cattle, six years old, weighing three thousand pounds, were remarkably well trained, and the Committee were not only pleased with the work itself, but also with the *manner* in which it was done. It is believed that a noisy, boisterous teamster seldom, if ever, has a well-disciplined team. In this case there was no unnecessary noise, use of the whip, or urging the cattle forward; they moved with an even, steady pace, plowing the lot assigned them in forty-two minutes.

In the directions to be observed by Committees, the following paragraph occurs:—"Be particular in this, as the Society has frequently lost credit by awarding premiums for articles unworthy of them. No object or article shall be entitled to a premium unless it possesses points of superiority, even if it shall stand first, or be the only candidate for the premium."

Notwithstanding the above excellent rule, the Committee were unanimous in the opinion that they did not violate it by awarding Mr. White the first premium. In conclusion, the Chairman would say that it was very gratifying to him that every member of the Committee was present and promptly on the ground.

For the Committee,

ELIJAH TUCKER, *Chairman.*

Milton, Sept. 25, 1861.

DOUBLE TEAMS.

First premium of \$12 to Daniel Sullivan, of Dover—Prouty & Mears plow, No. 155.

Second premium of \$10 to Calvin Richards, of Dover—Parker, Gannett & Osgood's Lion No. 1 plow.

Third premium of \$8 to S. G. Williams, of Needham, (horses)—cast iron plow.

Gratuity of \$6 to William Fales, of Dedham.

MICHIGAN SOD AND SUBSOIL PLOW.

First premium of \$10 to Horace and Moses Whiting, of Dedham.

JOHN H. ROBINSON, *Chairman.*

Dorchester, Sept. 25, 1861.

DOUBLE HORSE TEAM WITH MICHIGAN SOD AND SUBSOIL PLOW.

First premium of \$10 to Luther Eaton, of Dedham.

ROBERT PORTER, *Chairman.*

Stoughton, Sept. 25, 1861.



REPORT ON SPADING.

The Committee award the first premium of \$5 to Francis Mooney, of Dorchester.

Second premium of \$4 to Dennis Doody, of Dorchester.

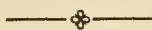
Third premium of \$3 to Dan McAulief, of Dorchester.

Fourth premium of \$2 to John Foote, of Dorchester.

Gratuities of \$1 each to Timothy Murphy and John Kelley, of Dorchester.

AARON D. WELD, *Chairman.*

West Roxbury, Sept. 25, 1861.



REPORT ON MANUFACTURES.

Domestic Manufactures.

The Committee on Domestic Manufactures (other than ladies' work) respectfully submit the following report:

That no articles strictly belonging to the department of your Committee were contributed to the Exhibition.

The Committee, however, feel bound to notice a number of plain photographs and ambrotypes, contributed by Mr. J. H. Nason, of Franklin. The contributor states that all the photographs contributed are without finish in India ink or otherwise, and in view of this fact, the Committee consider them worthy of especial mention. Two landscape photographs from nature show a clear outline and superiority of execution, usually only seen in the best finished pictures.

The Committee therefore recommend that a Society's diploma be awarded to Mr. Nason for his contribution to the exhibition.

For the Committee,

JAMES S. SHEPARD, *Chairman.*

Canton, Sept. 25, 1861.

Carriages, Wagons, &c.

The Committee on Carriages, Wagons, &c., would report in favor of a premium of five dollars to Cushman & Baker, of Medfield, for best covered wagon and buggy. Also a premium of four dollars to S. E. Morse, of South Dedham, for the best carryall and express wagon.

SANFORD CARROLL, *Chairman.*

Dedham, Sept. 25, 1861.

New Inventions.

The Committee award to Messrs Haley, Morse and Boyden, of Dedham, a diploma for Rhodes' Patent Wringing Machine, manufactured by them.

J. N. SMITH, *Chairman.*

Dedham, Sept. 25, 1861.

Manufactures of Rubber Goods, Brushes, Hats, Caps, &c.

To Timothy Phelps, of Dedham, for moleskin hats, the Society's diploma.

ELIAS G. COBB, *Chairman.*

Foxboro', Sept. 25, 1861.

Manufactures of Native Wines, Jellies, Preserves, &c.

The Committee make the following awards :

For the best native wine, a diploma to Eliakim Morse, of Medfield.

For a very fine display of pickles, a diploma to Wm. Whiting, of Dedham.

GEO. F. SUMNER, *Chairman.*

Canton, Sept. 25, 1861.

REPORT ON AGRICULTURAL IMPLEMENTS.

The Committee on Agricultural Implements submit the following report :

To Elijah Dunbar, of Canton, for improvement in the Bucklin Harrow Teeth, they award a premium of \$5.

The improvement consists in an alteration of the form of the tooth, which Mr. Dunbar has made during the past year, and

which, in our opinion, renders the Harrow one of superior merit, and well worthy the attention of the farmers of this county.

The Green Mountain Hay-cutter, exhibited by Luther Thayer, of Brighton, is an excellent machine for cutting all kinds of coarse fodder for stock. Simple in its construction, not liable to get out of order, easily sharpened, and very durable, giving, so far as we know, universal satisfaction to all who use it.

The Movable Gate Catch, by George Craft, of Brookline, though not exclusively an agricultural implement, is thought to be a valuable improvement.

The Rotary Hay-cutter on exhibition did not appear to possess any decided merit over those now in general use.

The "Woods" one-horse mower, by Nourse & Co., of Boston, we are satisfied is a good machine. Of its operation in the field we cannot speak, as we had no means of testing its merits, which we much regret.

A mowing machine which can be operated *easily* by one horse, and cut the grass *well*, and with ordinary rapidity, and be obtained at a moderate price, is *the mower* which is most needed by the generality of farmers in this county. We hope to see such an one in operation on or before the day of our next exhibition.

The Cultivator exhibited by Mr. Urry did not, in the opinion of the Committee, possess any superiority over the cultivators heretofore used.

Prindley's Patent Agricultural Cauldron and Steamer, by Parker, Gannett & Osgood, of Boston, did not arrive on the ground till late in the afternoon, yet steam was soon got up, and from the limited time the Committee had to examine it, they have no doubt that it will prove a very valuable apparatus for cooking food for stock. They accordingly award the Society's diploma.

For the Committee,

STEPHEN W. RICHARDSON, *Chairman.*

Franklin, Dec. 2, 1861.



REPORT ON FOREST TREES.

The only entry for premium on Forest Trees was made by Mr. William Metcalf, of Franklin. The experiment was made on a five-acre lot, which was plowed, sowed with two pounds of French white pine seed, and harrowed. A small part of the seed vegetated the following spring. The plants were very thick in some places; in other places there were none. Supposing that all of the seed that would germinate had started, Mr. M. plowed furrows across the field about six feet apart. Into these he trans-

planted the young pines from the spots where they were too thick. However, in the spring of each year for three subsequent years, young pines came up here and there, and at present there are as many as there ought to be on the land, of all heights from six inches to six feet. They are generally healthy and of good shape, although many have been destroyed by borers and other enemies.

This experiment has been conducted with good judgment, and with considerable labor and expense, and deserves a premium and honorable mention. And yet a comparison of this with other experiments made by transplanting young trees from our own forests, leads us to think that the latter method is the most profitable. It is well that both methods should have a fair trial. There are thousands of acres in Norfolk County that will yield scarcely anything to a profit so well as wood. It is important to ascertain the best mode of operation; and for this purpose we welcome all experiments, knowing that from any of them we shall gain some valuable knowledge.

In saying this we do not forget a suggestion that has been made of the expediency of discontinuing this premium, more especially if the trees are raised from seed. When it was offered, the pasture lands that were coming into wood were much more valuable than they are now. At present there is an over-supply of wood in the home market—that is to say, the supply is too abundant to be remunerative to the grower. There is almost everywhere through the County a scarcity of pasturage, and it may be thought a doubtful policy to convert any pasturage into woodland if it could be employed for grazing purposes. The Society's encouragement may possibly tend in the wrong direction at this time.

We award to Mr. Metcalf the Society's second premium.

For the Committee,

J. M. MERRICK.



REPORT ON SEEDS.

The Committee to whom was assigned the duty to examine and report on Seeds, would respectfully say that the duties assigned them were not in the least arduous—the contributions being but few. Their award was made as follows, viz:

To Daniel Lynch, of Dedham, for the best sample of ears of seed corn, of not less than forty in number, a premium of \$1.

To E. R. Andrews, of West Roxbury, for the best sample of wheat, a premium of \$1.

To E. R. Andrews, of West Roxbury, for the best sample of barley, a premium of \$1.

To Macey Randall, Jr. of Sharon, for the best collection of onion, carrot, beet, parsnip, &c. seeds, a premium of \$1.

Mr. Randall gives his entire attention to the raising and putting up of seeds, in small packages, for sale. The Committee gave a thorough examination of several boxes containing small papers on exhibition by Mr. R. and were well pleased with the quality.

We wish our American brethren would use the same care in the *cleansing* of seeds, that the English seeds-men invariably adopt.

EBEN WIGHT, *Chairman.*

Dedham, Sept. 29, 1861.



REPORT ON LADIES' WORK.

The Committee on Ladies' Work report one hundred and twenty (120) entries, and have awarded the following premiums:

To Mrs. A. Mills, of Foxboro', for silk bed-quilt, the first premium of	\$3.00
To Mrs. Pratt, of Dedham, for a patchwork bed-quilt, the second premium of	2.00
To Mrs. Lucy Gilbert, of Sharon, (aged 84,) for one patchwork bed-quilt, a diploma.	
To Mrs. Follansbee, of Dedham, for a beautifully quilted bed-spread,	1.00
Mrs. H. A. Blanchard, of West Dedham, presented a tufted bed-spread worthy of notice.	
To Mrs. Grant, of Dedham, for the best specimen of plain sewing,	1.00
To Mrs. Allwright, of Dedham, for embroidered lace collars,	1.00
To Miss Lizzie Follansbee, of Dedham, for very handsome embroidered handkerchief,	1.00
To Mrs. Mary Young, of South Dedham, (aged 66 years,) for stand cover, . . . . .	.50
To Miss Sarah J. Boyd, of Rockville, for best wrought chair,	1.00
To Miss Josephine Hartshorn, of Walpole, for wrought chair, a diploma.	
To Mrs. Charles McIntosh, of Needham, for ottoman cover,	.50
To E. L. Brackett, of Roxbury, for wrought skirt,	.50
To Mrs. H. R. Daniels, of Dedham, for embroidered skirt, a diploma.	

- To Mrs. Coolidge, of Dedham, for two cases of fancy articles, neatly made, 1.00
- To Miss M. C. Alden, of Randolph, for very beautiful carriage blanket, 2.00
- To Miss Caroline Robinson, of Dorchester, for knit sofa pillow, a diploma.
- To Miss Josephine Kingsbury, of Dedham, for crocheted shawl, a diploma.
- To Miss Susan Wight, of Canton, for crocheted cape, a diploma.
- Mrs. J. Engley, of Canton, exhibited a doll dressed in a very patriotic manner, which attracted much attention, as did also two *cotton* babies which were on exhibition.
- To Mrs. James Farrington, of Dedham, for two pairs of ladies' hose, and two pairs of woolen half hose, 1.00
The yarn of one pair of the above Mrs. F. carded, spun, colored and knit.
- To Mrs. Horatio Clark, of Dedham, for four pairs of hose, a diploma.
- To Miss Clara L. Hartshorn, of Walpole, for *very nice* crochet work and plain sewing neatly done, 1.00
- To Alice D. Guild, of Dedham, twelve years old, for crocheted yoke and sleeves, 1.00
- To Mrs. Brooks, of Dedham, for four specimens of crocheted work,50
- To Mr. E. N. Shepard, of Boston, for *fine* display of worsted work, yarns, &c., the Society's diploma.
- To Mrs. M. A. Clark, of Dedham, for braided mat,50
- To Mrs. A. E. Lombard, of West Roxbury, for one rag mat, containing seven hundred pieces, a diploma.
- To Mrs. Abigail Whiting, of West Dedham, for one rag mat, \$1.00 and diploma.
The above mat contains over four thousand pieces of rag drawn into corners, and took Mrs. W. over three years to make it, under peculiar difficulties, her hands being drawn up with rheumatism.
- To Mrs. Sandford Howard, of Dedham, for beautifully knit hose, a diploma.
- To Mrs. Robert Mansfield, of West Needham, for collection of feather flowers, worsted work and oriental table, 1.00
- To Miss S. E. Ellis, of Walpole, (13 years of age,) for crayon drawings, 1.00
- To Miss Vinson, of Dorchester, for three good crayon drawings, a diploma.

To Miss Z. Shepard, of Canton, for exceedingly nice specimens of paintings in cone frames,	1.00
To Miss J. Dana, of Dedham, for flower paintings in water colors—very nicely executed, . . . . .	.50
To Mrs. Lewis Pond, of Foxboro', for three excellent oriental paintings,	1.00
To Miss Mary Shumway, of Dedham, for two cone frames, a diploma.	
To Miss Z. Shepard, of Canton, for boquet of hair flowers—best specimens, . . . . .	.50
To George E. Browne, of Dedham, aged ten years, for case of hair flowers, a diploma.	
To Mrs. J. D. Ellis, of Walpole, for cone basket and watch-cases, a diploma.	
To C. A. Guild, of South Dedham, for vase of wax flowers, . . . . .	.50
To Mrs. C. Severance, of West Needham, for wreath of wax flowers, a diploma.	
Mrs. S. L. Shaw, of Dedham, presented some very pretty cone frames.	
To Mrs. Charles Thompson, of Dedham, for one pair of cloth boots, a diploma.	
To A. L. Miller, of Dedham, for case of stuffed birds,	1.00
William A. Cobb and J. H. Lathrop, each exhibited stuffed birds worthy of notice.	

Mrs. Eliza Howard, of Jamaica Plain, sent a "Farm and Farm House" made of moss, which showed good taste and ingenuity in its arrangement.

Mr. James Davy, from Niagara Falls, exhibited some Indian bead-work and feather fans, which attracted a large share of attention.

We are happy to see that the young misses are sufficiently interested to send in their work. The specimens sent this year promise well for those who sent them, and we hope that the contributions will continue as they have commenced.

Some specimens of Fibrillia or Flax Cotton, with some Satinet and Flannel manufactured from the same, were placed upon our table, and seemed quite an object of interest to all who saw them. Not coming under our department, we could do nothing more than exhibit them.

Of the one hundred and twenty articles presented, sixty-five were from Dedham. Why cannot some of the ladies in other towns in the County feel interested, and contribute more of their handiwork? We wish there might be more interest manifested in this department, and that more specimens of plain sewing could

be sent in. Not a single specimen of *darning* this year, an omission much to be regretted in times like the present.

However, we would give "honor to whom honor is due," and say that the department of Ladies' Work this year has fully equalled that of any former year, and we should have been glad to have given larger premiums in several instances, had it been in our power.

For the Committee,

FANNIE GRAY.

Walpole, October 20, 1861.

RECAPITULATION OF PREMIUMS

AWARDED BY THE

NORFOLK AGRICULTURAL SOCIETY, FOR 1861.

GRAIN CROPS.		DAIRY.	
B. N. Sawin,	\$8	E. T. Everett,	\$8
Aaron Bacon,	6	John Mansfield,	5
		Warren Sawin,	5
		Mrs. Luey Green,	3
IMPROVING MEADOW AND SWAMP LANDS.		CRANBERRIES.	
W. T. G. Morton,	\$10	Nathan Longfellow,	4
		Mrs. H. P. McIntosh,	3
IMPROVEMENT OF PASTURES.		MIXED CROPS.	
Walter H. Fisher,	\$10	W. T. G. Morton,	\$4
A. L. Smith,	5		
FRUIT.		VEGETABLES.	
Frederick Clapp,	\$10	John Sias,	\$10
Charles B. Shaw,	4	William Bullard, 2d,	5
Francis Dana,	3	E. H. Blackman,	5
George Davenport,	3	W. T. G. Morton,	1
Walker & Co.,	2	A. D. Weld,	1
Alfred Clapp,	2		
FLOWERS.		HORSES.	
E. S. Rand,	\$10	E. P. Carpenter,	\$20
Barnes & Washburn,	9	S. J. Capen,	13
Macey Randall, Jr.,	6	James McLain,	10
Marion I. Watt,	2	Thomas Adams,	10
William Dunbar,	1	Richard Holmes,	10
Sarah A. Boyden,	1	Benj. Huntoon,	8
E. H. Blackman,	1	John M. Gay,	8
Mrs. H. P. Mackintosh,	1	Jeremiah Pritchard,	7
Hattie W. Carroll,	1	A. T. Stearns,	7
Cheever Newhall,	1	Alexander Dickinson,	6
John H. Adams,	1	E. R. Andrews,	6
		Henry Jones,	6
		S. B. Scott,	5
		B. R. Ballou,	5
		Obed Baker,	5
		J. P. Paine,	4
		J. W. Carpenter,	4
		Joseph Fisher,	4
		Walter D. Ray,	3
		Oliver Dean,	3
		H. B. Fisher,	3
		Calvin Richards,	3
		S. L. Thayer,	3
		Hiram Gay,	3
BREAD.			
Mrs. Nathan Longfellow,	\$7		
Mrs. C. C. Sewall,	3		
Mrs. Lewis Pond,	3		
Miss H. L. Pond,	3		
Mrs. E. B. Metcalf,	2		
Miss Mary Longfellow,	2		

Joseph H. Billings,
Charles F. Howard,
Henry Blaney,
L. B. Jones,
Mathew Andrews,
Benj. Neal,
J. R. Gay,

EQUESTRIANISM.

Miss Hattie W. Carroll,
Miss Lizzie Mercer,
Miss Anna Metcalf,

BULLS.

H. L. Stone,
E. R. Andrews,
H. B. Fisher,
A. W. Austin,
J. W. Gay,
W. T. G. Morton,
Henry Goulding,
E. P. Carpenter,

COWS.

Eliphalet Stone,
W. T. G. Morton,
A. W. Austin,
James McLain,
Eben Wight,

HEIFERS.

Eliphalet Stone,
W. T. G. Morton,
Henry Goulding,
John Cawley,
P. O'Neill,
William Lynch,
Jonathan Avery,
Henry Grew,
E. F. Head,
John Gardner,
S. P. Mack,
Amos Barnes,

WORKING OXEN.

Benjamin White,
Luther Eaton,
S. G. Williams,
Horace and Moses Whiting,

STEERS.

James P. Clarke,
G. R. & W. R. Mann,

SWINE.

S. Dewing,
W. T. G. Morton,
A. H. & E. B. Metcalf,

POULTRY.

3	Zebina Smith,	\$7
2	Geo. E. Holbrook,	6
2	H. D. Mack,	4
2	Lemuel Kingsbury,	4
2	W. T. G. Morton,	4
2	H. L. Stone,	4
	James Farrington,	2
	C. B. Ward,	2
	Eben Wight,	2
\$10	Martha Clapp,	2
8	J. C. Inehes,	2
6	Geo. Cartwright,	2
	S. B. Harris,	1
	P. Conlen,	1
\$6	L. J. Cole,	1
5	Timothy Mack,	1
5	T. F. Hutchins,	1

PLOWING.

3	Daniel Sullivan,	\$12
3	Calvin Richards,	10
2	Horace & Moses Whiting,	10
	Luther Eaton,	10
	S. G. Williams,	8
	Benjamin White,	8
	John Bennett,	8
	William Fales,	6
	Jeremiah W. Gay,	6

SPADING.

	Francis Mooney,	\$5
	Dennis Doody,	4
\$6	Dan. McAuliff,	3
3	John Foote,	2
3	Timothy Murphy,	1
3	John Kelley,	1

AGRICULTURAL IMPLEMENTS.

2	Elijah Dunbar,	\$5
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FOREST TREES.

1	William Metcalf,	\$10
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CARRIAGES.

	Cushman, Baker & Co.,	\$5
	S. E. Morse,	4

HONEY.

3	M. P. Sumner,	2
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SEEDS.

	E. R. Andrews,	\$2
\$5	Macey Randall, Jr.,	1
5	Daniel Lynch,	1

LADIES' WORK.

\$24	See pp. 94, 95, 96,	\$25.00
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	Total,	\$720.00
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TREASURER'S REPORT.

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C. C. CHURCHILL, *Treasurer, in account with Norfolk Agricultural Society.*

Balance in the Treasury, Nov. 30, 1860,	\$468.66
Cash received for admission fees of new members,	85.00
“ “ from Commonwealth,	600.00
“ “ balance of net proceeds of Agricultural Exhibition, 1860,	187.54
“ “ net proceeds of Agricultural Exhibition, 1861,	425.00
“ “ borrowed money,	347.00
	\$2113.20

	CONTRA.	CR.
Cash paid incidental expenses,		\$937.34
“ “ premiums,		586.50
“ “ salary of Recording Secretary,		50.00
“ “ “ “ Treasurer,		25.00
“ “ interest,		326.63
“ in Treasury,		186.73
		\$2113.20

C. C. CHURCHILL, *Treasurer.*

Dedham, Nov. 30, 1861.

ORDER OF EXERCISES
AT THE
AGRICULTURAL HALL,
ON THE OCCASION OF THE
THIRTEENTH ANNIVERSARY
OF THE
NORFOLK AGRICULTURAL SOCIETY,
Wednesday, September 25, 1861.

At 12 o'clock a procession was formed on the grounds of the Society under the direction of Col. Thomas, Chief Marshal, and assistants. This embraced the officers and members of the Society, who, with their guests at the head, proceeded, with music by the Medfield Cornet Band, to the Hall, where tables had been spread for eight hundred persons.

The company being seated, the President called on the Rev. Benjamin H. Bailey, of Dedham, to invoke a blessing on the occasion. The dinner having been disposed of, the President, Hon. Marshall P. Wilder, welcomed the assemblage in an earnest speech, alluding to the present national troubles, and congratulating all upon the happy celebration of their anniversary.

Mr. Wilder spoke at some length, and closed as follows:—

Happy am I, my fellow-citizens, to meet you again on the return of another anniversary,—happy am I in the success of the present Exhibition, and most happy am I to feel that, although clouds and darkness now overspread the political horizon of our beloved country, old Norfolk has not forgotten that great industrial interest upon which, more than upon any other, our government must rely for the support of itself and its armies.

When we met at our last anniversary we were rejoicing in peace and prosperity,—in the union of thirty-four sovereign, and yet all loyal States, and in a government the most benign and beneficent on the face of the earth. But what a contrast! Now a portion of these States are in open revolt,—a revolt which threatens to subvert our beautiful form of Republican Government, the last and the best hope of the down-trodden and oppressed millions of earth. This subject may be deemed, by some, to be

inappropriate to the occasion, but while it is our duty to promote the great cause of agriculture by every means in our power, we are bound by the most sacred obligations to make every sacrifice for the support and maintenance of the institutions bequeathed to us, for it is to the good government under which we have lived, that we are mainly indebted for the happiness, wealth and prosperity we have enjoyed. And whose heart does not rise in gratitude to the Giver of all good for these priceless blessings,—blessings which have been purchased by the sacrifices of our fathers? Why, my friends, this very soil which some of us cultivate, has been sprinkled by the sweat, sanctified by the toil, and baptized by the blood of heroes and martyrs!

Here in our own County were the homes of the Warrens, the Adamses, the Quincys and other illustrious champions of freedom, and here they will ever remain to stimulate us to deeds of patriotism and philanthropy. Who, then, does not feel the deep responsibility which rests upon us in this hour of our nation's trial! When I reflect upon the wonderful progress and prosperity of our country, I cannot but feel that He who rules in mercy as well as in justice, has assigned a mission to these United States more important than to any other nation, and that He will bring us out of all our troubles and make us a wiser and better people. Let us, then, be faithful to the high and glorious trust committed to us, and thus shall we cause our children to bless the memories of their fathers, as we have had cause to cherish the names of those who laid the foundations of this Republic.

The President then introduced Prof. Agassiz, the orator of the day, as one to whom not only this country, but the world, were greatly indebted for his researches in science, and for his efforts in the diffusion of useful knowledge. A very enthusiastic reception was extended to Prof. Agassiz.

The Professor commenced by observing that his good will had obtained the better of his discretion; hence his appearance. He spoke of the fruits of the mind as necessary accompaniments of the fruits of the soil, and added that the condition of agriculture in any place was the sure test of the intellectual training of the cultivator. His subject was announced as follows:—“The Advantages and Progress of Agriculture, as related to Science, and the Mutual Influences of the same.” He first acknowledged his indebtedness to the fisherman and to the farmer for many of the most important scientific facts, and almost envied the latter his rare opportunities of daily life among the living creation. In the application of science to agriculture, new facts are continually developed, and the idea was impressed that these facts must triumph over all theories, however cherished the latter may be. Many questions of great import among scientific men await the decision of the farmer. In the study of the animal creation, we find the different species the same as at the beginning; all our improvements in raising cattle have never made anything out of a cow but a cow. Man has never yet suc-

ceeded in producing a new species. This is the result of thousands of years of experience. We have produced what are happily called "breeds," but species have never been produced by man. When it is known how far the differences of breed can be carried, we can say whether one animal can become another. In the question concerning the different genera and species, is involved the great moral question whether these beings, as they now exist, are one and the same; or more directly whether there is a God or not.

After speaking of the intonation of different animals, as showing some peculiar features of the animal creation, he illustrated the necessity to agriculturists of an intimate acquaintance with the workings of nature, by speaking of the cherry crop of this year, which had been destroyed by frost. He who is familiar with the subject, can discern to-day the indications of next year's crop. And the time should come when every farmer's boy can do this. As the wants of business are anticipated and met, so it should be with science. A case in point is the army worm, whose ravages have occasioned a universal desire to become acquainted with the character and habits of the insect, and yet that carefully prepared and comprehensive volume, "Harris's Insects," has nothing concerning it. And hence was urged the necessity for *complete* scientific works.

In closing, Prof. Agassiz modestly alluded to his own institution, acknowledging his indebtedness to the people and the State, and expressing the fervent hope that it might go on accumulating that kind of stock from which the people, in due time, would receive an ample reward for their liberality.

Every word of the address was listened to with the closest attention, and at the suggestion of the President, a vote of thanks was passed with much applause.

E. W. B. Canning, Esq., of Stockbridge, followed with an appropriate poem upon "The Union of the Useful and Beautiful in Agriculture," which was received with warm demonstrations of applause.

The following hymn was then sung by the audience:—

H A R V E S T H Y M N .

WRITTEN FOR THE OCCASION BY E. W. B. CANNING, OF STOCKBRIDGE.

TUNE—"Old Hundred."

Enthroned upon her golden sheaves,
With wealth of harvests clustering near,
And robed in glory-tinted leaves,
Lo! Autumn rules the waning year.

To build her triumph, joyous Spring
Its tribute gave of dews and flowers;
And Summer bro't on glowing wing
Its genial sunshine and its showers.

Now, resting from their honest toil,
 With beaming eye and brow serene,
 The sons of old New England's soil
 With gladness crown their Harvest Queen.

From southern plains while rolls the drum,
 And cannon time the pulse of war,
 We joyful shout the "harvest home,"
 And hail the blessing-laden car.

Great Father of the storied Past!
 Accept the praise no treason mars;
 Forever may thy favors last,
 Beneath the flag of stripes and stars!

The President then gave the following toasts:—

Harvard University—A fountain opened by the Pilgrims. Many have drawn from its waters, and thousands are now dispensing them to souls that thirst for knowledge.

This was responded to by President Felton in that easy and felicitous manner which has always placed his after dinner speeches among the most acceptable things of the feast.

The Delegate from the State Board of Agriculture—The friend of education and improvement—the education of the head, and the improvement of the soil.

Responded to by Mr. Stockbridge, of North Hadley, delegate from the State Board.

The Secretary of the U. S. Agricultural Society—The same able and stalwart man whether wielding the pen, the sword, the spade, or the wheelbarrow.

Responded to Major Benj. Perley Poore.

England and the United States of America—Bound together by ties of common origin and friendly alliance, and held fast by the golden links of commerce. New England welcomes the representative of Old England to our social feast.

Responded to by Capt. Anderson, of the Cunard line, who said he should like to offer one word for his own country; he would say as strongly as ever he could that in England there was but one wish, and that was to keep the peace with America. Most assuredly, whatever the papers might say to the contrary, in the hearts of his countrymen there was no such thing as ill feeling towards America. In concluding his remarks, he said he wished from the bottom of his heart, peace in this country and good will towards England.

Professor Agassiz—He has sounded the depths of knowledge and explored the arcana of science, but his gigantic intellect still finds an adequate field in the exhaustless resources and magnificence of Nature.

Responded to by Prof. Agassiz.

The next speaker was the Hon. Henry F. French, of Cambridge, the accomplished author of several works on agriculture.

The following letter was received from Hon. John W. Proctor, the venerable Ex-President of the Essex Agricultural Society.

MR. PRESIDENT—

Happy should I have been to have enjoyed the privilege of participating in the celebration of this anniversary of your Society. As was long ago said in our fatherland, "Look to Norfolk" if you would see a thing well done; so say the farmers of Massachusetts, so long as a *Wilder* shall be at its head. For many years the State held its anniversary in this vicinity, until it was thought the thing could be more efficiently done by County organizations. So far as my observation has extended, no Society has been more faithful to its trust than this, over which you have presided from the beginning.

I have sometimes *queried* whether the present mode of awarding premiums for *single animals* was the best to be adopted; and have thought it could be better done by taking into view *the entire stock kept on farms*. If such a plan of examining stock could be effectually carried out, it would be better than that which is now pursued. But though our plans may not be the most complete possible, certainly much good has been done, by the desire for improvement thus awakened. And when opportunity presents, let those *who can*, *advance* upon what others have done. I wish I could have heard Professor Agassiz and what science could say for agriculture. Fortunate are we in securing such talents in our schools of instruction; and doubly fortunate is the farmer whose occupation is complimented by such a man. I have seen many exhibitions of cattle, but do not remember any one that struck me so favorably as a herd of *milk cows*, twenty in number, from the Burley farm in Beverly, three years since. There were twenty cows, selected from a herd of fifty, all of them of a dark red color, and as near alike in appearance as so many peas. They ranged from five to ten years of age, were in healthy, vigorous condition, just as they came from a good pasture. They had not been pampered at all, or overfed by slops or vegetables or grain. Thinks I to myself, this is the kind of Cattle Show that may be looked at to advantage. Let each of the milk farms in the County bring forward a dozen of the choicest animals on the farm, and an experienced observer will soon discriminate the best milkers,—especially when they have been reared from a parentage of established character. I know we often see beautiful specimens of the Jersey stock, and so of the Ayrshire or of the Durham; but for real profit on a farm, whether for milk or butter, I have never seen any thing that excelled our best New England

stock. I care not what may be their pedigree, or where they may be ranked in the *Herd Book*, if they do but fill the pail through *the season of milking*.

The President responded to a toast in his honor, and after a parting sentiment to the ladies, the exercises were closed by the singing of the following ode, written for the occasion by a lady of Boston.

A welcome to these Autumn days
 With all their lusty cheer,
 When every plant its tribute pays
 For blessings of the year.
 For we've a land to save, my friends,
 A noble land to save,
 And in this sunset of the year
 We'll dig Rebellion's grave.

Let thanks for these go up in deeds—
 'Tis but the patriot's part;
 Each stalwart arm our country needs,
 And every stalwart heart.
 For we've a land to save, my friends,
 A blessed land to save;
 Our monument of praise, my friends,
 Shall be Rebellion's grave.

O b i t u a r y ,

PREPARED BY THE PRESIDENT AT THE REQUEST OF THE TRUSTEES.

Died in Dorchester, July 10, 1861, Thaddeus Clapp, aged 50 years. Mr. Clapp received a collegiate education at Harvard University. He attained to a high rank and graduated in 1834 with the second honors of his class. In 1838 he received the degree of Master of Arts, and for many years took an active part in advancing the cause of education in his native town and State. In consequence of ill health he was obliged to relinquish, in a measure, his literary pursuits and to apply himself to the employments of rural life as a means of restoring it.

From the year 1840 to the time of his decease, he devoted most of his time to agricultural and horticultural pursuits. In both of these departments he soon became distinguished. He was a member of the Supervisory Committee and a Trustee of the Norfolk Agricultural Society. As a cultivator of fruits he took a prominent stand, and for years received the highest premiums for the best collection of apples, both at the Exhibitions of the Norfolk Agricultural and the Massachusetts Horticultural Societies. To the cultivation of other fruits, especially the pear, he had given much attention, and had produced from seed more than twenty varieties, some of which promise to be valuable. To one of these he was so much attached that he gave it the name of "Clapp's Favorite," and of which an outline has been engraved on the marble under which he sleeps. Mr. Clapp was a gentleman of modest demeanor, amiable disposition and sterling worth.

Officers of the Society.

1861.

President,

MARSHALL P. WILDER, of *Dorchester*.

Vice Presidents,

JOHN GARDNER, of *Dedham*,
CHARLES BRECK, of *Milton*,
SHADRACH ATWOOD, of *Franklin*,
JOSEPH H. BILLINGS, of *West Roxbury*,
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SHARON.

OTIS JOHNSON,	ASAHEL S. DRAKE,
WILLIAM R. MANN,	HARVEY MORSE.

STOUGHTON.

LUCIUS CLAPP,	ROBERT PORTER,
LUTHER PORTER,	ASAHEL SOUTHWORTH.

WALPOLE.

EDWIN WILSON,	EBENEZER STONE,
WILLARD LEWIS,	JOHN N. SMITH.

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ELIAS HUNT,	JOHN W. LOUD.

WRENTHAM.

JOEL H. ROBINSON,	JAMES T. FORD,
LUCAS POND,	A. W. CHEEVER.

Norfolk Agricultural Society.

[SUCCESSFUL COMPETITORS MAY RECEIVE THEIR PREMIUMS IN PLATE
OR MONEY, AT THEIR OPTION.]

LIST OF PREMIUMS FOR THE YEAR 1862.

F A R M S .

EXPERIMENTS AND IMPROVEMENTS THEREON.

PROGRESSIVE HUSBANDRY.

For the best conducted and most improved Farm during five consecutive years, commencing in the year 1861,—of which the occupant shall present annually to the Trustees a satisfactory account of the whole management of the Farm,—of the crops produced, of the improvement made and of the stock kept,—a premium of *One Hundred Dollars*, to be paid in 1866.

NOTE. Whenever any farm shall be entered for this premium, the Secretary of the Society shall give notice thereof to the Committee on Progressive Husbandry annually in September, who will be required to examine the farm, and to certify the general management of it.

MANAGEMENT AND IMPROVEMENT OF FARMS.

For the best managed Farm, taking into view the condition of the buildings, fences and orchards, the cultivation of the lands, the care and management of the stock, the quantity, quality and preservation of the crops, the expenses incurred and the improvements made during the year, with a detailed statement of the whole to be rendered on or before November 15th, \$25; second best, \$20.

Competitors must give notice of their intention to the Secretary, on or before June 15th. Farms entered for premium will be viewed by the Supervisory Committee, as they shall deem expedient, between June 20th and September 20th. Any farm offered for inspection, without being entered for a premium, will be viewed and reported by the Committee, if seasonable application be made to the Chairman.

IMPROVING MEADOW AND SWAMP LANDS.

For the best experiment in reclaiming wet meadow or swamp lands, by drainage or otherwise, on not less than one half acre,

with statement, in detail, of the previous condition and produce of the land, the method and expense of the experiment, and the produce at the present time, \$8 ; second best, \$4.

UNDER-DRAINING LAND.

For the best experiment in under-draining land, not less than forty square rods, regard being had to the character of the soil and subsoil, the method, extent, expense and result of the experiment, \$10 ; second best, \$5.

OLD PASTURE LANDS.

For the best conducted experiment in renovating and improving old pasture lands, on not less than two acres, with an account of the means employed and the expense of the same, \$8 ; second best, \$5 ; third, \$3.

CLEARING AND ENCLOSING UNIMPROVED LANDS.

For the best experiment in clearing, enclosing and improving lands hitherto lying waste, on not less than one acre, with a statement of the previous condition of the land and of the method, expense and result of the experiment, \$8.

TURNING IN CROPS AS A MANURE.

For the most satisfactory experiment of turning in crops as a manure, either *green or dry*, on not less than *one-half acre of land*, a detailed account of the whole process, expense and result to be given in writing, \$6.

MANURES.

Premiums of \$25, \$20 and \$15, are offered for the three most successful experiments in the application of Manures, in accordance with the following vote of the State Board of Agriculture :—

At a meeting of the State Board of Agriculture, held in December, 1861, it was

“*Voted*, That the several Agricultural Societies receiving the bounty of the State, be required to offer three premiums for the most thorough, exact and reliable experiments upon the proper depth of applying manures, payable in the fall of 1864, as follows :—

“Select a level piece of land of any convenient size, from twenty rods up to as many acres or more, which should be as nearly equal in its character and conditions as possible. Divide it into five equal parts, numbering them 1, 2, 3, 4 and 5, for a rotation of three years.

“Divide the manure which it is proposed to apply, and which should be of a uniform character, into four equal parts. At the

time of first plowing in the spring, spread evenly one-fourth of the manure upon plot No. 1, and then plow the whole field of an equal depth. Apply another fourth part of the manure to plot No. 2, and then cross plow the whole field to about half the depth of the plowing. Spread another fourth of the manure upon plot No. 3, and harrow or cultivate the whole field; after which sow or plant the whole evenly, with any crop preferred. Finally, spread the remaining quarter part of the manure upon plot No. 4.

“Observing that by pursuing this course, each of the five lots will receive equally, a deep plowing, a shallow plowing, and a harrowing, or cultivating, the only difference in them being that in No. 1 the manure is buried deep, in No. 2 shallow, in No. 3 buried only slightly, but coated with loam, and in No. 4 left exposed upon the surface; while No. 5 gets no manure. The manure is to be spread broadcast and as evenly as possible. The after cultivation should be the same on each of the lots, and the harvest of each should take place at the same time.

“Let a statement of the character of the soil, whether light or heavy, dry, or moist, leachy or retentive of manures, the crop of 1861, kind and amount and mode of application of manure in 1861, size of field covered by the experiment, depth of first plowing, kind and amount of manure used in 1862, kind of crop, when and how sown, number of times and manner cultivated, and weight of product on an average rod of each plot be made in 1862, and returned in the annual report of each Society.

“If there is a double product, as grain and straw, corn and stover, let the weight of the secondary product be given on each plot.

“If the competitor weigh the whole crop instead of estimating it by an average rod, there will be no objection to such a course.

“A brief synopsis of the weather for each of the following months, by dividing each month into three parts, and using the terms dry, moist and wet, to indicate the general character of the weather, will also be expected.

FIRST THIRD.	MIDDLE THIRD.	LAST THIRD.
May,		
June,		
July,		
August,		
September,		

“A similar report of all the above items, except the nature of the soil, will be made in 1863, and in 1864, when the premiums will be awarded. No manure is to be applied to the second and third crop.”

THE MASSACHUSETTS SOCIETY FOR PROMOTING AGRICULTURE,

Offers the following premiums for Experiments with Manures, and competitors for the preceding can also compete for this, with the same experiments :—

1st premium, \$100 ; 2d do., \$100 ; 3d do., \$100.

A similar report of all the above items, except the nature of the soil, will be required in 1863, and in 1864, when the premiums will be awarded. No manure is to be applied to the second and third crop.

The above premiums are open to competitors throughout the Commonwealth. Competitors for premiums offered by other Agricultural Societies are invited also to compete for the above, the same experiments serving for both, by filing a duplicate statement with the Secretary of this Society.

In awarding the premiums, all other things being equal, preference will be given to those which are tried on the largest space of land, and also where the competitor weighs the whole crop instead of an average rod. Notice of an intention to compete must be given to the Secretary on or before the first day of January, 1863, with the statement required in the terms of the premium.

This offer of premiums for experiments on the application of manures is distinct from those on the same subject offered by the same Society, January 13th, 1860, and February 18th, 1861, and requires a different series of experiments.

P. C. BROOKS, Jr., *Secretary.*

Boston, January 14, 1862.

EXPERIMENTS IN SUBSOIL PLOWING.

For the best experiment, on not less than one acre of land, of the effect of subsoil plowing, to be determined by the difference in the value of crops, raised on equal portions of equally manured land, of like quality, one half of which having been subsoil plowed, the other half plowed in the usual manner,—statements of the depth of plowing, in each instance, together with all the particulars of culture, required, \$8 ; second best, \$6.

COMPARATIVE VALUE OF CROPS AS FOOD FOR CATTLE.

For the best experiment upon a stock of cattle, not less than four in number, to ascertain the relative value of the different kinds of fodder used, with a statement in detail of the quantity and value of the same, as compared with English hay, the experiment to be made in the three winter months, \$15 ; second best, \$10.

FATTENING CATTLE.

For the best experiment in *feeding* cattle, with a statement in detail of the process, expense and result, \$8 ; second best, \$4.

FATTENING SWINE.

For the best experiment in *feeding* swine, with a statement in detail of the process and result, \$6 ; second best, \$4.

SOILING OF CATTLE.

For the best experiment in the *soiling* of cattle, with a detailed statement of the process and the result,—regard being had to the *saving of manure*, and to the comparative *expense of pasturing*, \$15 ; second best, \$10.

GREEN FODDER.

For the best experiment in raising corn fodder or other succulent feed to be used green, and in ascertaining its value for the feed of milch cows,—on not less than *one-half acre* of land,—with a statement, in detail, of the mode and cost of cultivation, and the result of its use, \$8.

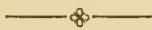
HAY.

For the largest quantity and best quality of English Hay per acre, produced on any farm in the County, regard being had to the character of the soil, the mode and cost of cultivation and making, \$5 ; second best, “Flint’s Treatise on Grasses.”

CRANBERRY VINES.

For the best experiment in transplanting Cranberry Vines, or in growing them from seed, on not less than one-eighth of an acre which shall be in the most flourishing and productive state, on the 10th September, 1862, \$8 ; second best, \$4.

Competitors will be required to give an exact statement of the process, expense, and result of the experiment.



GRAIN AND ROOT CROPS.

GRAIN CROPS.

For the best experiment in raising *Wheat*, \$6 ; second best, \$3.

For the best experiment in raising *Rye*, *Oats*, or *Barley*, each, \$4 ; second best, each, \$2.

For the best experiment in raising *Indian Corn*, \$6 ; second best, \$4 ; third best, \$2.

For the best experiment in raising *White Beans*, *Millet* or *Buckwheat*, each, \$3.

An addition of 20 per cent. to the above premiums, if the successful competitor be a youth, under 16 years of age.

Samples of each kind of Grain, not less than a half-bushel, and properly labelled, must be exhibited at the Show. The quantity of the crop to be ascertained by weight, as follows:—Corn and Rye, 56 pounds each to the bushel; Barley and Buckwheat, 48 pounds each; Oats, 32 pounds; Wheat, 60 pounds.

ROOT CROPS.

For the best experiment in raising *Potatoes*, \$5; 2d best, \$3.

For the best experiment in raising *Sugar Beets*, *Carrots*, *Parsnips*, *Mangold-Wurtzel*, or *Ruta Baga*, each, \$5; 2d best, \$3.

For the best experiment in raising *Onions*, \$5; 2d best, \$3.

For the best experiment in raising *Flat Turnips*, \$4; 2d best, \$2.

Samples of Roots, not less than one bushel, and properly labelled, must be exhibited at the Show. The quantity of the crops, which must be on not less than one quarter of an acre, shall be ascertained by the weight of the Roots—freed from dirt and without tops—as follows:—Potatoes, Sugar Beets, Mangold-Wurtzel and Ruta Bagas, 60 pounds; Carrots, 55 pounds; Onions and Flat Turnips, 50 pounds; Parsnips, 45 pounds to the bushel.

Entries must be made with the Secretary, *ten days previous to the commencement* of any experiment. Experiments will be viewed by the Committee between July 1st and September 20th.

Claimants for premiums must render to the Chairman of the Committee, on or before November 15th, a written statement of the character and previous condition of the land, its present value, and the taxes upon it; the kind, quantity and value of manure used; the quantity and cost of seed sown; the labor and expense of cultivating and harvesting the crop, and the quantity, quality and value of the crop. In awarding premiums, regard will be had to all these circumstances, and to the area of the ground in cultivation.

VEGETABLES.

For the best experiment in raising *Squashes*—one half dozen of each variety to be exhibited at the Show—\$3; second best, \$2.

For the best experiment in raising *Cabbages*—not less than six heads to be exhibited at the Show—\$3; second best, \$2.

MIXED CROPS.

For the best experiment in cultivating mixed crops of Grain and Vegetables, in alternate portions, or of different roots, in alternate rows, \$6; second best, \$4; 3d best, \$2. The experiment must be made on not less than half an acre of land, and a detailed statement of the mode of culture, expense and product must be rendered on or before November 15th.

PLOWING MATCH.

DOUBLE OX TEAMS. *With Sod and Subsoil Plow.* For best performance in ploughing sward land, eight inches in depth, within an hour, \$10; second best, \$8; third best, \$6; fourth best, \$4.

DOUBLE HORSE TEAMS. First, \$10; second best, \$8; third best, \$6; fourth best, \$4.

With any other Plow. Same conditions. Best, \$10; second best, \$8; third best, \$6; fourth best, \$4.

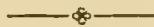
DOUBLE HORSE TEAMS. *With Sod and Subsoil Plow.* Same conditions. Best \$10; second best, \$8; third best, \$6; fourth best, \$4.

With any other Plow. Same conditions. Best, \$10; second best, \$8; third best, \$6; fourth best, \$4.

SINGLE OX TEAMS. *With any Plow.* For the best performance in plowing sward land, at least one eighth of an acre, six inches in depth, within an hour, \$6; second best, \$4; third best, \$2.

SINGLE HORSE TEAMS. Same conditions. Best, \$6; second best, \$4; third best, \$2.

NOTE. A DOUBLE TEAM will consist of two yokes of oxen, with or without a driver; or a team of one yoke of oxen and a horse, with or without a driver. SINGLE TEAM, one yoke of oxen or one pair horses, without a driver. Competitors must own their teams and plows, and enter the same in their own names. Plows must be held and teams driven by their owners, or by persons staidly in their employ. Notice to compete must be given to the Secretary on or before the Saturday previous to the Exhibition. In awarding premiums, one hour will be allowed for the performance of the work, regard being had to the width and depth of the furrow slice, and the evenness, ease and quiet with which the work is performed.



SPADING.

For the best performance in spading, not less than ten inches in depth, on a piece of not less than one hundred square feet of sward land; the time allowed for the performance to be thirty minutes; due regard being had to the thoroughness of the pulverization of the soil, and the state in which it is left for the reception of seed, \$5; second best, \$4; third best, \$3; fourth best, 2; fifth best, \$1.



SAWING AND SPLITTING WOOD.

For the best performance in sawing, and splitting into quarters, not less than one foot of dry oak wood, averaging four inches in diameter, \$5; second best, \$4; third best, \$3; fourth best, \$2; fifth best, \$1.

ARBORICULTURE.

FRUIT TREES.

APPLE ORCHARD. For the best Apple Orchard, of not less than *fifty trees*, which shall have been set out at least five years, and which shall be in the best and most thriving condition in 1862, \$10 ; second best, \$5.

PEAR TREES. For the best engrafted or budded standard Pear Trees, set out at least five years, and which shall be in the most thriving condition in the autumn of 1862, not less than *twenty-five trees*, \$10 ; second best, \$5.

For best engrafted or budded Pear Trees on Quince roots, with same conditions, and not less than *fifty trees*, \$10 ; 2d best, \$5.

PEACH ORCHARDS. For the best Peach Orchard, of not less than *fifty trees*, and which shall be in the most thrifty bearing condition in the autumn of 1862, \$10 ; second best, \$5.

For the Peach Orchard, of not less than *fifty trees*, grown from pits planted since 1857, on the spot where the trees stand, which shall be in the best condition in 1862, \$10 ; second best, \$5.

SEEDLING APPLES OR PEARS. For the best variety of *new Seedling Apples or Pears*, of decidedly superior quality, *one dozen specimens* to be exhibited, together with a history of the origin of the tree, a description of the growth, and its bearing character, \$10 ; second best, \$5.

SEEDLING PEACHES. For the best variety of *Seedling Peaches* of decidedly superior quality, and worthy of general cultivation—*one dozen specimens* to be exhibited two years in succession—together with a history of its origin, a description of its growth, and the bearing character of the tree, \$5 ; second best, \$3.

FOREST TREES.

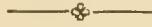
For the best plantation of Forest Trees, of either of the following varieties, viz. : White Oak, Yellow Oak, Locust, Birch, White Ash, or Walnut, Scotch Larch, Norway Spruce, Pitch Pine and White Pine, or other varieties, not less than three years old, and not less than one thousand trees,—Entries to be made to the Society previous to June 10th,—a premium, to be awarded in 1862, of \$15.

For the best plantation, containing not less than five hundred trees, a premium of \$6.

ORNAMENTAL PLANTING. To any city or town of Norfolk County, for the largest number and best growth of ornamental trees, not less than one hundred, which shall have been planted in a public square or on the roadside at least two years—first premium, \$15 ; second do., \$10.

To any individual or society, regard being had to the number of persons associated, for the largest number and best growth of ornamental trees, not less than fifty, which shall have been planted in a public square or on the roadside at least two years—first premium, \$10; second do., \$5.

These premiums to be awarded in the autumn of 1862, and if awarded to a city or town, to be graduated by the population according to the census of 1860.



HORTICULTURE.

FLOWERS.

For the best collection of cut flowers, \$4; second best, \$3; third best, \$2; fourth best, \$1. For the best bouquets, or tastefully arranged basket of flowers, not less than four, \$4; second best, \$3; third best, \$2; fourth best, \$1. For the best collection of twenty named dahlias, regard being had to *colors* and symmetry of flower, \$3; second best, \$2. For the best single bloom, \$1. For the best collection of twelve pot plants, regard being had to new and rare varieties and well grown specimens, \$3; second best, \$2. For the best single specimen, \$1. For the best collection of new seedling verbenas, with foliage, \$2. For the best new seedling, \$1. For the largest and best collection of wild flowers, \$2; second best, \$1. Any person presenting flowers for premium or exhibition, is requested to furnish a statement in writing of the sorts contributed, and of the contributor's name.

Gratuities, in publications or otherwise, to the amount of \$10, may be awarded at the discretion of the Committee.

FRUITS.

For the best collection of the most approved standard *Apples*, not less than twelve specimens of each variety—first premium, \$5; second do., \$4; third do., \$3; fourth do., \$2.

For the best collection of the most approved standard *Pears*, not less than twelve specimens of each variety—first premium, \$5; second do., \$4; third do., \$3; fourth do., \$2.

For the best collection of the most approved standard *Peaches*, not less than twelve specimens of each variety—first premium, \$3; second do., \$2; third do., \$1.

For the best collection of the most approved varieties of *Plums*, not less than twelve specimens of each variety—first premium, \$3; second do., \$2.

For the best *dish* of *Pears*, not less than one dozen specimens, a premium of \$2; second do., \$1.

For the best *dish* of Apples, not less than one dozen specimens, a premium of \$2; second do., \$1.

For the best basket of assorted Fruits, of different kinds, \$4; second best, \$3; third best, \$2.

For the best exhibition of Quinces, not less than a peck, \$2.

GRAPES. For the best exhibition of *Foreign Grapes*,—first premium, \$4; second do., \$3, or \$3 in publications at discretion of Committee.

For the best collection of *Native Grapes*, by the ordinary mode of cultivation, and without ringing, \$3; second do., \$2; third do., \$1.

For a new variety of *Native or Seedling Grape*, equal or superior to the Isabella, ripening in this County in the open air, by the *middle of September*, prolific and suitable for the table, first premium, \$20; second do., \$10.

CRANBERRIES. For the best collection of Cranberries, not less than four quarts, \$3; second best, \$2; third best, \$1.

GARDEN.

For the best VEGETABLE GARDEN, regard being had to the variety, excellence and quantity of the products thereof, and the mode and expense of cultivation, \$5; second best, \$3.

Entries must be made before 10th of June, and an exact statement rendered before 1st of November.

GARDEN VEGETABLES.

For the best collection and variety of GARDEN VEGETABLES, regard being had to the quantity as well as quality exhibited, \$10; second best, \$5; third do., \$4; fourth do., \$3; fifth do., \$2; sixth do., \$1. \$20 in agricultural publications, or otherwise, may also be awarded, at the discretion of the Committee.

POTATOES. For the best new variety of *Seedling* Potatoes, superior to any kind now in cultivation, a premium of \$10.

For the largest and best collection of *Potatoes*, not less than a *peck* of each variety, a premium of \$3; second best, \$2.

SEEDS.

For the best sample of ears of Seed Corn, not less than forty in number, \$1.

For the best collection of Onion, Carrot, Beet, Parsnip, and Ruta Baga Seeds, first premium, \$3; second do., \$2.

For the best 10 pounds of Timothy, Red Top, and Clover Seed, \$1.

For the best sample, one peck each, of Wheat, Rye, Barley and Oats, \$1.

HEDGES.

For the best *Live Hedge Fence*, not less than five hundred feet in length, \$5 ; second best, \$3.



ANIMALS.

All animals are to be entered in the name of the owner, who must have had them in his possession, at least six months before the exhibition.

All animals, entered in accordance with the rules and regulations, will be fed, during the Exhibition, at the expense of the Society.

No animal, entered in one class, will be allowed to compete for a premium in another, under a different entry, except working oxen and draught horses.

For any animal, worthy of the first premium, and having received a similar one at any previous Exhibition, a diploma, certifying the rank of such animal at the present Exhibition, shall be awarded instead of a premium.

A deploma may also be awarded, at the discretion of the several Committees, for any animal, worthy of exhibition, from without the limits of the Society.

CATTLE.

For the best BULL, one year old and upwards, of either Jersey, Durham, Devon, Ayrshire, Hereford, Kerry, or other foreign stock—in each class, \$5 ; second best, \$3.

For the best Grade BULL, \$3 ; second best, \$2.

For the best BULL CALF, under one year old, foreign stock, \$3 ; second best, \$2.

Cows. For the best Cow, three years old or upwards, Foreign Stock, of either class, each \$5 ; second best, \$4 ; third best, \$3.

Grade, \$5 ; second best, \$4 ; third best, \$3.

HEIFERS. For the best Heifer, two years old and under three, Foreign Stock, of either class, each \$3 ; second best, \$2 ; third best, \$1.

Grade, \$3 ; second best, \$2 ; third do., \$1.

For the best Heifer, one year old, of any stock, \$2 ; second best, \$1.

MILCH Cows. Three years old and upwards. For the best Milch Cow, without regard to breed, each, \$8 ; second best, \$6 ; third do., \$4 ; fourth do., \$2.

For the best Milch Heifer, not over three years old, without regard to breed, each \$6 ; second best, 4 ; third do., \$2.

A written statement of the quantity and quality of Milk, and of the manner of feeding the Cows and Heifers, will be required. Also a written statement of the butter made from milk, during two periods, of ten days each, with an interval of three months, and previous to the Annual Exhibition. If no butter is made, the statement must give the quantity and weight of the milk, the character of the last calf, and the time when it was dropped.

HERDS OF MILCH COWS. For the largest and best herd of Milch Cows—not less than six—kept on any farm in the County, and exhibited at the Show, regard being had to their breed, age and milking properties, with written statement thereof, first premium, \$12; second do., \$8; third do., \$6.

WORKING OXEN. For the best yoke, four years old and upwards, \$6; second best, \$4; third best, \$2.

STEERS. For the best yoke, well broken, three years old and under four, \$4; second best, \$3; third best, \$2.

For the best yoke, well broken, two years old and under three, \$3; second best, \$2.

NOTE. For Oxen or Steers, and also for Herds of Milch Cows, bred and raised by the exhibitor, twenty per cent. additional. In testing the strength, docility and training of Working Oxen, the load shall be not less than 3000 pounds for oxen five years old and upwards; and not less than 2500 pounds for oxen under five years old. In testing the character of Steers, as the Committee may direct, special regard will be paid to their docility and proper training.

TOWN TEAMS. For the largest and best team, of not less than ten yokes of Oxen or Steers, from any city or town in the County, first premium, \$12; second do., \$8.

FAT CATTLE. For the best beef animal fattened by the exhibitor, within the County, regard being had to the manner and expense of feeding,—of which a written statement will be required, first premium, \$8; second do., \$6.

SWINE.

BOARS. For the best Boar, not less than six months old, \$5; second best, \$3; third best, \$2.

SOWS. For the best Sow, not less than six months old, \$5; second best, \$3; third best, \$2.

WEANED PIGS. For the best litter, not less than four in number, and not more than six months old, \$5; second best, \$3; third best, \$2.

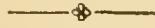
FAT HOGS. For the best Fat Hog, regard being had to breed, age and feeding, \$5; second best, \$3; third best, \$2.

SHEEP.

For the best lot of Sheep, not less than six, \$8; second best, \$6; third best, \$4.

For the best lot of Lambs, not less than six,—bred by the exhibitor, \$5 ; second best, \$3.

For the best Ram,—Cotswold, Leicester, Oxford Down, or South Down,—one year old or over, \$5 ; second best, \$3.



POULTRY.

For the largest and best collection of Poultry, owned by the exhibitor, \$10.

For the best collection of either Shanghae, Black Spanish, Dorking, Poland, Bolton Gray, Guinea, or Bantam Fowls, each, \$2 ; second best, \$1.

TURKEYS. For the best collection, \$3 ; second best, \$2.

GEESE. For the best collection, \$3 ; second best, \$2.

DUCKS. For the best collection, \$3 ; second best, \$2.

PIGEONS. For the best collection, \$2 ; second best, \$1.

NOTE. Poultry must be entered before 12 o'clock, on the first day of the Exhibition, to be entitled to a premium.



HORSES.

In awarding the premiums on Roadsters, the general good qualities,—such as style, action, constitution and enduring properties,—as well as speed of the animals, will receive special consideration.

In testing the speed of horses, each animal,—four years old and over,—will be required to draw a carriage weighing, with driver included, not less than 350 pounds.

It is understood that horses which have heretofore been classed under the head of “Thorough-bred and part Thorough-bred,” may compete as Roadsters, or in any other class.

Colts and Fillies will compete in separate classes, as heretofore, the premiums being the same for either sex.

No stallion will be entitled to a premium without a guaranty of his remaining for service in the County six months.

In testing the strength, docility and training of Draught or Team Horses, the load shall not be less than 2500 pounds for a single horse, and 3500 pounds for a pair of horses.

Every entry for premium must be made before 12 o'clock of the first day of the Exhibition, and the Stock must be present the second day, on or before 9 o'clock, A. M.

It must be distinctly understood that premiums will not be awarded to any animal that does not, in the opinion of the Committee, possess decided merit and a sound constitution.

ROADSTERS.

Stallions.

For the best Stallion, 4 years old and upwards, a prem. of	\$10.
“ 2d best “ “ “ “	7.
“ 3d best “ “ “ “	5.

Brood Mares.

For the best Brood Mare, with a Foal at her side, a prem. of	\$7.
“ 2d best “ “ “ “	5.
“ 3d best “ “ “ “	3.

Colts and Fillies.

For the best 3 years old, a premium of	\$5.
“ 2d best “ “	3.
“ 3d best “ “	2.
For the best 2 years old, “	3.
“ 2d best “ “	2.
“ 3d best “ “	1.
For the best 1 year old, “	3.
“ 2d best “ “	2.
“ 3d best “ “	1.

Harness Horses.

For the best Gelding or Mare, a premium of	\$7.
“ 2d best “ “ “	5.
“ 3d best “ “ “	3.
“ 4th best “ “ “	2.

HORSES OF ALL WORK.

Stallions.

For the best Stallion, 4 years old and upwards, a prem. of	\$10.
“ 2d best “ “ “ “	7.
“ 3d best “ “ “ “	5.

Brood Mares.

For the best Brood Mare, with a Foal at her side, a prem. of	\$7.
“ 2d best “ “ “ “	5.
“ 3d best “ “ “ “	3.

Colts and Fillies.

For the best 3 years old, a premium of	\$5.
“ 2d best “ “	3.
“ 3d best “ “	2.
For the best 2 years old, “	5.
“ 2d best “ “	3.
“ 3d best “ “	2.

For the best 1 year old, a premium of	\$5.
“ 2d best “ “	3.
“ 3d best “ “	2.

Carriage Horses 15 to 16 Hands High, open to all Descriptions.

For the best pair of Carriage Horses, a prem. of	\$10.
“ 2d best “ “	7.
“ 3d best “ “	5.
For best pair, less than 15 hands high, a prem. of	8.
“ 2d best “ “	6.
“ 3d best “ “	4.

Family Horses, open to all Descriptions.

For the best Buggy or Chaise Horse, a prem. of	\$8.
“ 2d best “ “	6.
“ 3d best “ “	4.

Ponies.

For the best matched Ponies, a premium of	\$6.
“ 2d best “ “	4.
“ best single Pony, “	3.
“ 2d best “ “	2.

Saddle Horses, open to all Descriptions.

For the best Saddle Horse, a premium of	\$6.
“ 2d best “ “	4.
“ 3d best “ “	2.

Single Draught or Team Horses.

For the best Draught Horse, a premium of	\$7.
“ 2d best “ “	5.
“ 3d best “ “	3.

Pairs of Draught or Team Horses.

For the best pair of Draught or Team Horses a premium of	\$7.
“ 2d best “ “	5.
“ 3d best “ “	3.

Walking Horses.

For the best Walking Horse, a premium of	\$7.
“ 2d best “ “	5.
“ 3d best “ “	3.

D A I R Y .

B U T T E R .

For the best produce of BUTTER, on any farm within the County, for four months, from the 20th of May to the 20th of September,—a sample of not less than twenty pounds to be exhibited,—*quantity* as well as *quality* to be taken into view, with a full account of the manner of *feeding* the Cows, and the general management of the milk and butter, first premium, \$10 ; second do., \$8 ; third do., \$5 ; fourth do., \$4.

NOTE. It will be seen that these premiums are offered for the best produce on the Farms, and not simply for the best specimens exhibited. Competitors will therefore be required to keep an account, and render a statement of the entire produce within the time mentioned. Each lot must be numbered, but not marked ; any public, or known mark, must be completely concealed, nor must the competitors be present at the examination.

For the best box of Butter, of not less quantity than 12 pounds, first premium, \$5 ; second do., \$3 ; third do., “Flint’s Treatise on Dairy Farming.”

NOTE. Butter to be presented before 9 o’clock on the morning of the second day.

CHEESE. For the best lot of Cheese,—not less than 40 pounds to be exhibited,—a written statement of the whole process of making which will be required, first premium, \$5 ; second do., \$3 ; third do., “Flint’s Treatise on Dairy Farming.”



B R E A D .

For the best loaf of Wheat and Indian, of two to four pounds weight, first premium, \$3 ; second do., \$2.

For the best loaf made of Unbolted Wheat, which has been grown in the County, of two to four pounds weight, first premium, \$3 ; second do., \$2.

For the best loaf of Rye and Indian, of four to six pounds weight, first premium, \$3 ; second do., \$2.

For the best loaf of Wheat Bread, of two to four pounds weight, first premium, \$3 ; second do., \$2.

For the best specimens of each or any of the aforementioned kinds of Bread, made by young women under eighteen years of age, an additional premium of twenty-five per cent.

The bread presented for premium must be made on the day previous to the Exhibition, by some female member of a family, (exclusive of hired persons,) in whose names the entries shall be made, and to whom the premiums shall be awarded. The bread shall be made without the use of saleratus or other alkaline substance, and baked in the oven commonly used by the family in which it shall be made, and must be presented on the second day

of the Exhibition, before 9 o'clock in the morning. A written statement of the process of making the bread shall accompany each entry, but no name or mark shall be put on the loaves, except the number of the entry in the Committee's book.

Committees shall be appointed to judge of the several descriptions of bread, to whom the names of the contributors shall not be known, and no person shall serve on said Committees if any member of his family shall be a competitor.

HONEY.

For the best specimen of Honey in the comb, not less than six pounds, \$2; second best, \$1.



MANUFACTURES.

AGRICULTURAL IMPLEMENTS.

For the largest and best collection of Agricultural and Horticultural Implements, \$12; second best, \$8.

For the best collection manufactured within the County, and exhibited by the manufacturer, \$6; second best, \$4.

For the best collection of Plows, with a statement of the purposes to which they are adapted, and their cost and method of operation, \$6; second best, \$4.

NEW INVENTIONS. For any new invention of decided superiority and usefulness to the farmer, a premium or gratuity, at the discretion of the Committee.

DOMESTIC MANUFACTURES.

FANCY ARTICLES—including Needlework, Crochetwork, Shellwork, Millinery, Drawings, Paintings, &c.

For such articles in this department as may be deemed worthy, a sum, not exceeding fifty dollars, shall be appropriated, to be paid in premiums or gratuities, proportioned to the cost and value of the article, at the discretion of the Committee.

NOTE. It should be understood that, in this department of Ladies' work—while other things will receive due consideration—the premiums are intended SOLELY FOR NEWLY MADE articles which are really useful, or particularly beautiful. For well made garments of any kind; for stocking knitting of wool, cotton or silk; or bonnet and cap making; for all articles of children's wear, well made or tastefully embroidered; for neat and thorough mending, patching, and darning; for drawing, designing, or painting in oil or water colors; for models in plaster, wood, or marble, &c.

Any article well and tastefully wrought, and offered by children under twelve years of age, will receive particular attention.

MANUFACTURES OF STRAW. For the finest collection and best manufactured *Plain Braid* Bonnets, not less than twelve in number, \$5 and diploma; second do., \$3.

For the finest collection and best manufactured *Fancy Bonnets*,

whether of Straw, Hair, or other material, not less than twelve in number, \$5 and diploma; second do., \$3.

For the best specimen of *Straw Bonnets*, wholly of domestic manufacture, \$4 and diploma; second do., \$2.

For the best specimen of *Straw Braid*, of domestic straw, not less than 100 yards, \$2 and diploma; second do., \$1.

For the best specimen of *Sewing Bonnets*, made of Straw, Hair, or other material, exhibited unfinished, with blocks upon which they are made, and not less than three from each sewer, \$3 and diploma; second do., \$2.

MANUFACTURES OF CLOTH, FLANNELS, HOSIERY, &c. *Cotton Cloth.* For the best specimen of Cotton Cloth, of any description, not less than twenty-eight yards in quantity, a premium or gratuity, at the discretion of the Committee.

Woollen Cloth. For the best specimen of Woollen Cloth, of any description, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

Cotton and Woollen Mixed. For the best specimen of Cotton and Woollen Cloth of any description, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

Flannels. For the best specimen of Flannel, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

For the best specimen of Cotton Flannel, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

For the best pair of Woollen Blankets, a premium or gratuity, at the discretion of the Committee.

Hosiery, &c. For the best specimen of Silk Hose, a premium of \$1.50.

For the best specimen of Silk Half Hose, a premium of \$1.

For the best specimen of Woollen Hose, a premium of \$1.

For the best specimen of Woollen Half Hose, a premium of 50 cents.

For the best specimen of Cotton Hose, a premium of 50 cents.

For the best specimen of Cotton Half Hose, a premium of 25 cents.

For the best specimen of Worsted Hose, a premium of \$1.

For the best specimen of Worsted Half Hose, a premium of 50 cents.

For the best specimen of Sewing Silk, not less than one pound, a premium of \$2.

For the best specimen of Knitting Yarn, not less than one pound, a premium of \$1.

For the best specimen of Spool Thread, not less than one pound, a premium of \$1.

For the best Fleece of Wool, a premium of \$1.

For the best dozen Grain Bags, a premium of \$1.

For the best specimen of neat and thorough mending, patching, or darning of garments, hose, &c., a premium of \$1.

COUNTERPANES. For the best Counterpane—regard being had to quality and expense of materials—first premium, \$3; second do., \$2.

CARPETING, RUGS AND FLOOR CLOTH.

For the best "Common" Ingrain 2-ply Carpeting;

do. do. "Fine" do. do. do.

do. do. "Superfine" do. do. do.

do. do. "Common" "Fine," or "Superfine Ingrain 3-ply Carpeting;

do. do. Brussels Floor Carpeting;

do. do. Tapestry do. do.

do. do. Velvet Carpeting;

For each of these descriptions of Carpeting, a premium or the Society's diploma, at the discretion of the Committee.

NOTE. Ingrain 2-ply Carpeting will be judged by the comparative merits of pieces of similar weight; or, disregarding weight, by the quality of color, the taste of shading, and evenness in spinning and weaving.

For the best piece of Stair Carpeting, the Society's diploma.

For the best Hearth Rug, the Society's diploma.

For the best specimen of Painted Floor Cloth, a premium or the Society's diploma, at the discretion of the Committee.

NOTE. Any articles, in either of the foregoing departments, which shall have been manufactured in THE FAMILY of the person presenting it, will receive the particular consideration of the Committee, and, if worthy, a suitable premium.

GLASS, EARTHEN, STONE AND WOODEN WARE. For the finest collections and best specimens of articles in each of these departments, a premium or gratuity, at the discretion of the Committee.

BRASS, COPPER, TIN, IRON AND BRITANNIA WARE. For the finest collection and best specimens of articles in each of these departments, a premium or gratuity, at the discretion of the Committee.

CABINET WORK. For the best specimen of Cabinet Work, a premium, or the Society's diploma.

IRON FENCING, GATES AND POSTS. For the best specimens of each—regard being had to cost and utility, as well as ornament—a premium or gratuity, at the discretion of the Committee.

STOVES. For the best Farmer's Cauldron Stove;

do. do. Cooking do.

do. do. Parlor do.

—a premium of \$2.

HORSE AND OX SHOES. For the best specimens of Horse and Ox Shoes, a premium of \$1.

For the best specimens of Horse Shoes *for meadow lands*, a premium of \$1.

INDIA RUBBER GOODS. For the finest collection and best specimens of India Rubber goods, a premium or gratuity, at the discretion of the Committee.

BRUSHES, COMBS, HATS, CAPS AND GLOVES. For the finest collection and best specimens of each of these articles, a premium or gratuity, at the discretion of the Committee.

LEATHER, AND ARTICLES MANUFACTURED THEREFROM.

For the best specimen of Thick Boots, a premium of				\$2.
do.	do.	Calfskin,	do.	3.
do.	do.	Thin Boots, other		
		than Calfskin,	do.	2.
do.	do.	Kipskin,	do.	2.
do.	do.	Thick Brogans,	do.	1.
do.	do.	Fine Brogans,	do.	1.
do.	do.	Ladies' Boots,	do.	1.

For the best specimen of Upper or Sole Leather, or Morocco, a premium or gratuity, each, at the discretion of the Committee.

For the best single Carriage Harness ;

do. do. double do.

do. do. Cart Harness—a premium or gratuity, each, at the discretion of the Committee.

For the best Riding Bridle, a premium of \$1.

do. do. do. Saddle, do. 2.

do. do. Carriage or Cart Whip, a premium of 1.

CARRIAGES, WAGONS, CARTS, &c.

For the best specimen of Family Carriages, for one horse or for two horses ;

For the best Covered Wagon ;

do. do. Open do.

do. do. Farm do.

do. do. do. Cart ;

do. do. Farm Wheelbarrow—a premium or gratuity, each, at the discretion of the Committee.

JELLIES, PRESERVES, PICKLES, AND KETCHUPS. For the finest collection and best specimens of each, made of articles of domestic growth, a premium or gratuity at the discretion of the Committee.

NATIVE WINES, CORDIALS, &c.

For the best specimen of Wines from cultivated or wild grapes, not less than two bottles to be exhibited, \$2 ; second best, \$1.

For the best specimen of Wine or Cordial from currants, black-

berries, raspberries, or elder berries, not less than two bottles to be exhibited, each, \$1.

NOTE. It is to be understood that all articles presented for premium, in each of the foregoing departments, shall have been manufactured or produced within the County during the last year, and by the person presenting them. Also, that in every case, the Examining Committee shall have the right to substitute the Society's diploma, for a premium or gratuity, or to give it where no premium or gratuity has been offered, at their discretion.

All discretionary premiums or gratuities shall be proportioned to the actual value and utility of the articles.

Articles in either of the above departments, contributed to the Exhibition by persons not resident in the County, shall receive suitable attention from the Committee, and if worthy, be awarded the Society's diploma.



M I S C E L L A N E O U S .

AGRICULTURAL LABORERS.

For a certificate—signed by his employer, and countersigned by any two of the Trustees residing nearest to the applicant—of the superior qualification of any man or youth, in the employment of any member of the Society for a period, next preceding, of not less than two years, attesting the industry, integrity, respectful demeanor, and general good habits, during the time, of the bearer of such certificate, a premium of Membership of the Society and a Diploma.

AGRICULTURAL ESSAYS.

For the best Essay on the relative importance and value, as sources of profit, of the various grasses, or cereal, fruit or vegetable crops, a premium of \$10.

For the best Essay on the relative importance and value, as sources of profit, of the breeding and raising of the different classes of farm-stock, a premium of \$10.

For the best Essay on the fattening of cattle, swine or sheep, detailing the process and expense of the same, a premium of \$10.

FOREST TREES. For the best Essay on the raising and cultivation of Forest Trees, a premium of \$10.

INSECTS. For the best Essay for the destruction of Insects injurious to vegetation, such as *Cureulio*, *Borer*, *Canker-Worm*, *Caterpillar*, *Cut-Worm*, *Squash-Bug*, *Striped-Bug*, *Rose-Bug*, &c., &c., a premium of \$10.

PRESERVATION OF WINTER FRUIT. For the best Essay on the preservation of Apples and other Winter Fruits, \$10.

PRESERVATION OF VEGETABLES. For the best Essay on the preservation of Vegetables, a premium of \$10.

AGRICULTURAL EDUCATION. For the best Essay on Agricultural Education, a premium of \$10.

FARM ACCOUNTS. For the best Essay on a system of Farm Accounts, a premium of \$10.

For the best Prize Essay on Domestic Poultry, \$10.

For the best Essay on Fences for Farms, uniting economy, strength, and appearance, a premium of \$10.

For the best Essay on the extermination of Weeds and Plants, destructive to crops, a premium of \$10.

For the best Essay on the preservation and application of Liquid Manure, a premium of \$10.

For the best Essay on the Introduction of new Fruits and new articles of Field Culture, a premium of \$10.

For the best Essay on the value and application of Phosphate of Lime, or any fertilizer of the soil, a premium of \$10.

For the best Essay on Bees, and Structure of Hives, with particular reference to feeding Bees, and guarding against the spoliations of the Bee Moth, a premium of \$10.

For the best plan for a Barn and Barn Yard, with regard to the keeping of the Hay, the comfort of the Cattle, the ease and convenience of tending them, and the making and preserving the Manure, a premium of \$10.

These premiums will not be awarded unless the Essays offered shall, in the judgment of the Committee appointed to decide upon them, be deemed worthy of an award, without reference to their comparative merit.

FARM BUILDINGS.

For the best planned house and out-buildings,—regard being had to the cost and economy of labor,—the house to be warm, well lighted and ventilated, with a cellar protected from frost and vermin, and the whole not to cost over \$1,800;—to be examined by the Committee on Farms,—a premium to be adjudged by said Committee.

RULES AND GENERAL REMARKS.

It is understood that all premiums will be restricted to articles of the growth and manufacture of the County, unless otherwise specified in the premium list. Essays and Agricultural Implements being excepted from this rule, are open to general competition.

Committees are particularly requested not to award gratuities other than diplomas, or such as are specified in the premium list.

Any gentleman, not a member of the Society, entitled to a premium of five dollars or upwards, shall receive the amount exceeding the sum of five dollars, and shall thereafter become a member.

The stock and articles intended for exhibition and premium,—working oxen, bread and butter excepted,—must be on the ground at or before 12 o'clock on Thursday, the first day of the Exhibition, to be entitled to any premium. Animals will not be allowed to be removed from the pens before 3 o'clock on Friday, the second day, and all other articles not until 5 o'clock, without the permission of the Committee having them in charge.

In order to extend liberal encouragements to citizens of the County living remote from the Society's grounds in Dedham, a sum,—not exceeding fifty dollars,—will be appropriated for compensation of travel to the owners of all such neat cattle, swine and sheep, as have been brought or driven more than five miles,—reckoning the distance from whence they came to the place of exhibition,—and receive no premium. Only one travel will be allowed to the same person. Payment will be made at the rate of ten cents per mile, for a yoke of oxen or steers; eight cents per mile, for each bull, cow, heifer or yearling; ten cents per mile, for each boar, sow or litter of weaned pigs; and eight cents for each flock of sheep. But no such payment shall be made for any animal, or animals, which, in the judgment of the Committee appointed to examine them, are not of a superior character and

worthy of exhibition, or have not been entered in accordance with the rules and regulations of the Society.

The animals, while on the ground, will be fed at the expense of the Society.

No person serving on any of the Committees shall have a vote in any case, when he shall be personally interested as a competitor.

All other Entries for premiums must be made in writing, and shall be placed in the hands of the Recording Secretary, on or before the 15th of November.

Premiums awarded, and not called for on or before the last Wednesday in March following, will be considered as given to the Society, in aid of its funds.

After the objects for Exhibition are arranged, they will be under the care of the Committees, and cannot be removed without their consent.

No object or article will be entitled to a premium, unless it possesses points of superiority ; and the Committees have the discretionary power of withholding premiums, if, in their opinion, the articles or objects are not deemed worthy to receive the same.

The Trustees have carefully revised and approved of the foregoing proposals for *Premiums*. The respective Committees, appointed to award the same, are required to enforce a strict conformity to all the rules in relation to Entries and Certificates.

In the appointment of *Committees*, the Trustees will seek for the most judicious and skilful individuals in the various towns in the County, *to award the Premiums* ; but should they fail to secure the aid of the ablest and most experienced men in the above capacity, they will rely upon the forbearance which, they believe, will be generously extended towards sincere and unwearyed efforts.

As it will become the duty of the Society to make to the Legislature an exact report of its doings, the Trustees deem it of the highest importance, that earnest and persevering efforts should be made by the citizens of every town in the County, to bring out the results of their skill and industry.

MARSHALL P. WILDER, *President*.

HENRY O. HILDRETH, *Secretary*.

TRANSACTIONS

OF THE

NORFOLK

AGRICULTURAL SOCIETY,

FOR

1862.

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ADDRESS,

BY HON. BENJAMIN F. THOMAS.



MR. PRESIDENT, LADIES AND GENTLEMEN :

WHAT lessons are written for us, farmers, in the earliest record of the human race. The first man, fresh from the moulding hand of his Creator, bearing his yet unmarred image, was a gardener. "And the Lord God took the man and put him into the garden of Eden, to keep and to dress it." As he looked with joy and admiration upon the new creation, with what intense emotion must he have heard the voice of his Maker, giving him dominion over the earth, and commanding him to replenish and to subdue it. To the All-seeing eye the work was very good. Well might the morning stars sing together, and all the sons of God shout aloud for joy. From that hour to this, it is in the culture of the earth that man has gone back nearest to the glory of his first estate, the Eden of tranquil joy and peace.

The next lesson is like unto the first. The curse that fell upon the second man cut him off from the culture of the earth. And the Lord said unto Cain, When thou tillest the ground it shall not yield unto thee her strength. And Cain went out from the presence of the Lord and built a city. Went out from the presence of the Lord! How many a young man who gives up the quiet occupations of rural life for the struggles and terrible temptations of the market-place and the forum, goes out from the presence of the Lord, leaving behind him the simplicity and purity of life and thought by which his childhood was drawn near to Him; the loving eye, which saw Him in the smiling bud of

spring and in the golden fruit of the harvest; the loving ear, which heard him in the falling shower and in the surging wave. And for what does our young man give up the quiet, the beauty, the freedom of rural life? To sport and flutter for awhile in the gay saloons of fashion, to waste the vigor and freshness of youth and early manhood in the pent-up air of some office, mill or counting-room, or, perchance, to be the servant of servants—the servant of the people—now basking in their smiles, now shivering in their frowns, kissed at one moment and kicked at another, with no special cause for either kick or kiss. Few errors of opinion are more harmful than the underestimate of the worth and dignity of rural pursuits, which hurries so many of our young men from the farm into the already crowded ranks of professional and commercial life. The exchange and the forum may have some brilliant prizes, but how many fail compared with those who win, and how many of those who win find the fruits of victory turn to ashes in their grasp. Who shall garner up the blighted hopes, the wasted frames, the broken hearts that lie thickly strewn on the fields of the world's conflict and struggle?

I know that I have always looked upon rural pursuits with a *loving eye*; but, weighing them in the scales of a *sober judgment*, they will be found wanting in nothing essential to a happy, manly and useful life.

If a young man seeks a competence of this world's goods, there are no shares—factory, bank or railroad—that in the long run pay better dividends than the ploughshare. Agriculture, even in New England, pursued with system, with a wise economy, and with the skill which results from science, tested by experience and experience illumined by science, yields as much wealth as it is good for a man to have, more than the average of other pursuits, enough, at any rate, to enable us to live comfortably, to educate our children, to provide for the rainy day or shady slope of life, and to obey the calls of Christian charity and neighborly kindness. More than this cometh of evil. We are beginning to understand that, even in this world, the rich man has no place in the kingdom of rest and of peace. When we add the comparative certainty of the farmer's gains, his exemption from the sudden reverses which test so severely not only the mental but the

moral strength of men, his freedom from corroding anxieties and cares, the balance, even as a means of living, will be found in favor of rural pursuits.

If a man love home, the serenity and peace that are found only beneath our own roof-tree and on our own hearthstone, he will cling to the farm. Domestic happiness finds there its most congenial soil. Poets and painters have but expressed the common convictions of mankind, when they have environed their pictures of home with the objects and wreathed them with the atmosphere of rural life. But of the general comfort and happiness of rural pursuits I need not say much in this presence. There is a view of the matter, however, which has always struck me with great force, but which I do not recollect to have seen brought into distinct notice. It is the visible, palpable result of agricultural labor. There is nothing so requites toil as a visible, palpable result. Most men cast their bread upon the waters, with the trembling hope that it may return in many days. The farmer scatters his seed upon the soil, sees the bow of promise which the hand of the Lord hath bent above him, and lies down to rest assured that summer and winter, seed-time and harvest, will not utterly fail upon the earth. Every day's labor tells. The results of his toil greet him morning and evening, as he goes to or returns from his labor. That rough, unsightly bog-meadow, into which he slumped so often when a boy, now smiles on him in beauty and rejoices with him beneath the weight of its luxuriant crops. That twig of a tree, which in a thoughtful moment he planted with care, now shelters him from the noontide sun, or bends to the earth with luscious fruit. Order succeeds confusion, the waste places are redeemed, the rough places made smooth. That neat, compact, comfortable dwelling, that well-arranged, capacious barn, with cellar beneath, those solid stone walls, that thrifty orchard, those fields of waving verdure, that sleek and well-fed stock, how they rejoice the eyes and gladden the heart and reward the skill and patient industry and energy of their owner!

And the fruits of his toil are not only palpable but comparatively certain. The earth returns his devotion with even more than woman's fidelity. Year after year she increases the number

of her gifts, demanding only in return vigilant care and the refuse of the products he cannot use.

But if a man has hopes and aspirations which do not cluster about home, if he would move the world outside of his farm, the farm, nevertheless, is a grand starting-point.

If, for example, a man hankers for political distinction, the thirst for which has been one of the greatest curses that has afflicted our country, (the locusts of Egypt were mercy in the comparison,) it will by no means mar his prospects to have the title of farmer prefixed to his name. It throws that of esquire or reverend at once into the shade. The prophet sought for the king of Israel among the shepherds of Bethlehem. The Romans found the Saviour of the republic at the plough. The Father of his country was a Virginia planter. With the Farmer of the Hermitage and the Farmer of Marshfield our dear old homestead remained undivided.

There is, doubtless, more or less pretension about the matter. Every aspirant for office who ever rode within sight of a cornfield, or whose grandfather ever held a plough, is, for the nonce, a farmer. But there is a valuable truth underlying this pretension. It is a deep and prevalent conviction that rural pursuits keep the mind and heart in sound and healthy tone; that they who till the soil and moisten it with the sweat of their brows, cannot but love it; that his heart must be cold and dead, who, standing beneath the tree in whose shade he sported in childhood, and looking out upon the broad acres his skill and muscle have subdued and clad with beauty, does not feel with singular depth and earnestness,

“This is my own, my native land.”

If a young man has higher, nobler aims in life, the development and culture of mind and heart, what better school is there than the culture of the earth? I mean, of course, the culture of the earth in the light and with the eye of science. The science of agriculture, beautiful as it is profound, looking into the very heart of Nature's secrets and mysteries, at once the interpreter and handmaid of creative wisdom and power, will feed, refresh and strengthen the mind, at the same time that it fits it for every day's duties. And the close observation and study of nature, in

her beauty and her divine economy, and of that almost tangible Providence which moves in the procession of summer and winter, day and night, seed-time and harvest, and looks out upon us through the myriad forms of organic life, can they fail to exalt and purify the heart and ripen it for that harvest which is the end of the world, and whose reapers are the angels?

No pursuit has a truer dignity or nobler aim. The farmer is the co-worker of the Creator. God is the great cultivator. He lifts up the mountain of rock from the bosom of the earth, and when the fire which heaved it from its deep foundations has gone out, the process of cultivation begins. The atmosphere wreathes itself around the granite's face and softens it. The rain bears the impalpable dust to the plain. The seed is borne to it on the wings of the wind. The solitary place is made glad and the wilderness buds and blossoms as the rose.

A beautiful example of Nature's processes of culture may be found in the agency of water in the formation and growth of organic life,—water, itself the most beautiful of the works of God, the emblem of his purity and goodness, one of the chief ministers of his ever-creating and renewing power. Borne upon the bosom of the air, the watery vapor softens the rock and creates the soil itself. Mingling with and impregnating the atmosphere, it penetrates and permeates the soil, finds its way into the leaf and pores of every plant, and mingles with the life-blood of every living being. It rises with the atmosphere, which holds it in suspension in proportion to the warmth of its temperature. When the air touches the colder mountain top or mountain side, it bears behind, in the floating mist or cloud, a portion of its burden. This re-appears in the rill or gushing spring on the thirsty plain beneath. Again, when a warmer current of the air, charged with moisture, meets and mingles with a colder current, the mean temperature, which is the result of the union, is incapable of holding in suspension the mean quantity of vapor. Again the cloud is formed and the excess of moisture falls to the earth in the refreshing and fertilizing shower, washing the air, as it passes, of the vapors which, noxious to man, yet minister to vegetable life.

Observe another form of the same beautiful process,—when

as night approaches and the surface of the earth begins to cool, the air in contact with it begins to cool also, and, like the current on the mountain top, to give up a portion of its watery burden. This water descends in particles infinitely minute, which collect on every leaf and hang on every blade of grass in drops of glittering dew. "Mark here," says Professor Johnston, to whom I am indebted for the material of this illustration, "a beautiful adaptation. Different substances are endowed with the property of radiating their heat, and of thus becoming cool with different degrees of rapidity, and those substances which in the air become cool first, also attract first and most abundantly the particles of falling dew. Thus in the cool of the evening the grass plot is wet while the gravel walk is dry, and the thirsty pasture and every green leaf are drinking in the descending moisture, while the naked land and the barren highway are still unconscious of its fall."

I shall have occasion, in a moment, to observe how the practice of deep and subsoil ploughing proceeds upon and takes for granted this agency of water in the production and growth of vegetable life.

To subdue the earth and to replenish it; in this first commandment lies the epitome of our art.

To subdue the earth and to replenish it is to fit it for the abode of cultivated, developed man.

In redeeming the bog meadow of which I spoke, what has the farmer accomplished? If prudently done, at times of relief from other work, he has added greatly to the value of his estate. He has given beauty, softness and finish to the landscape. Every traveller that passes that way has cause to bless him. He has sweetened the air, made his own and his neighbor's abode healthier, and given a ruddier tint to the rose upon his daughter's cheek. He has increased the capacity of the earth for the very end for which it was made. That portion which was before worse than useless, now affords means of sustenance and support for a human being.

Look at the same thing on a larger scale. In 1780 the island of Great Britain contained about nine millions of inhabitants. In seventy years the population doubled, and the quantity of food

raised upon the island was more than doubled. It is estimated that under the improved systems of agriculture, the food necessary to sustain forty millions of beings may be raised on this little speck of the ocean. We can understand this when we find that on the estate of Mr. Coke (afterwards Earl of Leicester) the rental has increased eight fold in fifty years—from £5,000 to £40,000.

But the dignity and worth of your calling is shown not only by the great fruits of its labors and progress, but by the large requirements it makes of those who would prosecute it with skill and success. To subdue the earth and to replenish it. To subdue the earth, we must understand its powers or laws of growth and production, and must so prepare the soil as to give the freest and fullest play to those laws; science must be combined with art, the culture of the mind with the culture of the soil.

The plant that springs up at my feet, on what food does it feed? What condition of the soil is necessary to ripen and perfect its fruit? To answer these questions, which every season repeats to the farmer, is the province of science. The plant must have nutriment. I will feed it. But will the manure on my fork assist or check its growth? Will any of its properties enter into the composition of the plant? Again, I plant wheat in my field this year. It takes up for its nourishment and nearly exhausts certain properties of the soil. What shall I do? Science gives the answer. She says sow a root crop the next year, and while you are raising the root crop the influence of the atmosphere on the soil, aided by culture, will prepare and render soluble the food which will supply the wheat the year after. It is thus we can understand the remark of Professor Johnston, that the art of agriculture is almost entirely a chemical art, and that nearly all its processes are to be explained upon chemical principles.

And this is true, I conceive, not only of what may be called the natural but the mechanical processes of agriculture. The mere passing of the ploughshare or the harrow through the soil can have, of itself, no effect in increasing its productive powers. How, then, does the deep ploughing of dry land and the stirring of its subsoil increase its fertility? Mainly by increasing its power to absorb water, through whose gentle agency the food of plants is dissolved and held in solution for its use. "This power

of land to absorb water," Mr. Humphrey says, "depends in a great measure upon the division of its parts. The more divided these are, the greater its absorbent power. When this power is great, the plant is supplied with moisture in dry seasons. The effect of evaporation in the day is counteracted by the absorption of aqueous vapors from the atmosphere, by the interior parts of the soil during the day and by the exterior and interior during the night." I have thought of this remark when I have seen a man plant a tree, by digging the soil just deep enough to cover the roots, and then setting it on hard pan or a gravel bed, wonder why it did not live, or if it did languishingly live, as we say in the law, why it did not grow; as if a tree, as well as a man had not an inherent right to die of thirst or starvation. Put the same tree upon good rich loam, thoroughly stirred and decomposed to the depth of two and a half or three feet, and if underdrained all the better; keep the ground open and loose about it, give it a little mulching, in a dry season, and its growth will be such that Jonah's gourd will no longer seem miraculous.

The object of all mechanical operations on the soil is to expose the greatest possible surface to the influence of the atmosphere. The plough, the harrow, the spade, the hoe, accelerate the decomposition of the soil. The rapidity of the decomposition of a solid body increases with the extension of its surface. "The more points of contact we offer," says Liebig, "to the external chemical agent, the more rapid will be its action." An extension of surface almost infinite, any one can see, is gained by the subdivision of its particles.

But into the details of this beautiful science of agricultural chemistry I may not venture to go further. I fear I should soon get beyond my depth. These imperfect illustrations may suffice to show that we must have its aid and guidance, if we would thoroughly subdue the earth. I should be happy, if I thought they would attract you to the study of the science itself. Its principles should be better understood. They underlie our art. They are at once the seed and the fruit of its progress and growth.

This doctrine of the necessity of thoroughly subduing the earth may throw some light upon the vexed question of small or large

farms. And with farmers of moderate capital the difference is just this. On the small farm we may subdue the earth; on the large the earth subdues us.

But we are commanded not only to *subdue* the earth, but to *replenish* it,—to restore to the soil the substances which have been taken from it, and which the atmosphere cannot supply. The earth is liberal, but she is exact also. She asks only for the refuse matter, which we cannot use, but she asks for all. Her cry is, restore. Her work is re-production. Give back, she says, what I have lent. No matter how vile the form, it shall come to you again in the blooming flower, the luscious fruit, the golden grain.

We hear much of the comparative value of the sciences,—the moral and the exact sciences. After all, there are few sciences more beautiful or of greater practical worth than the science of manures. How shall we procure and preserve the food of plants, and how shall we distribute to each its appropriate food? for plants differ in their tastes and habits, and what is nourishing to one is noxious to another. To answer the last question requires a knowledge of organic chemistry. The answer to the first is comparatively simple. The only way to get along is to save all, to gather up all the fragments, so that nothing be lost. There is not a green weed that grows by the road-side, nor a refuse bone that a dog leaves in the door-yard, that is not worth caring for. It grieves a man's heart to see how the most precious food of plants, their very life-blood, is wasted and lost. The late Judge Buel, of Albany, estimated that the eight millions of cultivated land in the State of New York were capable of producing sixteen million loads of manure, (an underestimate, in my judgment,) but that in point of fact they did not produce more than four millions. Estimating the value at a dollar the load, the difference every year is twelve millions of dollars.

When we come to aggregates the importance of the subject is apparent. Does our practice show that we feel it? How many a barn-yard, even in this county of Norfolk, can be found on a hillside, near the highway. First comes the sun. He takes what will pass off in a gaseous form. Then comes the rain or melting snow, and what of strength is left is washed or trickles into the

road. The owner of that barn-yard must be of opinion that the importance of manures is overestimated. He might just as well take the bank-bills he gets for his hay or grain, and put them behind the back-log, as to waste such precious mint-drops. I believe there are farmers in every county of the State, and many of them, on which in the life-time of their owners, manure enough has been wasted to pay for the price of the farm.

Now, without going far into the chemistry of the matter, every body understands that the manure from organic matter may be in liquid, solid or gas. The solid is all that most farmers save, and that imperfectly. How can we preserve the *liquids* and *gases*? The answer is obvious, by putting into the barn-yard and barn-cellar some substance that will absorb and retain them. This is the philosophy of the compost-heap. The earthy matters absorb and retain the fertilizing properties of the liquids and gases, and impart them again to the plants. By covering with loam the fermenting dung-heap, you retain the gases which would otherwise take wings, and by coating the barn yard with loam you save the liquids, which otherwise would run away or evaporate.

The earth must not only be thoroughly subdued, but liberally and constantly replenished. A plant, like an animal, must be fed. It is a living being, with organs of digestion. Give it good, nutritive food, and enough of it, and it will laugh and grow fat; give it poor, scanty food, it will pine and die. You may as well starve your cow as your corn.

Without the aid of science, the observation of every farmer tells him that the principal food of plants is organic matter, vegetable or animal. Keeping this simple fact in view, some practical conclusions seem to follow. First, that it is as wise to waste the food of plants as of stock, manure as hay or grain. Second, that it is as judicious to feed two acres of plants with food sufficient only for one acre as to winter two cows on hay just enough for one. Third, that supposing the farmer has the requisite labor to subdue the land, the quantity to be cultivated must depend upon the manure he is able to make, save or buy. Fourth, that the farmer who begrudges the systematic care, labor or expense of preserving his manures, saves at the tap but loses at the bung.

But, says the wise man, better is the end of a thing than the beginning thereof.

The lines of the farmer have indeed fallen to him in pleasant places ; he hath a goodly heritage.

Agriculture, like the wisdom of Solomon, is a “ tree of life to them that lay hold upon her, and happy is every one that retaineth her.”

She shall be health to his mind and marrow to his bones.

His barns shall be filled with plenty, and his presses shall burst out with new wine.

Length of days is in her right hand, and in her left hand riches and honor.

Her ways are ways of pleasantness and all her paths are peace.

When thou liest down thou shalt not be afraid, yea, thou shalt lie down and thy sleep shall be sweet.

Forsake her not and she shall preserve thee, love her and she shall keep thee, exalt her and she shall promote thee.

REPORT OF THE PRESIDENT AND SECRETARY.

TO THE SECRETARY OF THE STATE BOARD OF AGRICULTURE.

SIR,—In accordance with former usage, we submit the following Report of the Transactions of the NORFOLK AGRICULTURAL SOCIETY for the year 1862.

The operations of the Society for the past year have been highly successful, and will compare favorably with those of any season since its organization. Notwithstanding the disturbed condition of national affairs, the Annual Exhibition was one of the most successful ever given by the Society, affording gratifying assurance of the excellent influence exerted by the Association, and attesting in the strongest manner to the deep interest taken in its welfare and prosperity by the people of the County.

For more specific information with reference to the present condition and future prospects of the Agricultural Interests of the County, we would refer to the interesting and valuable report of the Supervisory Committee, which, with the reports of the several Committees of the Society, is herewith subjoined.

MARSHALL P. WILDER, *President.*

HENRY O. HILDRETH, *Recording Secretary.*

REPORT OF SUPERVISORY COMMITTEE.

The Supervisory Committee of the Norfolk Agricultural Society submit the following Report in regard to their observations for the year 1862 :—

The winter of 1861-2 was rather mild. Snow fell in the latter part of December, and remained on the ground till late in March. The first snow-storm ended in rain, which, being absorbed by the snow, was converted into ice by the cold weather which followed. Several subsequent storms were of similar character, and were followed by similar weather. The result was that the ground became covered with a covering of ice, of eight inches or more in thickness, which remained solid and unbroken for more than two months. The effect of the ice was to kill much grass. The manner in which this result is produced we will not undertake to explain; but the fact that ice, adhering firmly to the ground, destroys grass, more or less, is well known. Another fact deserves mention in this connection: The covering of ice prevented the field-mice from burrowing amongst the grass, and these animals, straightened by hunger, were forced to resort to trees, which they attacked above the ice, gnawing off the bark, and thus destroying them. Much damage was done in this way.

The snow and ice finally disappeared, chiefly from the influence of the sun, under an unusually high temperature for the season, causing high freshets in many streams—the Connecticut and some other northern rivers having reached a higher point than before for many years. April and May were much dryer than usual—only 4.05 inches of rain having fallen during those months against 7.30 inches as the average. But with the beginning of June the weather became wet, and from that time onward there was not a day during the season when grass, or any other vegetation, in this section, indicated any want of moisture.*

* The unusual wetness of the last summer and autumn, in this vicinity, having been the subject of general remark, the Chairman of your Committee thought it might be important to obtain accurate statistics, showing how the season would compare with others, in regard to the quantity of rain for each month. A note, therefore, was addressed to Professor G. P. Bond, of Cambridge, who kindly furnished a table, giving the quantity of rain and melted snow registered at the Observatory of Harvard College, from the beginning of the year 1862 to November 28th of the same year, with the average amount for thirty-four years at Boston. From this it appears that, notwithstanding the remarkable dryness of April and May, the aggregate quantity of water which fell from the 1st of January to

In regard to agricultural products, the season was on the whole propitious, so far as relates to this section. The first crop of hay was in some instances lessened by the spring drought, and in others was deficient from injury done by ice, as before mentioned; but the crop was nearly an average one, and under the favorable weather which followed, the aftermath was abundant. Pastures were green and luxuriant from June to November. The crops of small grain (so called) gave, generally, an average yield, with the exception of wheat, which from the attack of blight, was not so uniformly good as it had been for several previous years. Indian corn gave a fine yield, notwithstanding fears were for awhile entertained that much of it would not ripen. Potatoes grew finely through the season, and the yield was generally more abundant than that of any previous crop for several years. Still the tubers have not been altogether free from the *rot*—that mysterious malady which for nearly twenty years has been more or less destructive to the crop, both in this country and in Europe.

But the special characteristic of the season in regard to productions, was the abundance of apples and pears. The yield of these fruits was even greater than that of 1860, which was regarded as unprecedented. Cherry trees have not recovered from the great injury sustained in the autumn of 1860 and the following winter. The crop was very small, and the quality of the fruit generally inferior. Peach trees of proper age for bearing, which were not killed by the winter of 1860-1, bore fair crops of good fruit in 1862.

It will be recollected that some species of insects, not heretofore common in this section, appeared here in great numbers in 1861. Allusion is particularly made to the army-worm and grain aphid or louse. The ravages of these were spoken of in the Report of this Committee for last year. Fears were entertained

the 28th of November, exceeded by nearly a foot the average quantity for the year, as follows :

1862.	At Cambridge. in.	Average at Boston. in.
January.....	7.69	3.45
February.....	2.79	3.31
March.....	6.21	3.58
April.....	1.73	3.79
May.....	2.32	3.51
June.....	6.29	2.64
July.....	5.05	3.30
August.....	6.29	4.28
September.....	4.66	3.28
October.....	5.24	3.47
November to 28th.....	6.73	4.31
December.....	....	4.14
	55.00	43.06

that the voracious army-worm would reappear in 1862, in increased numbers, although, as stated in our Report for last year, we have no instance in the history of the insect that it has appeared in great numbers, in the same locality, two years in succession.

But we have now to record the singular fact that there is no account of the appearance of the army-worm, in any part of the country, during this year. When we consider that it appeared in myriads last year, in certain districts throughout a vast extent of country, its non-appearance in 1862, is a mystery not easily explained. It is not to be supposed that the insect has become extinct; it undoubtedly still lives in sufficient numbers to continue the species, though hidden in its secret haunts from ordinary observation. We will not speculate on the causes of the sudden disappearance of this insect, but will merely say, that, as we have intimated previously, the attack on the army-worm by various parasites, has, doubtless, had much to do in lessening its numbers.

The grain aphid reappeared the past season, though the damage it did was less than the previous season. On some farms, where it greatly lessened the yield of wheat and oats in 1861, little or no injury was experienced from it in 1862. This insect is also attacked by various parasites. The lady-bug (*Coccinella*) of several species preys on it; and on some fields of grain which were attacked by the aphid, these parasites were seen in such numbers that they cleared the grain of its countless enemies in a few days.

In August the Committee visited the grounds of the President of this Society, Hon. Marshall P. Wilder. It was not the first visit we have made to this place; but during the present season fruits formed so prominent a feature in the productions of the county, that we gladly availed ourselves of the opportunity of repeating our examination of the President's orchards, &c. Our attention was first called to the peach orchard, which covers about ten acres, and comprises twenty-five hundred trees, which have been planted from five to thirty years. A large proportion of these are on quince stocks, Colonel Wilder having always thought favorably of this mode of propagating the pear for such varieties as succeed on the quince. He has beautiful trees of the so-called dwarfs—some of them are thirty feet high—probably as old or older than any in the country, and producing a barrel of excellent fruit in a season. He was one of the first, if not the first, to recommend the planting of dwarfs, so as to entirely cover the quince stock—a method which protects it from the ravages of the borer, causes the quince to swell up evenly with the pear wood, and enables the pear to send out roots, which gives permanence

and size to the tree. Thus the early bearing of the tree from the influence of the quince stock is secured, and when it is furnished with fruit-spurs, retains them even after it has thrown out pear roots. Some of the most flourishing dwarfs are from thirty to forty years old.

The season of 1862 was the most productive that has occurred since the orchard was planted. Colonel W. remarked, on bringing to our view the loaded trees, that he had had fruits in former years, but this year brought *fruition*. His crop of pears of this year exceeded a thousand bushels, ripening from July to March. The collection embraces more than eight hundred kinds—the orchard above alluded to consisting principally of the following: Bartlett, Louise bonne de Jersey, Urbaniste, Beurre d' Anjòu, Vicar of Winkfield, Buffum, Doyenne Boussock, Lawrence, Merriam, and a few other sorts. The Beurre d' Anjòu has been for years a favorite with Colonel W., and we believe he has stated that, if, after all his expenditures and exertions, he had only acquired this variety, he should feel that he had been repaid, and had conferred a lasting benefit on the country by its introduction.

Colonel Wilder had eighty bushels of Beurre d' Anjòu pears this year, which brought three dollars per bushel. In former years they had brought much higher prices. Among the trees which particularly attracted our attention were several large Buffums, some of which, we learn, produced over four barrels of fruit each.

The Committee visited Colonel W.'s nurseries, and were particularly pleased with the handsome and thrifty appearance of the trees, both of the apple and pear. The neatness of cultivation noticed throughout his grounds, was another very agreeable feature, and, we doubt not, one highly important in regard to profit.

Some of the Committee visited the pear orchard of Mr. Edward Ives, a neighbor of Colonel Wilder. This consists of two acres, the trees having been planted in April, 1861. A portion of the ground was quite wet, and required draining, which was done with tiles, at the depth of two feet, and distances of about two rods. The ground was trenched and manured; and notwithstanding the unfavorable predictions which were made in regard to the success of pear trees in such a locality, upwards of two hundred dollars worth of fruit was sold from the orchard the present year—a result which indicates what may be done by thorough culture.

The Committee also visited the farm of Messrs. Frederick Clapp & Brother, of Dorchester, where they saw the seedling tree,

which produces the pear called Clapp's Favorite, originated by the late Thaddeus Clapp, Esq. Of this splendid fruit we need not speak particularly in this connection, as it has been several times noticed at the exhibitions of this Society, and described through other channels. The tree is a very fine one, large for its age, and of healthy and thrifty habit. Mr. Clapp also originated several other seedling pears, some of which are deemed valuable.

The Committee noticed the manner in which the Messrs. Clapp occupy their grounds with different crops. Among the apple trees, which are very large and noted for their productiveness, currant bushes are set, and in the least shaded places, sugar beets, parsnips, and carrots are planted. They obtained no less than twelve hundred bushels of currants this year from bushes thus planted. The root crops are grown chiefly for feeding the stock kept on the farm. It should be remarked that though this system of culture is, in this case, highly successful, it cannot be carried out except with very liberal annual supplies of manure.

The Committee called next at the farm of Cheever Newhall, Esq., in Dorchester. Mr. N. has long been known as a successful cultivator of fruits. On the grounds attached to his residence he has fifteen acres, devoted mostly to apples, pears, and red and black currants. His apple and pear trees, which are generally of the most esteemed varieties, were loaded to their utmost capacity with fruit. The red currant was so generally abundant this year, and its price in market so low, that Mr. Newhall gathered no more of his crop than was wanted for home consumption. Of the black currant, however, he made wine. He has for several years made wine from this fruit, and that which has acquired sufficient age has been brought into market, where it has already become known as a valuable article medicinally, and as a pleasant and wholesome beverage in warm weather. It may be stated in this connection that in France the black currant has, within a few years, been used for making wine to a very great extent, and its production for this purpose is rapidly increasing in that country.

In connection with fruits Mr. N. produces some vegetables for market. Early potatoes are an important article. Mr. N.'s mode of starting the sprouts on the potatoes to be planted is worthy of notice. He puts them in narrow boxes, on three sides of which strips of boards about two inches wide are nailed, with spaces between them of an inch wide. These boxes, holding perhaps a bushel each, are filled with potatoes, and then brought within the influence of the heat of the furnace which warms the dwelling, the furnace being in the cellar. Care is taken to bring them into just that temperature which will gradually start

the sprouts without withering the tubers, which can be ascertained by carefully watching them from day to day. The object is to have a good, strong, but not very long sprout by the time the ground is ready to plant. From potatoes thus sprouted Mr. N. obtained a yield of 150 bushels per acre this year—the whole crop having been sold in July at ninety cents per bushel. The ground was then sown to turnips, which yielded 266 bushels per acre, and sold on the field at fifteen cents per bushel.

Mr. N. called attention to a very handsome lot of cabbages, on ground from which a crop of strawberries had been taken the present year. The vines were turned in with the plough, after they had done bearing, a dressing of manure applied, and the cabbages planted. The ground was entirely free from weeds, and the crop of cabbages promising. We learn that they made a good return.

Mr. N. leases fifty acres of his farm. The Committee went over a portion of this, which they found had yielded large crops of hay, Indian corn, vegetables of various kinds, and apples and pears. An apple orchard, which has been planted eight years, attracted attention from the good condition of the trees and their productiveness.

In regard to the general productiveness and profitableness of the farm, we need only to cite the fact that the tenant, Mr. Harding, pays Mr. Newhall a satisfactory sum as rent, and lays up money for himself. A former tenant was enabled, in the space of five years, to lay by enough to purchase a fine farm in a neighboring town. These simple facts, and others of like character which might be cited, are sufficient to settle the point, often agitated, respecting the practicability of making farming profitable in this section.

The Committee went over a portion of the Welles Farm, Dorchester, belonging to the heirs of the late Hon. John Welles, a prominent agriculturist and promoter of agricultural improvement. The farm is leased by Luther Spear, Jr. Vegetables for market, in connection with milk, are the leading objects. Sugar beets, mangel wurzel, and Swedish turnips are cultivated for feeding the cows. The crops were promising.

Mr. Spear's success in growing late-planted Indian corn deserves notice. He called our attention to a lot of two acres, planted on the 13th of June. The ground was sward; was ploughed just before the corn was planted, a good dressing of barn-yard manure spread on and harrowed in. The corn was never hand-hoed; the cultivator was run through it twice. At the time of our visit, August 21st, the growth was large, and excepting that it was rather too thick, the prospect was favorable to a large crop. Mr. S. has planted corn as late as the 22d of June,

and got forty bushels per acre. When planted on sward, at that season of the year, the decomposition of the sward takes place quickly, and the growth of the corn is very rapid.

Mr. S. greatly prefers sweet corn to the common kinds for fodder. He stated that in feeding his cows last winter on the fodder of sweet corn, the supply became temporarily exhausted, and instead of the fodder a full supply of the best hay was given, the keeping in other respects being the same that it was before ; but the quantity of milk decreased considerably, till by removing some hay another supply of corn-fodder was reached, and on returning to it the cows soon gave the former quantity of milk. This was the dried stalks from which the ears had been sent to market as "green corn." The stalks were cut close to the ground soon after the ears were gathered.*

A portion of the Committee visited the farm of Ellis Tucker, of Canton, on the 2d of July. They were unfortunately prevented by rain from making as extensive examinations in the neighborhood as they had intended. Mr. Tucker's farm was occupied by his ancestors for several generations. Since it came into his possession he has repaired some of the buildings, made important additions, and erected a convenient stable and carriage-house. The farm is situated on the eastern shore of Massapoag pond, a portion of it sloping very handsomely to that fine body of water. Most of it is naturally very good for grass, though a considerable part would be benefited by drainage. Some small streams, rising from springs on the land, might, if drains were first properly laid, be readily made to irrigate several acres. Some of Mr. T.'s land has been in pasture a long time—probably ever since the original forest was cut off, two hundred years ago. The best of it still produces very good feed, but not as much or of as good a quality as formerly. Among the various means which have been resorted to for the improvement of pastures, wood ashes have been found to produce the best results. The effect of fifty bushels to the acre, unleached, is to produce the most luxuriant and nutritious feed for many years. We are not aware that any

* Since this Report was written, Cheever Newhall, Esq., has informed the Chairman that he planted three-fourths of an acre of sweet corn, in the latter part of May, dropping the seed with a corn-planter, in rows three feet apart, and in hills about two feet apart. The cultivation was nearly all done with the cultivator. Sixty barrels of ears were sent to Boston from the lot, and on the 15th of September the crop was cut close to the ground and shocked—the stalks being quite green, as the variety was late. It remained on the field in shock till about the middle of November, when it was housed. Mr. N. states that he has fed the fodder to a cow and to his horses, which eat it with evident relish, and without the least waste, although the stalks were not cut. He is so well convinced of the value of the fodder of sweet corn that he intends to raise enough in future to feed his horses through the winter.

experiments have been made by Mr. T. in reference to the comparative effects of leached and unleached ashes.

Mr. T. cuts heavy crops of hay, which are kept up mainly by top-dressing—a system which he prefers to ploughing the land much, especially as it is generally rather stony and hard to cultivate.

We had scarcely time to go over the main portion of Mr. Tucker's farm and a part of his brother's, adjoining, when rain put a stop to our pleasant walk. We may say, in passing, that the Messrs. Tucker take special pains in the selection of their stock, both cattle and horses, and on few farms have we seen better. Several of the cows were not only handsome, but evidently very profitable.

On the 26th of June the Committee, by invitation, visited Dover, meeting at the farm of Calvin Richards. On this occasion, as well as several other appointments, the state of the weather interfered with the arrangements. Rain fell copiously during the preceding night and during the morning of the day of our visit. This rendered walking over farms—particularly through tall grass and grain—much less agreeable, to say the least, than it would have been in dry weather.

Mr. Richards's farm consists of 160 acres. It is mostly rather stony, but much of the soil is strong and good for grass, which is the leading crop. He uses the Buckeye mowing-machine, by which he is satisfied he can cut grass cheaper than by the scythe; and thinks farmers, on rough and stony land, should endeavor to bring their fields into such a condition that the grass crop can be readily cut with machines. He prefers barley as a crop to "seed down" with, as being better for the grass than any other grain. It is also a good crop in reference to the grain and straw which it furnishes. Mr. R.'s barley fields appeared promising.

Mr. Richards has commenced the improvement of old pasture land. On a tract near his house he has cut bushes, dug stones, drained a wet basin, and ploughed—the land having never been ploughed before. The crops growing on the land, at the time of our visit, were chiefly corn and potatoes, which looked well. On another tract Mr. R. has cut the bushes, with a view of eradicating them and encouraging the growth of grass. But these experiments have not been carried on for a sufficient length of time to justify a positive conclusion in regard to their advantage.

The Committee made a very brief call at the farm of Ephraim Wilson. He has commenced the reclamation of a piece of swamp land, by draining and applying to a portion a coating of gravel.

The grass appeared well, but we had not the opportunity to thoroughly examine the lot.

Our next call was at the residence of Benjamin Newell, Charles River Village. Mr. N. is a manufacturer of paper, and only occupies about twenty acres of land. He, however, shows his appreciation of the importance of agriculture and the interest he feels in regard to its improvement, by the support he gives to the Norfolk Agricultural Society, of which both himself and his wife are members. Of course, with the small quantity of land which Mr. N. occupies no very extensive farming operations can be carried on. He keeps no more stock than is necessary for his own use or convenience. Two cows which he keeps are worthy of notice on account of their age—one being twenty and the other seventeen years old. They have been kept to this age on account of their excellence for milk and butter. We had occasion to see and taste butter which had lately been made from them, and its quality was such as to elicit various remarks in its praise.

The Committee made a brief call at the farm of Mr. Kirby. He is an architect by profession, and his business has heretofore been chiefly in Boston. He has lately purchased the farm on which he resides, and is engaged in extensive improvements. A neat and tasteful house is already completed; new fences, consisting to a considerable extent of handsome stone walls, have been erected; many shade and ornamental trees planted, and at the time of our visit the barn was undergoing a reconstruction, which will render it more spacious and convenient.

The Committee found the premises of Hiram W. Jones in a condition which plainly indicated that ORDER and NEATNESS are here regarded as fundamental principles. Evidences of a plan, combining convenience and economy, are obvious, from the dwelling to the barn, piggery, and poultry-house. Space will hardly admit of our going into a particular description of the various buildings. We have seldom seen so many objects so well combined in the same space as are embraced in Mr. J.'s barn. Being situated on a hill-side, it has a basement story and a cellar, both of which are sufficiently dry, light and airy. Water from an aqueduct which supplies the house, is carried through them. The stock is kept on the basement story, which is so protected that frost cannot much affect it.

Mr. J. makes the fattening of calves a business of some importance. They are bought at Brighton, when from a few days to two weeks old, and are fattened on milk, which they suck from the cows. The rearing of early chickens is another branch here

carried on with success. They are hatched in March and sold in June, generally at fifty cents a-piece.

Mr. J.'s farm is mostly of quite light soil—part of it too sandy and loose to bear good crops of grass. Yet he turns even this part to good account, chiefly by the cultivation of beans, for a crop of which—quite young at the time of our visit—he received a premium of the Society. He showed us promising crops of rye and Indian corn—grains with which he generally succeeds well.

The Committee called at the farm of Mr. Kenrick. This consists of 150 acres, situated mostly on the southerly slope, and near the summit of a large hill. The soil is loamy, strong and good for grass and fruits. The dwelling is nearly new, spacious and well finished. A large barn was burnt here a few years since, and a temporary one only has since been built. Mr. K. has one of the finest orchards in the county, ten years from the nursery. The trees are large, well shaped, and kept free from moss and insects. Mr. K.'s mode of defeating the borer is worthy of notice, as it appears to have been entirely successful. The ground comprising the orchard has been kept in cultivation—potatoes being generally the crop planted. At the last hoeing—the last of June or first of July—a mound of earth is raised round each tree to the height of seven or eight inches. When the beetle comes to the tree to deposit its eggs, it places them on the bark, just at the surface of the earth, not being able to get at the tree near the roots. In the fall, at the time the potatoes are dug, the earth which had been drawn round the tree is hauled away, leaving the part attacked by the borer in plain sight, and as the larvæ have made but a slight entrance, they are easily destroyed. We should remark that when the apple orchard was planted, peach trees were put between the apple trees—the latter being two rods apart. The peach trees were set in the centres of the squares formed by the apple trees. The peach trees being comparatively short lived, came into bearing and produced several good crops before the apple trees attained such a size as to be at all interfered with. Some of the peach trees are still standing, and produced a fair crop this year. But they will all probably be dead by the time the apple trees need all the ground.

A call at the farm of Henry Golding ended our observations in Dover for this time. This farm has been previously visited by the Committee. The farm is noted for its large orchards and the large quantity and fine quality of cider produced. Many of the apple trees are quite old, though still productive—the soil being well adapted to them. A flourishing young orchard is coming into bearing. Mr. G. sells large quantities of cider at a good price.

It is filtered through sand, as it runs from the press, and sold immediately from the filter at from four to five dollars per barrel—the barrel being returned or paid for. Mr. G. is extending his reclamation of wet lands—his former operations of this kind having been quite satisfactory. He uses the Buckeye mowing-machine.

An appointment was made to visit Franklin on the 28th of July. Here, again, rain interfered with our designs, and the Chairman found himself the only member of the Committee present out of the town of Franklin. Nevertheless, examinations, though necessarily somewhat hurried and imperfect, were made of a few farms. First, we reviewed the farm of S. W. Richardson, which was visited and reported on in 1860. Our object, in part, on the present occasion, was to learn the result of certain improvements which had been commenced at the time of our former visit, particularly the result of draining some kinds of soil. In 1860, drains were made where a “hard-pan,” or deposit of iron, had rendered the subsoil, even to within a few inches of the surface, very hard, it being almost impervious to water, and ungenial to plants. It was deemed important to ascertain whether the sinking of drains in the soil would produce such a change as would render it suitable for the growth of crops. We are happy to say that the desired change has already been effected to some extent. On a portion of the drained land a heavy crop of Indian corn was growing at the time of our last visit, and on another portion a fine crop of potatoes—a considerable part of the land occupied by the latter having never produced a crop of any value before the late improvements were made. Mr. R. states that the “hard-pan” is evidently undergoing a decomposition, as the air obtains access to it through the drains, and that he can perceive that it softens by the greater depth to which the plough can be run.

We are happy to speak of the general neatness practised by Mr. R. and his son in the management of their farm. They appear to realize the truth of the adage—“One year’s seeding makes seven years’ weeding;” and they probably agree with another good Franklin farmer, that “they can’t afford to raise weeds.”

The Committee called at the farms of J. T. Bacon and Elisha Bullard, but were unable on account of the increase of the rain, to make many examinations. Mr. Bullard’s farm exhibits various indications of good management. The fields are handsomely laid out, and enclosed by substantial stone walls. Drainage of some wet tracts has been commenced with good results. We would venture to suggest, however, that additional depth would insure a

better quality of hay—that being the crop which it is intended to produce—and probably increase the weight, if not the bulk. Drains should not be less than two and half feet deep, and on springy land an additional half foot would be very beneficial.

Mr. B.'s barn is well planned, well finished, and kept with scrupulous neatness. There is a cellar under the whole, in one part of which the manure is kept; but it is so deep, dry, and well ventilated that other parts are used for other purposes. A shed is attached to the northeast corner of the barn, by which the cold winds are kept from the yard, while the sun is admitted; thus making, in connection with part of the cellar, a sheltered and pleasant place for stock in winter. Running water is brought into the shed.

The farm of William Metcalf has been spoken of in previous reports of the Committee. A short call was sufficient to show that he still progresses in his improvements. He has within a few years made a handsome and productive field from what was previously a wild, rough pasture. Besides removing boulders of various sizes, a large quantity of cobble stones has been taken off, and as there was no better place to deposit them, they were piled on one side of the field. But it should not be inferred from this that the ground they occupy is wholly wasted. Grapevines are planted at the base of this huge stone-heap, and the vines spread themselves over its surface. Though yet young, they bore considerably the present year, and, doubtless, will in a few years cover the stones and produce abundance of fruit—thus converting what would otherwise be an unsightly object into one of beauty and profit. The grapes are of native kinds, but selected on account of their superiority. We have previously noticed Mr. M.'s success in cultivating native grapes, which he finds no difficulty in disposing of, in various ways, at a satisfactory profit.

A call at the farm of Walter Fisher closed our examinations in Franklin. In addition to what has been said of this farm in a previous report, we may say that its appearance the present year was in no respect inferior to what it has heretofore been. The principal point to which our attention was directed was the condition of a tract which has been reclaimed from a rough pasture, for which Mr. F. has received a premium of the Society. A considerable portion of the tract has been thoroughly subdued and cultivated, and is laid down to grass, with a surface so smooth that a mowing-machine can be made to cut the grass as closely as is expedient. Other portions are still in process of improvement, and present favorable indications. The experiment has now reached a point which, we think, justifies the conclusion that it will *pay*.

It is proper that some mention should be made in this report of the experiments in irrigation, as conducted by Artemas Newell, of Needham, and E. L. Metcalf, of Franklin, and which have been spoken of in previous reports. The Chairman visited Mr. Newell's grounds on the 25th of June. The water was found flowing between the pear trees and the strawberry beds as usual; but in some respects its advantages had not, this season, been equal to what they have formerly been. The season, after May, having been a wet one, there was less necessity for supplying water artificially. A considerable portion of the strawberries were killed by frost; so that in any event this crop could not show to so good advantage as in previous years. In consequence of the copious and frequent rains, some of Mr. N.'s strawberry beds, on rich land not irrigated, were nearly as productive as the irrigated beds.

Mr. Metcalf, having been very closely engaged the present season with matters somewhat distinct from the usual routine of farming—a part of his business having been the building of one of the best barns in the county—did not avail himself to the full extent of his advantages of irrigation. The water was, however, turned over a portion of the land which has been prepared for that process. A newly-seeded tract of several acres, irrigated for the first time, produced three crops of hay this year. It was not weighed, but Mr. M. states that the two first crops were as large as he could make on the ground, that the third crop was what would ordinarily be called a good one for a second crop, and that even after this had been taken off, a growth of considerable bulk sprang up.

We may add that extended observation from year to year, only accumulates evidence in regard to the great advantages which may be derived from irrigation, and it is to be hoped that so important an object will receive increased attention from our farmers.

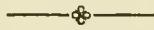
The Committee made an appointment to visit Medfield, but their intentions were wholly defeated, as they nearly were in other cases, by the occurrence of rain.

One entry only came before the Committee for the premium offered for the best cultivated farm, namely, that of Dr. W. T. G. Morton, of West Needham, who made the same entry in 1861. A delegation of the Committee re-examined the farm in reference to the claim alluded to. We might express the result of our examinations and reflections, by a quotation from our Report of 1861, as follows: "In reference to his [Dr. M.'s] claim for the premium for the best cultivated farm, we are of opinion that,

though credit is due him for his enterprize in the operations to which we have alluded, yet on the whole the farm does not now present such an example of culture and management as would justify us in making an award."

It is due to Dr. Morton to state that he has continued to make improvements of various kinds, the general character and advantage of which will appear more strikingly after the lapse of some time, and under the head of "Progressive Husbandry,"—in which class the farm is entered for premium,—may hereafter secure the honor desired.

SANFORD HOWARD, *Chairman.*



EXPERIMENTS ON MANURES.

The Committee of Experiments on Manures report that Messrs. Charles Breck, of Milton, and Aaron D. Weld, of West Roxbury, have continued their experiments, began last year, and have presented interesting accounts of their doings the *second year*. These experiments are to continue three years, (not two, as stated in last year's Report,) to entitle the gentlemen to the premium offered by the Society. They appear to be careful and exact in their statements, and when continued another year and published, will afford valuable information to the farming community.

Mr. Weld has also this year commenced a second series of experiments on manures, to compete for the premium offered by the Norfolk Agricultural Society, in conformity to the requirements of the State Board of Agriculture, and his statement is herewith presented.

The Committee recommend that all these experiments be published in the transactions of the year.

For the Committee,

CHEEVER NEWHALL, *Chairman.*

Dorchester, Dec. 31, 1862.



STATEMENT OF CHARLES BRECK.

CHEEVER NEWHALL, Esq.:

SIR,—In continuation of my experiment with manure, commenced in 1861, an account of which was handed to you last year, I have to state that the rye sown last fall was cut July 29th,

1862, and was threshed August 6th. The grain and straw were carefully weighed, and the result was as follows :

	Weight of grain.	Weight of straw.	Amount per acre of grain.	Amount per acre of straw.	Value per acre of grain at 90 cents.	Value per acre of straw at 70 cents per 100.	Total per acre.
No. 1,	38½ lbs.	70 lbs.	27½ bu.	2800 lbs.	\$24.75	\$19.60	\$44.35
No. 2,	37	72	26.43	2880	23.78	20.26	44.04
No. 3,	29½	51	20.85	2040	18.76	14.28	33.04
No. 4,	28	47½	20.	1900	18.00	13.30	31.30
No. 5,	9	21½	6.43	860	5.78	6.02	11.80
Nos. 6, 7, and 8,	Av. 28, 66 lbs.	46.83	20.48	1973	18.43	13.81	32.24
No. 9,	30 lbs.	52	21.43	2080	19.28	14.56	33.84

1861.	Profit on No. 1 above cost of manure,	\$18.97	}	\$51.52
1862.*	“ “ “ “ “ “	32.55		
1861.	“ “ No. 2 “ “ “	22.73	}	54.97
1862.	“ “ “ “ “ “	32.24		
1861.	“ “ No. 3 “ “ “	13.76	}	35.00
1862.	“ “ “ “ “ “	21.24		
1861.	Loss “ No. 4 “ “ “	23.96	}	4.46 loss.
1862.	Profit “ “ “ “ “ “	19.50		

Synopsis of the Weather.

	First third.	Second third.	Last third.	Average of thermometer.	
May,	Moist,	Dry.	Dry,	58.25 degrees	or about 2¾ degrees warmer than the average for 10 years.
June,	Moist,	Dry,	Moist,	63.83 “	or about 2½ degrees colder than the average.
July,	Dry,	Moist,	Wet,	68.75 “	or about 2½ degrees colder than the average.
August,	Moist,	Dry,	Moist,	68.93 “	or about 1 degree warmer than the average.
Sept.	Moist,	Moist,	Moist,	62.88 “	or about the average.
				63.66 degrees,	average of the 5 months, 1862.
				64.53 “	average of same 1861.

CHARLES BRECK.

Milton, Nov. 28, 1862.

*The profit on the several lots for 1862 is found the same as in 1861, by deducting the products of No. 5, where there was no manure used (that being the natural product of the soil,)—all over that should be credited to the manure.

STATEMENTS OF AARON D. WELD.

CHEEVER NEWHALL, ESQ. :

DEAR SIR,—Having notified you verbally of my intention to compete for the premium offered by the Norfolk Agricultural Society, for “experiments with manures,” I now submit my report for the year 1862, the first of this series.

A level piece of land, containing one hundred square rods, was selected for the purpose, and divided into five lots of twenty square rods each. The soil is composed of black peat mud, has been down to grass seven years and was ploughed last fall.

This spring it was ploughed and the manure applied according to the requirements of the State Board of Agriculture,—precisely in the same manner and quantity as in my Report on Experiments with Manures, in 1861, to which reference is had on page 34 of the Transactions of that year. It may be proper to state that the cut-worm again attacked the lots on which we were experimenting, which prevented a larger quantity to estimate upon.

Well rotted stable manure was used at the rate of six cords to the acre.

May 17th the whole piece was planted with corn, five hundred and six hills in each lot. Cultivated and hoed the field June 11th and July 2d. September 23d the corn was cut up and shocked, and one row in each lot, being twenty-two hills, was set aside to estimate upon.

October 24th the corn was husked and weighed, and a part shelled with the following estimated result :

*Actual weight of 1-23 of each lot. Calculations for 1862.
20 rods 1-8 of an acre.*

Lots.				
No. 1.	75 lbs corn and stalks by 23.	1725 lbs. by 8.	13,800 lbs	per acre.
No. 2.	90 “ “	2070 “	16,560	“
No. 3.	70 “ “	1610 “	12,880	“
No. 4.	75 “ “	1720 “	13,800	“
No. 5.	35 “ “	805 “	6,440	“

Corn in Ear.

No. 1.	35 lbs by 23.	805 lbs by 8.	6440 lbs	per acre.
No. 2.	44 “	1012 “	8096	“
No. 3.	36 “	828 “	6624	“
No. 4.	35 “	805 “	6440	“
No. 5.	21 “	483 “	3864	“

Stover.

No. 1.	40 lbs. by 23.	920 lbs. by 8.	7360 lbs.	per acre.
No. 2.	46 “	1058 “	8464	“
No. 3.	34 “	782 “	6256	“
No. 4.	40 “	920 “	7360	“
No. 5.	14 “	322 “	2576	“

Corn Shelled.

Lots.						
No. 1.	26 lbs. by 23.	598 lbs. by 8.	4784 lbs.	85.24-56	bush.	per acre.
No. 2.	33	759	6072	108.24-56		“
No. 3.	27	621	4968	88.40-56		“
No. 4.	26	598	4784	85.24-56		“
No. 5.	16	368	2944	52.32-56		“

Synopsis of the Weather.

	First third.	Middle third.	Last third.
May,	Wet,	Moist,	Moist,
June,	“	“	Wet,
July,	“	Wet,	Moist,
August,	“	Moist,	“
September,	Moist,	Wet,	“

The land on which the above experiments were made is what I call my meadow lot, lying northerly from my barns and just below them.

All of which is respectfully submitted,

AARON D. WELD.

Weld Farm, West Roxbury, Dec. 24, 1862.

CHEEVER NEWHALL, ESQ. :

DEAR SIR,—I refer you to my last Report—“Experiments on Manures”—pages 34, 35 and 36 of Transactions for 1861, for the land, soil, and experiments of that year. On page 35 it will be noted that the land was sown to winter rye and herdsgrass seed September 20, 1861—about five pecks of rye and a fraction over one bushel of herdsgrass seed to the acre.

The rye was cut and shocked July 18th; weighed the whole and threshed it August 12th, and winnowed it August 16th—all of which was carefully weighed on Fairbanks' Standard Scales on my farm, with the following results:

20 rods on 1-8 of an acre to each lot.

Lots.	Rye and straw.	Rye cleaned.	Straw.	Per acre. Rye—bushel.	Per acre. Straw.
No. 1.	640 lbs.	195 lbs.	445 lbs.	27.48-56	1.1560 tons.
No. 2.	770	251	519	35.48-56	2. 152
No. 3.	740	247	493	35.16-56	1.1944
No. 4.	730	250	480	35.40-56	1.1840
No. 5.	620	198	422	28.16-56	1.1376
No. 6.	1120	360	760	51.24-56	3. 80

You will now note that lots Nos. 1, 2, 3 and 4 had each six feet of well rotted manure. No. 5, no manure; and in reference to my last report, No. 6 had two feet of compost applied in the hills, and a top-dressing of six feet of additional composts when laid last fall.

No. 1 was spread and the whole piece ploughed eight inches deep.

No. 2 was then spread and the whole piece cross-ploughed four inches deep.

No. 3 was spread and the whole piece harrowed.

No. 4. Same ploughing as above and manure spread on surface after planting.

No. 5. Same ploughing and no manure.

No. 6 like No. 3, except the application of about two feet of compost to the hill, and six feet of top-dressing last fall, at time of seeding down, as before stated.

Result per acre for two years.

Lots.	1861.		1862.	
	Shelled corn.	Stover.	Cleaned rye.	Straw.
No. 1.	68 bush.	7.1240 tons.	27.48-56 bush.	1.1560
No. 2.	80 48-56	8.1544	35.48-56	2. 152
No. 3.	74.48-56	7.1408	35.16-56	1.1944
No. 4.	59,12-56	7. 160	35.40-56	1.1840
No. 5.	49.12-56	4.1912	28.16-56	1.1376
No. 6.	74 48-56	7. 64	51.24-56	3. 80

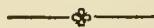
Synopsis of the Weather.

	First third.	Middle third.	Last third.
May,	Wet,	Moist,	Moist,
June,	"	"	Wet,
July,	"	Wet,	Moist,
August,	"	Moist,	"
September,	Moist,	Wet,	"

All of which is respectfully submitted,

AARON D. WELD.

Weld Farm, West Roxbury, Dec. 24, 1862.



REPORT ON PASTURE LANDS.

The Committee on Pasture Lands award the following premiums :

Second premium of \$5.00 to Henry Goulding, of Dover.

Third premium of \$3.00 to Joel H. Robinson, of Wrentham.

BENJAMIN G. KIMBALL, *Chairman.*

Needham, Dec. 1, 1862.

[The statement of Mr. Goulding was not received in season for insertion in the volume of transactions.]

STATEMENT OF JOEL H. ROBINSON.

The piece of pasture land that I offer for premium contains about three acres. I will now give you a description of the pasture as it was when I commenced operations. None of it had ever been disturbed by the plough, and it was supposed never could be. It was in a very rough condition. Part of it was covered with maple, alders and small bushes, and stony as the Devil's hop-yard.

The character of the soil is somewhat varied,—part of it high and dry; the rest moist with a rich black loam. In the fall of 1860 I commenced operations by ploughing about two acres, which were so full of brakes and roots that it tore up in large blankets, making it necessary to use the bog hoe. I then harrowed and burnt all I could.

For the first crop I planted potatoes, using a small handful of plaster and ashes to every hill. My second crop I planted with the ashes made by burning the bogs and bushes. No manure has ever been applied. The remainder was ploughed in the fall of 1861, and in the spring of 1862 was planted with potatoes, using plaster and ashes, a small handful to each hill. My object was a thorough renovation, whether my crop paid or not.

My account stands as follows:

Expenses.

By ploughing both lots first time,	\$24.00
Ploughing part twice,	4.00
Harrowing and burning,	8.00
Bogging and furrowing,	8.00
Planting,	15.00
Plaster and ashes,	8.00
Seed potatoes,	5.60
Seed corn, . . . .	.50
Cultivation and hoeing,	20.00
Harvesting corn and potatoes,	18.00
Total amount of expenses,	<u>\$112.10</u>

Profits.

By 6½ baskets round corn,	\$30.50
13 baskets soft corn,	3.90
Corn fodder,	10.50
174 bushels large potatoes,	77.30
46 bushels small corn,	11.50
Total amount of profits,	<u>\$133.70</u>
Deduct expenses,	112.10
Leaves a profit of	<u>\$21.60</u>

In conclusion, I would say that my object has been to prove to the farmers of this county that worthless land can be reclaimed without loss.

JOEL H. ROBINSON.

North Wrentham, Nov. 1, 1862.

STATEMENT OF GEN. LUCAS POND.

MR. KIMBALL :

DEAR SIR,—My business for the last five years has led me to visit every part of the county of Norfolk, and being a farmer I of course observed the condition of pasture lands in particular ; and I have come to the conclusion that they are more neglected than any other part of the agricultural interest of the county. I find a large proportion of them in an uncultivated state, producing very little that is fit for cattle to eat, and it appears to me that there must be something done to bring them into a better state of cultivation before we can get much profit from our stock in the summer season. I believe that the plan that I have pursued for the last eleven years is the best that has been presented to the Society, as it pays the cost of labor and manure, and leaves the land in better condition than any other way, besides leaving a handsome balance in my hands. For the manner of cultivating I refer you to my report of last year, printed in the Transactions of the Norfolk Agricultural Society for 1861, page 57.

Statement of expense of labor, manure, &c., for one hundred rods of land the present year.

By ploughing and harrowing,	. . .	\$5.25
Planting and harrowing,	. . .	8.00
Manure, 4 cords,	. . .	20.00
6 bushels potatoes for seed,	. . .	3.00
Digging potatoes,	. . .	10.00
		<hr/>
		\$46.25

Profits.

122 bushels of potatoes, at 50 cts. per bush.,	\$61.00
Expense of cultivation,	46.25
	<hr/>
Balance in favor of crop,	\$14.75

Expense of laying down an acre that was planted last year.

Ploughing, sowing and harrowing, . . .	\$5.00
3 bushels of oats,	1.50
Grass seed,	1.75
Harvesting and threshing,	10.00
	<hr/>
	\$18.25
54 bushels of oats, at 65 cents per bushel,	\$35.10
30 hundred of straw,	15.00
	<hr/>
	\$50.10
Expenses,	18.25
	<hr/>
Balance in favor of crop,	\$31.85
Balance first crop,	14.75
	<hr/>
Balance in favor of both crops,	\$46.60

The above is as near correct as I can make it.

Very respectfully yours,

LUCAS POND.

Wrentham, Nov. 30, 1862.

Note. Although the experiment of Gen. Pond was deemed very satisfactory by the Committee, the piece of land upon which it was made was too small to bring it under the rule of the Society entitling it to a premium. It is, nevertheless, deemed of sufficient value to warrant the publication of the statement in the transactions.—SECRETARY.



REPORT ON UNDERDRAINING LAND.

The Committee on Underdraining Land rejoice to be able to report that, for the first time since the Norfolk Agricultural Society was formed, we have been called upon to examine some improvements in the line of our duty.

Two entries for premium were made during the past summer; and the premises duly examined; one by W. T. G. Morton of Needham, the other by H. L. Stone of Grantville. A written statement from each of those gentlemen is hereto appended. We regret that the number of entries was not larger, as we know that experiments in underdraining are being made more or less every year by farmers in nearly every town in the county.

The object of the Society in rewarding the efforts of the farmer is most fully attained when the number of competitors for pre-

miums is large, thereby giving the Committee an opportunity of selecting the best and most successful experiments as entitled to an award of one or more premiums. As a beginning has now been made, we hope that hereafter the number of entries will increase from year to year, and that the object of the Society in offering premiums for experiments in underdraining land may in future be fully attained. We believe the necessity of underdraining a large part of our soil, in order to render its cultivation both pleasant and profitable, is now almost universally admitted, in *theory* at least, by all the best farmers in the county. Enough has already been done to show that the benefit derived from a judicious and thorough system of underdraining is such that no intelligent cultivator of the soil can fail to see it, and having seen it, we think he will not hesitate to avail himself of the advantages derived from it. If, however, there are still any farmers in our midst who have any doubts in regard to the *practical* benefits of underdraining land, and who are believers in *progress*, we now invite them to a free ride in our omnibus while we take a short drive over the county.

Now, gentlemen, please keep your eyes open. We have just passed over a small brook, and are now upon a causeway in a meadow or swamp. Now look to the left hand side of the road and see what kind of a crop this meadow or swamp naturally produces. Behold coarse grass, rushes, brakes, alders, bushes, skunk-cabbage, and many other varieties of semi-aquatic plants, to say nothing of the numerous frogs, snakes and venomous reptiles and creeping things concealed beneath, and the still more noxious vapors arising from it. A worthless crop, say you. So say we. A miserably poor soil, say you, not worth cultivating at all; good for nothing but "to hold the world together," and rather poor for that. You pity the man who has to pay the taxes on it. So do we, while it remains in its present condition. But now look to the *right*, and see a piece of land which a short time since was of the same character, and produced the same kind of crops. What have we now? Potatoes, clover, redtop, herdsgrass and various other things, suitable for the sustenance of man and beast, large in quantity and good in quality. A splendid crop, say you. So say we. Do you ask what has caused this difference? The answer is simply this. The land on the right hand side has been *underdrained*—on the other side it has not. On one side the soil is partially covered, and entirely filled with stagnant water during most of the year. On the other side it has been thoroughly drained, and the stagnant water removed from the surface, and also from *out* of the soil to the depth of one foot at least. Do you say that underdraining alone has not caused all this difference? Admitted. But we do say that, without thorough draining, all the

money and labor which has been expended upon it would have been of very little benefit. In short, *underdraining* is the *foundation* of the whole improvement.

But our time is limited, and we must drive along up a gentle acclivity, a short distance ahead. Here we respectfully ask you to look at two fields of *moist upland*, which were naturally alike, as we happen to know, for we have passed over this road before. Both fields have been cultivated in the same manner for a century at least, until about two years since. Both are situated, as you perceive, along the base of a hill, and have a gradual slope towards the meadow which we have just looked at. Both were naturally somewhat stony. The soil of both was black and moist—the subsoil of clay, resting upon a bed of hardpan. During the last two years one of them (which we will call field No. 1,) has been thoroughly underdrained, with stones and tile, there being small stones enough on the field to construct most of the drains. The other (which we will call No. 2,) has not been drained, but otherwise has been treated like the first, having had the same quantity of manure applied to it. On both fields a crop of corn, of the same variety, is to be raised the present season.

We will suppose it is now the last of May. Now, gentlemen, let us examine these two fields. We will look at No. 1 first, if you please. You perceive that the soil is light and spongy; there are no stones lying about on the surface; the blades of corn have already made their appearance, and look vigorous and healthy. You will please notice there are very few “*miss-hills* ;” the corn has “*come up*” very evenly; there are no “*wet spots*” where it looks yellow and sickly. The prospect is that the after cultivation will be easy and pleasant, the harvest both plentiful and profitable.

Now let us go upon the adjoining field—No. 2. What have we here? *Mud*. Yes, mud like mortar, soft and sticky. The soil is completely saturated with stagnant water which oozes from the base of the hill. A part of the field has evidently been planted, but the corn has scarcely begun to come in sight, and what few blades we see, look pale and feeble. There are plenty of stones lying about upon the surface; there are several deep gulleys, where much of the soil and some of the manure have been washed off by the recent heavy rains. The prospect is, the after cultivation of this field of corn will be neither easy nor pleasant; the water will evaporate, and the mud will probably dry up, and, then, instead of *mortar*, there will be *bricks*. The soil will bake and become hard and lumpy instead of light, spongy and friable; the corn will have to struggle for existence, whether the season is wet or dry; the harvest will be any thing but plentiful and profitable.

And now, gentlemen, we bid you good-day, hoping you have had a pleasant ride, and that the two specimens of the *practical* benefits of underdraining which we have had the pleasure of showing to you will cause you to investigate the matter still farther for yourselves, and that the Committee on this subject will ere long be called upon to examine some improvements of your own making.

We feel unwilling to close this report without adding one suggestion in regard to the commencement of experiments in underdraining. We have learned, by observation, and some of us by dear-bought experience, that a considerable portion of the money and labor expended in these improvements has frequently been misapplied. In one instance, the whole experiment failed in consequence of the want of a good *outlet*. In several instances more rods of drain have been constructed than were necessary, provided they had been in the right place and in the right direction. These partial failures, and others which might be mentioned, may be avoided in future by a little more forethought. Underdraining, if judiciously planned and thoroughly executed, is an improvement that is intended to be *permanent*, therefore it is all the more proper to *take time* to consider and measure and level, and, if necessary, obtain the assistance of others who have had more experience in the business. In short, *take time* to get the *very best plan* in the commencement, and, rest assured, it will prove the *cheapest* in the end.

We award to H. L. Stone of Grantville, the first premium of \$10.

To W. T. G. Morton of Needham, second premium of \$5.

In behalf of the Committee,

STEPHEN W. RICHARDSON, *Chairman*.

Franklin, Dec. 1, 1862.

STATEMENT OF H. L. STONE.

During the past two years I have laid on upland twenty-six rods, and on low or meadow land fifty-two rods—forty rods of two and three inch tile, thirty-four rods of stone or culvert drain, and four rods formed by digging the required depth, (in my case four feet,) and then excavating a channel in the centre of the bottom of the ditch, four inches wide and same depth, and covering with roofing slate laid on the bottom of the ditch. These slates, taken from old buildings, can be obtained in Boston at \$1 per hundred, and covering, as they do, from fifteen to eighteen inches, form the cheapest drain that can be built. My slate drain has been in operation five months, and is effectual. I can see no reason why this kind of drain, in a subsoil of average tenacity, should not be

permanent, especially if the sides are sloped, as they should be, at an angle of about forty-five degrees.

My stone and tile drains all work perfectly, and I have been able to raise fair crops of peas, potatoes and carrots on land that formerly produced but coarse grass and skunk-cabbage. I prefer drains three feet deep and two rods apart, where I have a sufficient fall to take off the water, but on most of my land I have been able to get but from fifteen to twenty inches depth, and have, in consequence, placed the drains twenty-five feet apart. Twenty-four rods of these drains have been placed along the lower side of uplands, and from one to two rods from the meadow at its base, and just above that point, so often seen in such lands, where the water oozes for two or three months in spring. This strip of land, being cold and springy, producing naturally alders and water-bushes, is rendered as dry as that more elevated, and springs which kept the meadow below wet, being cut off and conducted in another direction, leaves the meadow comparatively dry,—so much so, that on a portion of it I have this year raised a better crop of potatoes than on the upland adjoining.

I have found no difficulty with any of these drains, or with similar drains laid six years ago, except in two or three of the latter, that, through inattention, I suffered to become obstructed at the outlet. I prefer the tile drain to all others, and where I have plenty of small stones at hand, I have used them to fill in about the tile rather than to use them for a drain, as the extra time it takes to lay a perfect stone drain will about pay for the tiles, which can be laid quite rapidly.

H. L. STONE.

Grantville, Nov. 7, 1862.

STATEMENT OF W. T. G. MORTON.

GENTLEMEN,—The land I have been underdraining consists of a strip of meadow and swail, and mostly level. The natural fall was not sufficient to carry away the water quick enough. Perceiving this at the time of purchasing the farm, nearly twenty years ago, I bargained with the owner of the lands adjoining (who happened to be the same party I bought of,) for right to lower the brook to a depth that would drain these lands. As the adjoining farm through which I wished to lower the original stream was on the opposite side of the town road, I also had to negotiate with the town to take up the old bridge, and sink the bed of the brook under the bridge on a level with the stream which it emptied into it. The rest of the brook from there to the outlet was sunk to correspond. This outlet empties into Charles River. A main drain and sub-drain were then located, running through the lowest

part of the field, so as to convey away the water brought by the cross drains that it was necessary to construct from the most distant part of the fields. Owing to having but little fall this drain was made six inches deeper than the depth fixed upon for the small drains. This keeps the outfalls of the small drains clear, and accelerates the speed of the water. The main drain conveyed so much more water than the small drains, I found the small amount of fall was no serious objection except where the fall varied; where this occurred the main drain was cut the narrowest where the least rapid part of the water was, for the purpose of increasing the current.

The main drain being cut on the same level, the lower end was made larger than the upper, it having more water to convey, and for the purpose of expediting the egress of the water and promote accelerated speed along the whole length of the drain. But the difficulty was not yet entirely overcome. The Boston and Worcester railroad crosses a part of this meadow, and their culvert was constructed at a height that interfered with draining the field above the railroad. To cause a greater fall than there was upon the surface, I cut the cross drains deeper at the lower end than I had determined the average depth, and shallower at the upper. The force of the water was also increased by confining it to narrow channels, thereby increasing the depth as it flows nearer to the outlet into the main drain. The ground being mostly low and flat, and the fall not allowing more, I decided on making the drains average about four feet deep. Where small undulations existed the drains were passed right through both the flat and rising ground. The depth was varied only when we struck muck or peat; this we took out to the bottom, if it went several feet below the fixed depth. The subsoil being of various qualities, drains at various distances were required, and it was impossible to fix the distance and depth that would be certain to sufficiently drain it before the ditches were dug, or the nature of the subsoil ascertained.

After the small drains were made a hollow occurred, requiring an additional sub-main drain to be made along the lowest part to receive the drainage and transmit it to the main drain. There were large springs and collections of water upon this land, which had to be conveyed away under ground. Stones were abundant on the premises; I have therefore confined my operations to stone drains. The small drains that were to be filled with stones varied from eighteen inches to two feet wide. Stones of the size of a man's head were selected and laid on the bottom of each side of the ditch, leaving an open space between them, then they were bridged over with other suitable stones. Small stones were then used to fill within eighteen inches of the surface; sods, with the

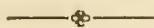
grass side down, were used as a covering for the stone, and earth returned to fill the drain to the original surface. Whole number of rods of ditches, 240.

Respectfully submitted by

W. T. G. MORTON,

Per WM. JAMES MORTON.

West Needham, Nov. 1, 1862.



REPORT ON GRAIN CROPS.

The Committee report three entries for premiums on corn, two for wheat, and one for white beans. One entry for corn was for less than one acre, and one for wheat, the applicants failing to give notice to the Secretary "ten days previous to the commencement of any experiment," hence their claims for premiums could not be considered. Although the yield of corn for which we award premiums falls below some crops raised in years past, yet from statements herewith submitted, it has proved a paying crop in both instances. The Committee will suggest, as corn may be counted among the surest crops of New England, that the producer be a little more liberal in the application of manure, and, in their opinion, the owner will be well remunerated for the trifling extra expense. It is the opinion of your Committee that, with good, judicious management, the cultivation of grain, particularly corn, may be made profitable in our county. The field of wheat offered by Dr. Wm. T. G. Morton went far towards doing away with our previous opinion that wheat could not be successfully cultivated in New England—for both the yield and quality of the grain were quite equal to the average crop in the States where the wheat crop pays best of all grains. The statement of Messrs. J. W. Richardson & Son is further evidence that wheat may be cultivated on soil adapted to its growth, in Norfolk county, successfully. The field of white beans, entered by H. W. Jones, proved a successful experiment, and is quite suggestive, for often the farmer may chance to have up more land than he has sufficient manure with which to raise any other crops.

We award to Hiram W. Jones, of Dover, first premium on corn, \$6.00.

To Henry L. Stone, of Grantville, second premium on corn, \$4.00.

To Dr. Wm. T. G. Morton, of Needham, first premium on wheat, \$6.00.

To Hiram W. Jones, of Dover, 1st prem. on white beans, \$3.00.

JOHN W. SHAW, *Chairman.*

Grantville, Nov. 28, 1862.

STATEMENTS OF HIRAM W. JONES.

My experiment in raising Indian corn was made on one acre of reclaimed meadow, which had been in grass ten years, and a great deal of meadow grass had come in. It was ploughed eight inches deep in September, 1861, with a team of four oxen. On the 24th of May last it was thoroughly harrowed with a Bucklin harrow, and furrowed three and one-half feet apart, one way, and on the 27th four loads of manure, composed of equal parts of horse manure and sandy loam, were applied in the hills, three feet apart in the rows. It was then planted with a very early kind of corn, which came from the State of Maine recently. The horse hoe was passed between the rows three times during the month of June, and very little work was required with hand hoe. The top stalks were cut, bound and stocked the first week in September, and the corn was ripe for harvest on the 25th. On the 6th of October the Committee selected two rods—an average of the field—which yielded fifty pounds of shelled corn, at that time, and was taken home by a member of the Committee, and dried until November 1st, when it weighed forty-five pounds, being at the rate of 64 16-56 per acre.

The cost of the crop was—

Ploughing,	\$5.00
Harrowing, \$1.30, furrowing, 50 cts.,	1.80
Manure, \$16.00, preparing and applying, \$5.25,	21.25
Seed, 25 cts., planting, \$2.25,	2.50
Interest on land, \$6.00, taxes, 15 cts.,	6.15
Horse hoeing 3 times, \$1.50, hand hoeing, \$2.50,	4.00
Cutting stalks, \$2.00, harvesting corn, \$6.25,	8.25
	<hr/>
	\$48.95

The value of the crop was—

64 16-56 bushels corn, at 85 cts.,	\$54.68
Top stalks,	5.25
Husks,	8.20
	<hr/>
	\$68.13
Deduct cost,	48.95
	<hr/>

Leaving a profit of . . . \$19.18

Leaving the Committee to judge of the value of the manure unspent.

H. W. JONES.

Dover, Nov. 3, 1862.

The land on which my experiment in raising white beans was made was a light, sandy loam, and measured ninety square rods. It was planted with corn last year, and yielded a very light crop. The corn hills were split open with a plough in April, and the last of May it was harrowed, and one cord of compost from the barn-yard spread on it. On the second day of June it was ploughed four inches deep. I then, on the 3d of June, with a hand corn-dropper, (without furrowing or marking,) dropped ten beans in each place, about twenty inches apart each way, and covered them with a hoe. The only after cultivation bestowed on them was fifteen hours' work with the hoe—ten bushels of wood ashes being applied, a handful to each hill, around the roots, just before hoeing. The crop was harvested in the fore part of September, and threshed and sold before the end of the month. They were quite a small kind of bean, and the product was 9 24-64 bushels of 64 pounds.

The value of the crop was—

9 24-64 bushels, at \$3.00 per bushel,	\$28.20
Haulm, or straw,	2.00
	<hr/>
	\$30.20

The cost was—

Interest on land and taxes,	.80
Preparing ground,	2.20
Manure and applying the same,	4.00
Planting,	2.50
Seed, (10 quarts,)	.95
Ashes, and applying the same,	2.50
Harvesting and marketing,	5.25
	<hr/>
	\$18.20
	<hr/>
Leaving a profit of	\$12.00

H. W. JONES.

Dover, Nov. 3, 1862.

STATEMENT OF H. L. STONE.

The field of corn I offer for premium contains 47,394 feet, as measured by R. Mansfield, surveyor, and consists in part of an old mowing field, which had not been ploughed within the memory of the neighbors, and for several years past had not been considered worth mowing. About half of it was a light, sandy loam, and the other half was a low, gravelly clay, wet and cold, and needed draining. For the low portion, this wet season has been very un-

favorable. The land was ploughed six inches deep in October, 1861, and harrowed and planted the middle of the following May.

Expenses.

Ploughing, 2 men, 1 pair oxen and 1 pair horses, 1½ days,	\$7.75
Ten loads barn compost,	10.00
One load night soil composted,	10.00
Seed corn, . . . . .	.50
Marking out and planting, 4 feet by 2 feet,	6.00
Cultivating and hoeing twice,	8.25
Cutting and carting stalks,	2.50
Harvesting, husking and shelling corn,	7.20
	<hr/>
	\$52.20

Product.

260 bundles top stalks,	\$5.20
1905 lbs. husks, \$7 per ton,	6.66
55 4-7 bushels corn, at 90 cts.	50.01
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	\$61.87
Profits,	9.67
Cost of corn per bushel, 73 cts.	

H. L. STONE.

Grantville, Nov. 12, 1862.

P. S. The corn on one square rod, gathered by the Committee, was shelled, weighed and spread to dry, and forty days afterward it was again weighed, and had shrunk but two per cent.

STATEMENT OF DR. WM. T. G. MORTON.

My experiment in raising wheat was made on three-fourths of an acre of land. The soil consisted of loam and subsoil gravel. It was planted with potatoes the year before, and manured at the rate of seven cords of compost per acre. This spring, May 1st and 2d, it was ploughed and sowed with wheat, at the rate of 2½ bushels per acre.

Account.

Ploughing, .75, sowing and harrowing,	\$1.37
Seed,	3.50
Harvesting,	2.00
Threshing and cleaning,	2.25
	<hr/>
	\$9.12

By 20 bushels of wheat, . . .	\$40.00
1400 pounds of straw, . . .	8.00
	<hr/>
	\$48.00
Deduct cost,	9.12
	<hr/>
Profit,	\$38.88

N. B. No charge for unexhausted manure.

W. T. G. MORTON.

Needham, Dec. 1, 1862.

STATEMENT OF J. W. RICHARDSON & SON.

The field of wheat which we enter for premium contains seventy-one rods. Soil dry, gravelly loam. In April, 1861, it was ploughed (having lain in grass for fifteen years without manure, and being no longer worth mowing,) and planted with early potatoes, beans, and sweet corn. Before planting, one barrel of ground bone was spread and harrowed in, and super-phosphate applied in the hill. The last week in August the crop was removed, and the surface thoroughly worked with the cultivator without disturbing the sod, and three pecks of white flint wheat, (previously soaked for twelve hours in strong brine, and rolled in lime,) sowed and got in as deep as possible, with cultivator and harrow, and rolled smooth. Three hundred pounds of ground bone was applied at the time of sowing, and worked in with the grain. No other dressing was applied, except three bushels of unleached ashes, sowed in May on a part of the field where the wheat looked least promising. The crop was harvested July 17th; threshed and winnowed Aug. 20th. Yield 11 bushes 1-2 peck of clean grain, weighing 62 lbs. to the bushel.

Expenses of the Crop.

Cultivating before sowing, . . . . .	.50
Preparing seed, sowing, cultivating, harrow- ing and rolling,	1.00
Seed, 3 pecks, at \$2.50 per bushel,	1.87
300 lbs. ground bone, \$3.75, spreading same, 25 cts.	4.00
3 bushels ashes, and spreading, . . . . .	.62
Reaping and binding,	1.50
Threshing and winnowing,	2.00
Interest on land and taxes, . . . . .	.75
	<hr/>
	\$12.24

Value of Crop.

11 1-8 bushels of wheat, at \$2.50 per bushel,	\$27.81
750 lbs. straw, at 30 cts. per hundred,	2.25
	\$30.06
Deduct cost,	12.24
	\$17.82

S. W. RICHARDSON & SON.

Franklin, Sept. 24, 1862.

REPORT ON MIXED CROPS.

The Committee on Mixed Crops report that the only entry was made by Mr. H. L. Stone, of Grantville, for his crop of corn and beans, and recommend that the Society award him the second premium of \$4.00.

For the Committee,

MARSHAL STEARNS, *Chairman.**Brookline, Dec. 1, 1862.*

STATEMENT OF H. L. STONE.

Having obtained at a cost of eight cents per bushel, delivered on the field, a quantity of corn that had been badly damaged by fire and water, I resolved to test the theory of agricultural chemists, that "any crop can be raised by supplying the elements thereof under proper circumstances." I accordingly hired the poorest land in my neighborhood—an old sand bank—and planted it with the Webster or smutty white corn, four feet apart each way, with the white pea bean between the hills one way. The result has been as handsome a crop of corn as I have ever seen (the ears, almost without exception, being filled to the extreme tip,) and a fair crop of beans. I think that while other manures might have produced as many beans, no other manure with which I am acquainted would have produced as much sound corn on the same land. This rotten corn, composted with loam and coal ashes, was applied about one quart to the hill. Herewith you have a statement of the costs and results.

Products.

2899 lbs. fodder, (husk,) at \$7.00 per ton,	\$10.14
110 bundles stocks, (407 lbs.) at \$10 per ton,	2.03

39 baskets, yielding 1209 lbs., 21 4-7 bushels,	
at \$1.00 per bushel,	21.57
5 1-16 bushels pea beans, at \$3 per bushel,	15.18
Bean straw, worth	1.00
1-3 manure estimated for future crops,	6.00
	<hr/>
	\$55.92

Expenses.

Ploughing, \$3.00, harrowing and rolling, \$2.00,	\$5.00
Planting, \$4.00, seed corn and beans, .87, 4.87	
Hoeing and cultivating twice,	10.00
Manure, 150 bushels corn composted,	18.00
Harvesting corn and beans,	11.75
	<hr/>
	\$49.62
	<hr/>
Profits,	\$6.30

P. S. The lot of land upon which the experiment was made contained one hundred and twenty-nine (129) rods.

H. L. STONE.

Grantville, Nov. 10, 1862.



REPORT ON VEGETABLES.

The space allotted to vegetables in the hall, on the days of Exhibition, was not by any means crowded, though quite a goodly number of specimens were shown, embracing nearly every article of substantial food and luxury adapted to our climate, and of which a quaint old historian of Virginia says, "Roots, herbs, vine-fruits, and salad flowers—they dish up various ways, and find them very delicious sauce to their meats, both roasted and boiled, fresh and salt."

There were twenty contributors. The exhibition, if not up to some former years, was, on the whole, good, considering the large numbers, who, in obedience to the call of their country, have beaten their ploughshares into swords, and gone forth into other fields.

The science of *squashology* seems not to have been wholly neglected; seven delegates from the mammoth tribe were in attendance. They weighed severally 90, 98, 100, 120, 131½, 132, and 138 pounds, and added LARGELY to the show.

The skill and energy of Mr. John Sias are very commendable.

His contributions on this and former occasions have materially enhanced the attractiveness of this division. Mr. S. may be hard to *beet*; but there may be those still left among us who are *sauce-y* enough to *pepper* him from this high position, and, perhaps, *root* out this propensity to *cabbage* and *carraway* the highest premiums. We hope these hints, as well as the *sage* counsels of former committees, in this regard, will not be unheeded in *thyme* to come.

Mr. J. York seems to be at home, whether engaged on dry, *Greek roots*, in the gardens of literature, or the products of a New England soil. His collection contained, among other articles, string beans and vegetable and marrow squashes, grown from seed procured from Greece, which excited the interest of the curious.

Mr. John Polleys, of South Dedham, exhibited potatoes—second year from seed—which we hope the Society will hear from again. Mr. A. Crosby, of West Roxbury, fine beets and carrots; Messrs. G. and C. Craft, of Brookline, ornamental beets, among which were several varieties of Swiss Chard, (Poirees.) These are said to be the finest kind of beet for greens; the stalks, which are very large, are boiled like asparagus, and the leaves like spinach.

Messrs. H. L. Stone, of Grantville, Robert Porter, of Stoughton, A. Kinsman, of Milton, Frank Blenus, Lewis Bullard, Calvin Guild, John Bumstead and A. P. Smith, of Dedham, also exhibited interesting articles. Other contributors will be found in the awards of the Committee.

Only two entries were made for premiums on experiments in raising crops of Roots and Vegetables. We hope future competitors in this line will consult the rules of the Society and govern themselves accordingly.

It would be very interesting to witness more enthusiasm and competition in these experiments, among farmers of all grades and classes, whether young or old, high or low, rich or poor. One can hardly fail of deriving benefit, even should the premium be taken by his rival. Things found out by one's own experience are generally more abiding and useful than to accept them from others. The habit of keeping such accounts as the rules of the Society require of competitors in these cases would be useful to many. Farming has often too little system in it, and the farmer gives too little thought to the process, to realize what loss he incurs in the want of more systematic management. "Nature will not abate one tittle of her laws, even to the mightiest earthly sovereign; but when the humblest individual obtains a knowledge of their exact and immutable operations, she protects him with her ægis and enriches him with all her bounties."

The Committee unanimously recommend that premiums, gratuities and diplomas be awarded as follows:

For the best collection and variety of Garden Vegetables, (117 varieties,) first premium to John Sias, of Milton, \$10.00.

For the best collection of Potatoes, (21 varieties,) a premium of \$3.00 to John Sias.

To Ephraim Wilson, of Dover, for 10 varieties of Potatoes, second premium of \$2.00.

To Jacob Wendall, Jr., of Needham, for Collection of Vegetables, (including four squashes, weighing from 90 to 138 pounds each,) a gratuity of \$1.00.

To John Fottler, of West Roxbury, for superior Onions and Sweet Corn—a gratuity of \$1.00.

To Richard Holmes, of Roxbury, for two very fine Egg Plants—a gratuity of \$1.00.

To John York, of West Roxbury, and Benjamin White, of Milton, for Vegetables; Stillman Whitney, of Dedham, for Mammoth Squashes, and C. B. Ward, of Dedham, for nice Pumpkins—each the Society's diploma.

To H. L. Stone, of Grantville, for the best experiment in raising Potatoes, the details of which will be found in his statement—a premium of \$5.00.

Mr. S. also sends a report of an experiment in raising mangel wurtzel, which, in the opinion of the Committee, is not entitled to a premium, on account of the very small amount raised per acre, and the cost per bushel, (45 cents,) being far above their value; but they recommend the publishment of his statement, in order that it may stimulate others to compete in raising this valuable auxiliary to the hay-mow.

For the Committee,

GEORGE CRAFT, *Chairman.*

Brookline, Dec. 2, 1862.

STATEMENTS OF H. L. STONE.

POTATOES.

The experiment in raising potatoes to which your attention is called was as follows, and on land last year in corn, and then had ten cords of barn-cellar manure spread over it, giving a good crop of corn, estimated at seventy bushels. In April last I ploughed between the hills of corn, which were four feet apart, and dropped in the furrows eight bushels of Jackson White potatoes, using as a fertilizer 300 pounds of plaster on the potatoes, a portion when planted and a portion at the first hoeing, except on four drills near the centre of the field, which were manured in the drills—one with horse manure, one with a compost of meadow mud and old salt

fish, one with compost of soda ash and mud, and one with compost of lime, salt, and mud, each at the rate of eight cords to the acre. That portion on which plaster was used looked feeble all the season. The furrows manured shew a thrifty growth of vines, four times as heavy as those with plaster. At the time for first hoeing I split the old corn hills, turning the earth towards the potatoes, having previously harrowed across the rows with a Bucklin harrow. As the sprouts had but just begun to appear, no injury was done to them by the harrow; but a thorough cultivation was effected without the use of the hoe, and the growth of weeds was checked. They were subsequently cultivated, and hoed twice and harvested early in September. No rotten tubers were observed. All those raised with manure were of uniform and good size, and were sold in the market without sorting. Of those raised on plaster, full one-third were too small for market or the table. Annexed you have a statement of costs and results.

April 25.	Ploughing between old corn hills,	. . .	.50
	8 bushels seed (Jackson White),	. . .	\$5.50
	Planting (covered with a plough),	. . .	1.50
	1 one-horse load lime compost,	. . .	1.00
	1 " " soda ash compost,	. . .	1.00
	1 " " fish compost,	. . .	1.00
	1 " " horse manure,	. . .	1.00
May 17.	Harrowing across rows,	. . .	.25
	300 lbs. plaster,	. . .	1.00
25.	Cultivating and hoeing,	. . .	3.50
June 10.	Cultivating and hoeing,	. . .	3.00
Sept. 5.	Digging,	. . .	6.00
	Picking up,	. . .	1.00
			\$26.25

The product was 60 bushels. The experimental drills produced as follows:

One with horse manure,	321 lbs.,	equal to	214 bush. per acre.
" fish compost,	301 "	"	200 "
" lime compost,	249 "	"	166 "
" soda ash,	205 "	"	137 "
" plaster,	83 "	"	55 "

Cost per bushel, with horse manure, 29 cents; with fish compost, 30 cents; with lime, 37 cents; with soda ash, 45 cents; with plaster, 60 cents.

H. L. STONE.

Grantville, Nov. 1, 1862.

MANGEL WURTZEL.

The crop which I offer for premium was raised on one-fourth of an acre. The cost and products were as follows :

1862.	2½ lbs seed,	.	.	.	.	.	\$1.25
May 10.	Ploughing,	.	.	.	.	.	1.00
	1 load night soil,	.	.	.	.	.	5.00
	Loam and labor composting with night soil,	.	.	.	.	.	2.50
	Marking out, planting and manuring,	.	.	.	.	.	2.50
July 7.	Weeding 5 days,	.	.	.	.	.	5.00
Aug. 5.	Weeding 3¼ days,	.	.	.	.	.	3.75
Nov. 1.	Harvesting,	.	.	.	.	.	1.00
							<hr/>
							\$22.00

Crop.

48½ bushels mangel wurtzel.

H. L. STONE.

Grantville, Nov. 10, 1862.



REPORT ON FRUITS.

The exhibition of Fruit, though excellent in quality, was hardly what might have been expected from Norfolk county, in this remarkably prolific and fruitful year. In fact, the very abundance of fruit was one reason for the somewhat meagre display on our tables. Many successful cultivators were deterred from sending to the Exhibition by the mistaken fear that there would be no room for their contributions; and the Committee were pained to hear, in at least two instances, spectators say they had finer fruit at home than the specimens before them in the hall. This may or may not have been true, but we are desirous that it may not be said in future, and the Committee promise for themselves and their successors that no pains shall be spared to display in the best manner all the well grown fruit that may be sent to them; and they earnestly request a better representation of the fine orchards and gardens of one of the best fruit growing counties of the State.

PREMIUMS.

Apples.

Of Apples, there may have been finer than were exhibited by Frederick Clapp, of Dorchester, but, if so, your Committee have never seen them, and they award him for his display of 95 varieties the first premium of \$5.

Second premium to Aaron D. Weld, of West Roxbury, (38 varieties,) \$4.

Third premium to Joseph Crane, of West Dedham, (17 varieties,) \$3.

Fourth premium to N. T. Davenport, of Milton, (25 varieties,) \$2.

For the best *single dish* of 12 specimens, (Gravensteins,) to Frederick Clapp, \$2.

For the second best, (Porter,) to A. B. Endicott, of Dedham, \$1.

The Society is indebted for liberal contributions from Edmund Polleys, Moses Kingsbury, S. Northup, Lucas Pond, Nathán Longfellow, G. F. Williams, Francis Marsh, J. S. Hubbard, and John York.

Pears.

The Committee decided to omit the first premium, and award the second to Frederick Clapp, of Dorchester, (24 varieties,) \$4.

Third premium to C. A. Hewins, of West Roxbury, (22 varieties,) \$3.

Fourth premium to Albert Crosby, of West Roxbury, (19 varieties,) \$2.

For the best *single dish* of 12 specimens, (Flemish Beauty,) to A. D. Weld, of West Roxbury, \$2.

For the second best to Samuel Herrick, of Brookline, \$1.

A fine lot of 17 varieties was received from Jonathan R. Packard, of Sharon, but, not complying with the rules of the Society regarding the number of specimens of each variety, was debarred from competing for the premium, but the Committee recommend the Society's diploma.

On the second day, after the Committee had made their awards, a very superior lot of about 20 varieties was received from Samuel Gilbert, Jr., of Dorchester, to whom we recommend the Society's diploma.

One hundred and twenty-five varieties were placed upon the tables by the President, who declined, as usual, to compete for the premiums. Fifty-eight varieties were exhibited by Aaron D. Weld, of West Roxbury, ten varieties by Lewis Bullard, of Dedham, and displays were made by A. Kinsman, of Dedham, Nathan Longfellow, of Needham, J. H. Billings, J. W. Paige, William C. Hibbard, and John York, of West Roxbury.

Peaches.

Eight varieties from Frederick Clapp, of Dorchester, were unsurpassed by any ever shown before this Society, and we award him the first premium of \$3.

Second premium to Macey Randall, Jr., of Sharon, \$2.

Plums.

There were none from the county. A fine dish of several varieties was placed upon the table by Dr. Eben Wight, of Dedham, raised by a gentleman in Bangor, whose name we did not learn.

Baskets of Assorted Fruit.—None.

Quinces.—None.

Foreign Grapes.

For the best collection, first premium to J. W. Clark, of Dedham, \$4.

Second best to Charles B. Shaw, of Dedham, \$3.

Native Grapes.

For the best collection, (12 varieties,) to George Davenport, of Dedham, \$3.

Second premium not awarded.

Third premium to A. W. Cheever, of Wrentham, \$1.

Cranberries.

For the best to Nathan Longfellow, of Needham, \$3.

Second and third premiums not awarded.

The President of the Society placed in the hands of the Committee bunches of Rogers' Hybrid Grapes—Nos. 3, 4 and 15. We have no hesitation in recommending them as being of great promise, and, perhaps, the best varieties that have yet been obtained for open air cultivation in this climate.

CHARLES A. HEWINS, *Chairman.*

West Roxbury, Nov. 27, 1862.



REPORT ON FLOWERS.

Relies ye are of Eden's bowers ;
As pure, as fragrant, and as fair
As when ye crowned the sunshine hours
Of happy wanderers there."

This part of our Exhibition was a decided success ; not because we had an extensive variety of rare exotics to gratify the cultivated taste of amateurs, but because it pleased the public,—met the wants of the great mass of the people. Amateurs and florists found objects of uncommon beauty and fragrance on which to expend their admiration ; while others, less fastidious, were satisfied with the general impression produced by the beautiful whole.

We regard the flower-show as an essential part of the Fair. At a small expense we procure a great pleasure. Nothing attracts more attention, or is more lovingly examined, or calls forth a heartier commendation. Nor is it strange; for nothing appeals more strongly to the simple tastes of men than these natural products in such unlimited variety as to form, size, color and fragrance,—to say nothing of the sentimental satisfaction which some derive from flowers considered as emblems of human passions. Happily we have no occasion to assert their utility. No man who does not measure utility by the lowest standard, doubts that the cultivation of flowers in a house or garden tends to refine the taste, and to purify the moral feelings, by associating them with the care and training of the fairest objects in the natural world. Many an otherwise idle or ill-spent hour is saved by being devoted to this employment, and many a heart-ache is, at least, temporarily relieved, many a pang of sorrow soothed, by the loving thought and careful attention bestowed on these favorites.

We are under obligations to the members of this Society, who take pains in furnishing our Annual Exhibition. The costly greenhouse plants, the ornaments of our gardens, and the no less charming natives of the fields and woods, receive the praises they so justly deserve, and are greeted year after year with a hearty welcome.

——— “Not a tree,
A plant, a leaf, but contains
A folio volume. We may read, and read,
And read again: and still find something new,
Something to please, and something to instruct,
Even in the humble weed.”

The Committee, after repeated comparisons of the articles offered for premium, make the following awards:—

Best Collection Cut Flowers—First prem. to Washburn & Curtis, Dorchester, \$4.

Second premium to Edward S. Rand, Jr., Dedham, \$3.

Third premium to Macey Randall, Jr., Sharon, \$2.

Bouquets—First premium to Washburn & Curtis, \$4.

Second premium to Edward S. Rand, Jr., \$3.

Twenty named Dahlias—First premium to Washburn & Curtis, \$3.

Second premium to Macey Randall, Jr., Sharon, \$2.

Single Bloom—First premium to Macey Randall, Jr., \$1.

Pot Plants—Edward S. Rand, Jr., Dedham, 12 plants, \$3.

Single Specimen—Edward S. Rand, Jr., \$1.

Seedling Verbenas—Best collection, John G. Barker, Dedham, \$2.

Gratuities—Cut Flowers and 54 varieties of cuttings of Evergreen Shrubs, G. & C. Craft, Brookline, \$2.

Lizzie J. Watt, West Roxbury, for Cut Flowers, \$2.

Mrs. Hannah P. McIntosh, Needham, for Bouquets, \$1.

Mrs. Hannah P. McIntosh, for Cut Flowers, \$1.

John G. Barker, Dedham, for Seedling Petunias and Gloxinias, \$2.

Miss E. J. Boyden, Dedham, for Flower Basket, \$1.

Macey Randall, Jr., Sharon, for Bouquets of Dried Flowers, \$1.

Mrs. Horatio Clark, Dedham, for Pot Plant, \$1.

Miss Sarah A. Boyden, East Foxboro', for Design of Dried Flowers, a copy of Breck's Book of Flowers.

Diplomas—Duncan Welsh, West Roxbury, for Coxcombs.

Mrs. Emma J. Newton, West Roxbury, for Bouquet.

Miss Lydia Shumway, Dedham, for Flower Basket.

Mr. John H. Adams, Milton, for Cut Flowers.

Miss L. P. Fisher, Dedham, for Bouquet.

For the Committee,

ROBERT WATT, *Chairman.*

West Roxbury, Nov. 13, 1862.

STATEMENT OF MESSRS. G. & C. CRAFT.

The following statement by those experienced florists, Messrs. G. & C. Craft of Brookline, was prepared at the request of the Committee, who were desirous of obtaining the result of the long experience of those gentlemen in the care and culture of Evergreen Trees and Shrubs. This statement, which has received the emphatic endorsement of the President of the Society, and other gentlemen of large experience, is submitted in the hope that it may prove of great practical advantage to many members of the Society, and to the public generally.

To Robert Watt, Chairman of the Committee on Flowers:—

DEAR SIR—In compliance with your request, the following statement is furnished respecting such varieties of Evergreen Trees and Shrubs as have been cultivated and tested by us. The land upon which most of the trees grow, lies rather low and level; the soil is a strong, black loam, not very deep, with a yellow subsoil, resting on hard pan gravel, about eighteen inches from the surface. We never apply manure to evergreens. The newer kinds are sheltered somewhat, by standing in the nursery, among larger trees, both deciduous and evergreen. Some of the kinds—especially those that are very common and well known—will be

passed over without remark; such as the white and pitch pines, balsam fir, white or swamp cedar, and the savin or red cedar; and where nothing is stated to the contrary with regard to any variety, it may generally be considered as perfectly hardy. This class embraces such trees as the Scotch Pine, *Pinus sylvestris*; Austrian, *P. Austriaca*; Norway or Red, *P. resinosa*; Cembrian, *P. Cembra*; Corsican, *P. laricio*; Pyrenian, *P. Pyrenica*; Jersey, *P. inops*; Dwarf or Mountain, *P. pumila*, which grows about four or five feet high. The Lofty or Bhoton, *P. excelsa*, has been in our grounds several years, and we have some fair, though not large specimens of this splendid tree. Our summer sun sometimes causes its leading shoots to die back, especially when the growth is very luxuriant. Perhaps this habit might be *starved out*, by growing the tree in a poor, gravelly soil. The larva of the white pine weevil, (*Rhynchoenus strobil.*) often kills the leader of this tree, as well as that of the white pine, Norway spruce, and others, rendering them unsightly for a season or two. Whenever a shoot is observed to wither, it should immediately be cut off, below the injured part, and burnt before the grub makes his escape.

Norway Spruce, *Abies excelsa*; Black or Double American, *A. nigra*; White American, *A. alba*; Lord Clanbrasil's dwarf Norway Spruce, *A. excelsa Clanbrasiliiana*, grows about three feet high—very bushy and compact. Another dwarf variety is *A. e. pygmaea*, which grows only a foot or so in height, but spreads very much. American Hemlock, *A. canadensis*. Of these we exhibited cuttings of four varieties, three of which are chance seedlings. Ground Hemlock, *Taxus canadensis*. The Hemlock needs the protection of other evergreen trees for the first three or four years after having been planted in localities exposed to the influence of the sun or the wind. The Norway Spruce, Balsam Fir, the Scotch, Austrian or White Pine, are all excellent nurse trees for this purpose. Simply tying in the branches of young evergreens, before winter sets in, is not only a protection from the rigors of winter, it also prevents injury from snow and ice. The Himalayan Fir, *A. Smithiana*, is invariably cut down to the snow line in winter. Our trees—about a dozen—which were planted some eight years ago, still live, but their growth being chiefly lateral, they have become a sort of low, scragged hedge. European Silver Fir, *Picea pectinata*, makes rather slow upward progress for three or four years, but afterwards grows rapidly, and becomes a lofty and perfectly hardy tree. Siberian Silver, *P. pichta*, and Noble Silver, *H. nobilis*, are both said to be perfectly hardy; our plants have stood well for two winters, but as they are only eight or ten inches high, we cannot, without further trial, pronounce upon their hardiness.

Swedish Juniper, *Juniperus svecica*, stands very well in a sheltered spot. Irish, *J. Hibernica*, is not quite so hardy as the former species. The Chinese, *J. Chinensis*; Cypress-leaved, *J. sabina cupressiana*; Tamarisk-leaved, *J. s. tamariscifolia*; Variegated-leaved, *J. s. variegata*; and Scaly-leaved, *J. squamata*, have all stood out-doors several winters, and, thus far, promise well. Weeping, *J. recurva*, died the second winter, although carefully protected. The Prostrate Juniper, *J. communis*, though looked upon as “a troublesome shrub, and useless for ornament,” yet when properly trained to a trellis, or arbor, forms a dense and beautiful screen of perpetual verdure. It is extremely hardy, and may be pruned so as to occupy but little more space than a board fence—a very desirable quality where land is valuable, or where the necessary room is lacking in which to use other trees or plants.

The Deodar Cedar, *Cedrus deodara*; Cedar of Lebanon, *C. Libana*; Japan Cedar, *Cryptomeria Japonica*; and Chili Pine, *Araucaria imbricata*, have all disappointed the strong hopes entertained a few years since, that these trees might be acclimatized.

Arbor Vitæ, *Thuja occidentalis*. This tree, though indigenous in a locality having a more austere climate than ours, has frequently suffered, of late, in this vicinity. Various are the causes which have been assigned for this calamity; all of them, however, seem to lie beyond human control. The Siberian, *T. Siberica*, is very hardy, and keeps its color pretty well in winter. Plaited-leaved, *T. plicata*. Hovey's, *T. Hoveyi*, has been in our grounds but one winter. It has beautiful foliage, and holds its color well; the tree is doubtless perfectly hardy. Weeping, *T. pendula*, is said to stand the coldest winters and hottest summers; but our plants being few and small, and having rather an exotic look, we have not yet ventured to trust them without some protection in winter. Chinese, *T. orientalis*, does not stand well, though in a sheltered spot. Golden, *T. aurea*. This exquisite little gem cannot be made to stand our winters with any reasonable amount of petting and coaxing. As the trees are small, and very pretty, it is worth while to have a specimen or two. We take ours up every autumn—three or more can be packed in a common soap box—and put them in the cellar, and in spring set them out again in the open border. In this way they succeed admirably. Gigantic, *T. gigantea*; *Taxodium sempervireus*; and Mammoth tree of California, *Washingtonia gigantea*, are three giants of the forest; growing—one 140 feet, another 200 to 300 feet, and the last named, 450 feet high. These all get sadly cut up every winter, though well protected by evergreen boughs. They recover somewhat in summer, and then grow rapidly; but the prospect that they will ever become acclimated, appears very dubious.

Broad-leaved, *Thuopsis Borealis*, is a new and very beautiful variety; a rapid grower, ultimately reaching, it is said, an altitude of 100 feet. Our specimens have stood out three winters, wholly unprotected, with complete success; every sprig seeming to retain throughout the year the fresh verdancy of summer.

English Yew, *Taxus baccata*; do. *pyramidalis*; Irish, *T. Hibernica*; Striped, *T. elegantissima*. The last named variety has stood with us; the others have succeeded but indifferently, except when planted on a sheltered mound.

Lawson's Cypress, *Cupressus Lawsoniana*, is another new evergreen tree, of a remarkably elegant and striking appearance. We have had it but a short time. Very favorable accounts respecting its hardiness, &c., near Boston, are given by those who have had it out several winters. Deciduous Cypress, *C. distichum*, is not an evergreen, though, like the Larch, it is closely allied to the pine family. It succeeds perfectly, even in exposed situations.

American Holly, *Ilex opaca*, is a slow grower—gets browned by the sun in winter and spring, when standing in an open spot, unless protected. A few years ago we received from England some beautiful Holly plants. There were two varieties—Dahoon, *I. scotica*, and Laurel-leaved, *I. laurifolia*; they went through one or two winters, with protection, very well, but are now nearly used up. The roots are alive, but the tops have only a few scattering leaves remaining.

Kalmia latifolia, *K. angustifolia* and *K. myrtifolia*, stand well; also Rhododendron, *maximum*, *Catawbieuse*, *punctatum*, *ferrugineum strictum*, *hirsutum*, *purpureum grandiflorum*, *Everastianum*, and other varieties.

Gold-edged Tree Box, Striped-leaved do., and Dwarf Box, thrive better if slightly covered in winter.

Holly-leaved Berberry, *Mahonia aquifolia*; Cluster-Flowered, *M. fascicularis hybrida*, and Creeping, *M. repens*, all do best in the shade, or where shielded from winter sun; otherwise the foliage gets scorched. Cotoneaster *buxifolia*, also requires similar management.

Ink Berry, *Prinos glaber*, gets discolored with us every winter. Probably the elegance of its foliage would be retained in a more sheltered place.

The above list comprises about all the evergreens which we have had under cultivation; it probably embraces more varieties than we exhibited, but as we did not expect to prepare any statement concerning them, we kept no list of the kinds.

Yours respectfully,

G. & C. CRAFT.

Walnut Hills, Brookline, Nov. 17, 1862.

REPORT ON BREAD.

Wheat.—First premium to Miss Carrie F. Ludden, of Braintree, \$3.00, with the additional premium of 75 cents, Miss L. being 15 years old.

Second premium to Mrs. Charles Coburn, Jr., of Dedham, \$2.

Unbolted Wheat.—First premium to Miss Mary Longfellow, 16 years old, of Needham, \$3.75.

Second premium to Mrs. Nathan Longfellow, \$2.

Rye and Indian.—First premium to Mrs. Nathan Longfellow, of Needham, \$3.

Second premium to Miss Althea Ware, of Needham, \$2.

Wheat and Indian.—First premium to Mrs. Nathan Longfellow, of Needham, \$3.

Second premium to Miss Elizabeth S. Sewall, of Medfield, \$2.

For the Committee,

EDMUND QUINCY, *Chairman*.

Dedham, Sept. 26, 1862.



REPORT ON THE DAIRY.

Whole number of contributors, 10.

Butter.—First premium to William Pierce, of Needham, \$5.

Second premium to Miss Lucy Morse, of Medfield, \$3.

Third premium to John Mansfield, of Needham, Flint's Dairy Treatise.

For best 20 pounds, second premium to Edmund T. Everett, of Wrentham, \$8.

Cheese.—First premium to Ruel Ware, of Needham, \$5.

Second premium to Henry Bird, of Stoughton, \$3.

No. 1 has the first premium, not because the Committee regarded it as the best cheese, but because there was not the quantity required by the rules of the Society in No. 2.

For the Committee,

J. W. GAY, *Chairman*.

Dedham, Sept. 26, 1862.

REPORT ON HORSES.

A part of your Committee on Horses, having attended to the duties assigned them, beg leave to offer the following report:

The number of animals exhibited was much smaller than usual, but no more so than we had good reason to expect, while the whole business of the country is so much deranged in consequence of the unholy rebellion which is now striving to overthrow one of the best governments the world ever saw, and under which we have been one of the most happy and prosperous of people. Still, we think the number might have been very much increased, had the Trustees given their attention to the matter, as was recommended in our report of last year. We are fully satisfied that without the co-operation of our Trustees, in their several towns, to awaken a renewed interest, our Exhibitions will prove failures.

We would recommend that only such men be put on committees as will faithfully attend to their duties.

And we would further suggest that the Superintendent of Horses be instructed to see that books, properly arranged for entering the animals in the various classes to which they belong be provided, and that some competent person shall attend to entering the same.

We award the following premiums :

ROADSTERS.

Stallions.—The two Stallions entered by E. P. Carpenter, Esq., of Foxboro', having received at the previous Exhibition of the Society the *first premiums*, your Committee award him a diploma for "Ethan Allen," Rank No. 1, and a diploma for his "Black Hawk," Rank No. 2.

Brood Mares.—First premium to Stephen D. Snell, of Dedham, \$7.

Diploma to L. Valentine, of West Newton.

Colts and Fillies.—First premium to Oliver Deane, of Canton, for the best three years' old, \$5.

Second premium to Levi Mann, of North Wrentham, for best two years' old, \$3.

Harness Horses.—First premium to Alden Bartlett, of Dedham, \$7.

Second premium to Hiram Gay, of Stoughton, \$5.

Third premium to Henry Jones, of Stoughton, \$3.

Fourth premium to William Hesketh, of Canton, \$2.

Gratuity to B. R. Ballou, of Stoughton, \$5.

Diploma to B. Royce, of Dorchester.

Diploma to Mr. Ellis, of Newton Centre.

HORSES OF ALL WORK.

Stallions.—First premium to Joseph Ham, of Roxbury, \$10.
No other offered.

Brood Mares and Colts.—First premium to G. S. Ferry, of Milton, \$7.

No other offered.

Colts and Fillies.—First premium to S. J. Capen, of Dorchester, for best three years' old, \$5.

Second premium to E. H. Tyler, of Medway, \$3.

First premium to James Deane, of Dedham, for best two years' old, \$5.

Second premium to Charles Kingsbury, of Medway, \$3.

CARRIAGE AND FAMILY HORSES, WALKING HORSES, PONIES, &C.

First premium to R. A. Holmes, of Roxbury, \$10.

Second premium to J. B. Dinsmore, of Roxbury, \$6.

Family Horses.—First premium to B. H. Bailey, of Dedham, \$8.

Second premium not awarded.

Third premium to S. G. Williams, of Needham, \$4.

Diplomas to S. P. Mack, of Dorchester, and E. P. Carpenter, of Foxboro'.

Saddle Horses.—First premium to Samuel Bradstreet, of Dorchester, \$6.

Second premium to Benjamin Huntoon, of Canton, \$4.

Third premium to A. J. Norris, of Dedham, \$2.

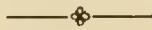
The Committee award a diploma to A. B. Balch, of Medfield, for his horse "Gen. Sigel," entered only for exhibition.

DRAUGHT HORSES.

First premium to Amory Fisher, of Dedham, \$7.

A. B. BALCH, *Chairman*.

Medfield, Dec. 1, 1862.



REPORT ON BULLS.

Whole number of entries, 10.

Jersey.—First premium to W. T. G. Morton, W. Needham, \$5.

Second premium to John Cawley, of Dedham, \$3.

Kerry.—First premium to A. W. Austin, of West Roxbury, \$5.

Second premium to same, \$3.

Grade.—First premium to E. Drake, of Stoughton, \$3.

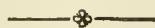
Second premium to J. W. Gay, of Dedham, \$2.

Bull Calf, Ayrshire.—First premium to Daniel A. Lynch, of Dedham, \$3.

Diplomas to A. S. Drake, of Sharon, and G. R. & W. R. Mann, of Sharon.

B. N. SAWIN, }
A. S. DRAKE, } *Committee.*

Dedham, Sept. 26, 1862.



REPORT ON COWS.

Whole number of contributors, 13.

Kerry.—First premium to A. W. Austin, of West Roxbury, \$5.
Second premium to same, \$4.

Ayrshire and Native.—Second premium to James McLane, of Dedham, \$4.

Hereford and Native.—First premium to James McLane, of Dedham, \$5.

Jersey.—Third premium to W. T. G. Morton, of Needham, \$3.

Ayrshire and Jersey.—Second premium to W. T. G. Morton, of Needham, \$4.

Grade.—Second premium to O. Moulton, of West Roxbury, \$2.
Third premium to P. O. Neill, of West Roxbury, \$1.

JEREMIAH W. GAY, *Chairman.*

Dedham, Sept. 26, 1862.



REPORT ON HEIFERS.

Whole number of contributors, 13.

Jersey.—First premium to James McLane, of Dedham, \$3.
Second premium to W. T. G. Morton, of Needham, \$2.

Jamestown.—First premium to Francis Marsh, of Dedham, \$3.
Second premium to same, \$2.

Ayrshire.—First premium to P. O. Neill, of West Roxbury, \$2.

Kerry.—Second premium to A. W. Austin, of W. Roxbury, \$1.

Native and Grade.—First premium to S. D. Bacon, of Dedham, \$3.

Second premium to W. T. G. Morton, of Needham, \$2.

Native.—First premium to George H. Hardy, of Needham, \$3.

EPHRAIM WILSON, *Chairman.*

Dedham, Sept. 26, 1862.

REPORT ON STEERS.

The Committee award a diploma to Edward E. Coles, of Milton, for his pair of Steers, sixteen months old, one-half Durham and one-half Devon, raised and bred by him, there being no premium offered for Steers of that age.

LUTHER EATON, *Chairman.*

Dedham, Sept. 26, 1862.



REPORT ON SHEEP.

The Committee on Sheep report, that the number of *five* were on exhibition, viz. :—One yearling Cotswold ram, one two-year old Oxford-Down ewe, and one (grade) Leicester ewe, owned by E. R. Andrews, of West Roxbury; one yearling ram, and a five-months old ewe lamb, apparently a mixture of Cotswold and Merino blood, owned by C. R. Belcher, of East Randolph.

Only one of these animals, as will be seen by reference to the premium list, could compete for any premium offered. The ram of Mr. Andrews was a candidate for the premium offered for the best Cotswold. He is a good specimen of the breed, seventeen months old, was bred by P. Bradley, Esq., Brattleboro', Vt., and though he had no competitor, is eminently entitled to the premium of five dollars offered by the Society.

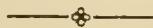
The Oxford-Down ewe, exhibited by Mr. Andrews, was bred by R. S. Fay, Esq. She is not large, but of fine symmetry, and great weight in proportion to the bone.

Mr. Belcher's sheep, although not of either of the distinct breeds recognized by the Society, are evidently thrifty and useful animals. Mr. B. stated that the ram's fleece, taken off in May last, weighed 11 lbs. 10 oz., washed. The ewe lamb is of good size, and bids fair to yield a large fleece.

For the Committee,

SANFORD HOWARD, *Chairman.*

Dedham, Sept. 26, 1862.



REPORT ON SWINE.

As your Committee have heretofore said much in regard to that very respectable and interesting quadruped, the hog, and have descanted, perhaps at tedious and unprofitable length, not

only on his manifold virtues and noble characteristics, but have also laid before the world his weaknesses and failings ; and have shown by facts and figures and incontrovertible arguments, that this animal, in his improved condition, ministers vastly to the interest and comfort of mankind, and particularly to that portion of mankind comprised within the limits of Norfolk County, we propose to add nothing to this part of a great and inexhaustible subject. We would rather, in a pæan of gratitude, direct the attention of this grave assembly to those enterprising men who make it their study and delight to develop the excellencies of this favorite animal, and render him more able to fulfil his important mission. We cannot avoid, however, saying a word in relation to the swine on exhibition at the late Fair.

But comparatively a few years ago, owing to the praiseworthy exertions and example of a few public-spirited individuals, the hogs of Norfolk County, exhibited on public occasions, were splendid specimens of swinehood, and furnished a noble illustration—so far as looks, actions, habits and delicacy of flavor are concerned—of the true character and appearance of a genuine *fat hog*. Probably no finer animals for the table were ever raised in any part of the world, than such as were raised in this county, and exhibited at our Fairs, causing the mouths of epicures to water at their sight, and planting the seeds of envy in the bosoms of public-spirited agriculturists in other counties and in other states.

Our superiority, however, in this important department, we regret to say, was short-lived. The exhibitions of swine gradually fell off, and in 1860 there were but *four* entries ; and the hogs exhibited, although respectable in quality, and, it may be, superior to the best specimens exhibited at other Agricultural Fairs in the Commonwealth, were—we blush to record it—of a very inferior grade compared with their illustrious predecessors. In the following year, 1861, however, there was a marked improvement. The number of entries was largely increased ; showing, beyond cavil, that the public were again awakening, after a long nap, to the importance of the subject of pork ; and among the pigs exhibited were some specimens worthy of all praise, and which commanded the admiration of all beholders.

In 1862, the present year, your Committee are rejoiced to find that the march of swine is still onward. “Excelsior!” is the motto ; and although, for obvious reasons, the number of entries has not been increased, yet a round dozen of noble-looking animals have been exhibited, some of which were curiosities in their way ; and crowds of spectators, beautiful women and brave men, with sparkling eyes and smiling features, pressed towards the pens, attracted by the voice of Fame, which, louder than the lowing of the oxen and the neighing of steeds, had trumpeted forth the

charms of the exhibition of swine, and also by the musical cries, and grunts of satisfaction, which the happy inmates from time to time poured forth!

These animals were all of gentle birth, and had been carefully nurtured, and reflect much honor on their patrons and proprietors, as well as on the towns in which they flourish, and show the successful results which care, skill and intellect can produce, when happily combined and directed towards a great and important end. They reminded your Committee of the great Falstaff, in rotundity of person and cheerfulness of disposition, and also in the habit of larding the lean earth as they waddled along.

While examining the pens, your Committee, lost in admiration and wonder at the sight of two splendid specimens of swine of the Northumberland breed, from the highly-favored town of Needham, were half inclined to say to the spherical, inert, but living masses, "You are all blubber!" as Queen Victoria once said to the young Prince of Whales, who was crying because they would not make him President of the United States!

But however interesting and attractive it may be, we cannot linger on this part of our subject, but must hasten to satisfy the impatience of those who are awaiting the award of honors and rewards in the shape of premiums.

For the best Sow, your Committee would recommend that the premium of five dollars be awarded to John Keating, of Dorchester, for an animal of California breed.

For the second best Sow, that the premium of three dollars be awarded to Dr. W. T. G. Morton, of West Needham, for an animal of Berkshire and Suffolk breed.

For the best Fat Hog, that the premium of five dollars be awarded to Thomas Belees, of Needham, for a hog of Northumberland breed, nine months old, and of extraordinary excellence.

For the second best Fat Hog, that the premium of three dollars be awarded to Thomas Belees, of Needham, for a very superior hog of Northumberland breed.

For the best Litter of Weaned Pigs, that the premium of five dollars be awarded to Dr. W. T. G. Morton, of West Needham, for eight pigs of much excellence, and of a mixture of the Berkshire, Suffolk and Cheshire breeds.

It has been remarked, by sage philosophers, that in all ages, those men who labored in the care and improvement of swine, in order to increase the comforts of their fellow-men, have been distinguished for elevated qualities, and particularly for the virtues of courage and fidelity. Such was Eumens, the brave and jealous friend of Ulysses, as recorded by Homer, the father of epic poetry—faithful when all others were traitors, and ready, single-handed, to peril his life for his patron and prince. Such

was Gurth, the valiant Saxon, who foiled the bold outlaw with his favorite weapon, the faithful squire of the renowned Ivanhoe at the celebrated tournament of Ashby de la Zouch. And such are men of the present day, some even now among us, whose names, did it not border too closely on personality, your Committee could give, and which would elicit grateful applause.

It is not remarkable that when the poets of old, as well as the novelists of a later date, touched upon this theme, and sang or said the praises of those who studied the excellencies of swine, they surpassed themselves, and soared to loftier flights, inspired by the glorious theme—a theme fit for poetry, and which, indeed, should only be lisp'd in numbers. A theme so inviting, that—

“ Can you pardon my presumption—even I—
No wit—no genius—yet for once will try.—”

Hail to the men, all honor, fame and place,
The friends and benefactors of our race,
Who lend the influence of all-powerful mind,
To increase the joys and comforts of mankind !
And at the head of this proud catalogue,
Stands he who seeks to elevate—the hog.

Then while we sit in solemn conclave, all,
A solemn body 'round this vaulted hall,
Dispensing with becoming care and zeal,
The meet awards for enterprize and skill,
Let us complete our task, and scorn to shirk
The claims of those who do the noblest work.

When pork invites us, who would basely choose
To turn aside and consort with the Jews ?
Then urged by grateful feelings let us raise
Our voices high, and give the meed of praise
To that small band, the firm and faithful few
Who, led by motive strong and generous too,
Cudgel their brains, and labor—not in vain—
T' improve and beautify the breed of swine,
From whose round forms such unctuous treasures flow,
The pride and glory of our Cattle Show.

“ Great Dr. Johnson, who in size an Ox,
Learned from his uncle Andrew how to box,”
Once said in social and familiar chat,
“ Who kills fat oxen should himself be fat !”
If this be so, then what rewards are due
To those brave men, so faithful, just and true,
Who, scorning fame and wealth, and vain applause,
Oft spend a lifetime in a nobler cause ?

Oh, may these generous souls, with tastes refined,
True benefactors of the human kind,
Who seek t' improve the forms and habits rude
Of that vast host, the swinish multitude,
Receive wher'er they go, now and again,
Strong marks of favor from their fellow-men :
Undoubted tokens, free and undisguised,
Of worth acknowledged and of labors prized.

Let them be met with smiles and flags unfurled,
 And shouts and cheers of a discerning world !
 May these unselfish wights be never roasted,
 But placed in high estate and often toasted ;
 Surrounded with good things, and freely feasted,
 But never hauled o'er burning coals and basted :
 May they, by friends embraced, by foes forsaken,
 Laugh and grow fat, and always save their bacon ;
 May something more than scraps to such men cheer afford,
 And juicy hams and spare-ribs smoke upon their board !
 May smiling fortune all their efforts bless ;
 May their expanded shadows ne'er be less ;
 May they have never cause to greet life's ills
 With discontented grunts or angry squeals,
 And may they never realize the process
 Of wearing yokes about the neck or rings in the proboscis !
 Long may they prosper in their glorious work,
 To breed fat hogs and make delicious pork ;
 May peace and comfort gather round their hearths,
 While pinguid blessings lubricate their paths,
 Anoint the wheels of Time's revolving car,
 And slip them through the world without a jolt or jar.

JOHN S. SLEEPER, *Chairman.*

Dedham, Sept. 26, 1862.

EXPERIMENTS IN FEEDING SWINE.

To the Board of Trustees of the Norfolk County Agricultural Society :—

GENTLEMEN—Mr. A. W. Cheever, of Sheldonville, made an application to me, as Chairman of the Committee on Swine, in September last, to enter his name as a competitor for the premium offered for the best experiment in feeding swine. Circumstances prevented me from making a visit to the premises of Mr. Cheever, for the purpose of personal inspection, and I was unable to consult with more than one member of the Committee in relation to the subject. The statement of Mr. Cheever, however, is full, and to the point. He is a gentleman of excellent character, and may be believed. The experiment appears to have been a valuable and successful one, although simple in its nature and easily conducted. It would probably be more successful if tried on a larger scale. The following is Mr. Cheever's statement.

STATEMENT OF MR. CHEEVER.

“The experiment I offer to the consideration of the Committee was made on two January pigs, one-fourth Mackay, bought by me April 3d, kept in a barn cellar, in a pen 10 ft. by 12 ft.,

one half of which was occupied by a platform for feeding and sleeping, the other half by manure and absorbents of the same.

“The feed has been milk, apples, corn meal, and wheat shorts.

• “The apples were all wind-falls and were gathered for the double purpose of destroying insects and feeding the pigs. The milk was what was not otherwise used, after taking off the cream, from three ordinary cows—one of them farrow.

“The shorts were made in a New England flouring mill, and were much better than those brought from the West, and were sold at nearly the same price per pound as corn meal.

“By using just enough dry loam to absorb the urine and keep their pen comfortable to live in, I have made two cords of compost manure, that is well worth five dollars per cord. By allowing the manure to be worth the value of the milk and apples, the account stands, April 3d:—

To 2 pigs—43½ lbs. each,	. . .	\$10.00
“ 600 lbs. corn meal,	. . .	7.96
“ 61½ lbs. wheat shorts,	. . .	7.92
		\$25.88
Oct. 28—By 632 lbs. pork, at 6 cts.	. . .	37.92
		\$12.04

“Thirteen pounds of lard, from the inwards, I set against the cost of dressing and marketing.”

Accompanying the statement is a certificate from Mr. Mayo C. Darling, of Franklin, dated October 28, 1862, certifying that he weighed two dressed hogs, bought by him of A. W. Cheever, and their weight was 314 and 318 lbs. nett.

Mr. Cheever also gives their measurement, as follows:—

“4 feet 5 inches from between the ears to the root of the tail; and 4 feet 9 inches in girth at the waist.”

He also says it is important to secure a breed of hogs that mature within twelve months; or, what is better, ten months. Such were the hogs he had; and he fed them on food that would give growth as well as fat. They were given as much food as they could eat up clean three times a day, with a few apples for dessert. He cooked none of their food, but wet the meal and shorts with the milk, adding water when there was not sufficient milk. He mixed the dough thick, and sometimes fed the hogs with the dough sour, and sometimes sweet, as they liked it best.

Mr. Cheever's notice for entry of his experiment came rather late and irregular, and prevented the Committee being called together to see the beginning, middle and end of the experiment.

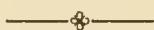
Nevertheless, he is undoubtedly entitled to much credit for the course he has pursued, and so carefully noting facts that may be a useful guide to others. Whether, under the circumstances, he is entitled to the premium offered for the best experiment in feeding swine, is a question for the Board of Trustees to decide. In my humble judgment, however, he is deserving of a gratuity, if only as an encouragement for others to "go and do likewise."

Respectfully, your obedient servant,

JOHN S. SLEEPER, *Chairman.*

Roxbury, Dec. 1, 1862.

[N. B. The Trustees voted to award the first premium of \$6 to Mr. Cheever for his experiment.]



REPORT ON LIVE FOWLS.

Whole number of contributors, 22.

Best Collection Fowls.—First premium to Zebina Smith, of Dedham, \$10.

Shanghai Fowls.—James Farrington, of Dedham, \$2.

Spanish.—First premium to C. B. Ward, of Dedham, \$2.

Second premium to Eben Wight, of Dedham, \$1.

Dorking.—First premium to Eben Wight, of Dedham, \$2.

Second premium to Amasa Alden, of Dedham, \$1.

Bolton Gray.—Supply Clapp, of Dedham, \$1.

Bantams.—First premium to Stillman Whitney, of Dedham, \$2.

Second premium to Timothy Mack, of Dedham, \$1.

Turkies.—First premium to Lemuel Kingsbury, of Needham, \$3.

Second premium to W. T. G. Morton, of West Needham, \$2.

Geese.—First premium to G. B. Cordwell, of Sharon, \$3.

Second premium to W. T. G. Morton, of West Needham, \$2.

Ducks.—First premium to Henry L. Stone, of Grantville, \$3.

Second premium to W. T. G. Morton, of West Needham, \$2.

Pigeons.—E. Moseley, of Sharon, \$1.

For the Committee,

ROBERT MANSFIELD, *Chairman.*

Dedham, Sept. 26, 1862.

REPORT ON PLOUGHING.

DOUBLE TEAMS.

Whole number of entries, 4.

Second premium to Geo. O. Farrington, of Dedham, (Nourse & Son's "Universal" Plough, No. 4,) \$8.

Fourth premium to William Fales, of Dedham, (Side Hill Plough, Sanborn's Patent, No. 2,) \$4.

Michigan Sod and Subsoil Plough.—First premium to Horace and Moses Whiting, of Dedham, (Nourse & Mason's Plough No. 34,) \$10.

There being but one Double Horse Team for ploughing, that was assigned to the Committee on Ox Teams, who award the first premium of \$10 to Luther Eaton, of Dedham, (Nourse & Son's "Universal" Plough, No. 5.)

For the Committee,

JOHN H. ROBINSON, *Chairman.*

Dedham, Sept. 26, 1862.

SINGLE OX TEAMS.

The Committee on Ploughing with single Ox Teams report that the only entry was made by Daniel Sullivan, of Dover, to whom they award the second premium of four dollars.

The plough, which was held by himself, was Nourse's Universal Iron Beam Sod Plough, No. 4. Mr. S. had owned his cattle but a short time, consequently they did not move so well as they probably would have done had he owned them longer. Perhaps no farming implement has been more improved within the last half century than the plough, consequently land can now be ploughed better and with much less expense than it could have been thirty or forty years ago. Some of us can remember what was formerly called a "breaking-up team," which often consisted of three yoke of oxen and a horse, and required five men—two to drive, one to hold, one to turn what the plough refused to do, and, as the length of the chain was then the only thing to regulate the depth of the plough, one man was necessary to bear on or lift up the beam as occasion required.

If such a team would plough an acre in a day, and we allow \$1.25 per day for each man, including board, and the same for a horse and each yoke of oxen, the expense of ploughing an acre of green sward would be \$11.25.

Now one man, with one yoke of oxen, will plough an acre in less time and do it better; but if he ploughs the same, the expense, at the above rate, would be only \$2.50 an acre, being less than one-fourth, or making a difference of \$8.75 in ploughing an acre. Land, however, is now generally more free from roots and stones, for which some allowance in the above estimate should be made. If we go still further back, we find Elisha ploughing with *twelve* yoke of oxen; we are not informed, however, about the quality of the soil, or how many men he had to assist him; but if it required twelve yoke of oxen to plough in his day, can it be thought strange that he should quit ploughing and take up prophesying?

Again, a man once asked to be excused from attending a feast because he had bought five yoke of oxen, and he must go to prove them—whether for ploughing, drawing, or other purposes; is not stated; but from the frequency with which oxen are mentioned in the Scriptures, and the great number which some of the ancients possessed, (one man having owned a thousand yoke,) it would seem that they were held in high repute by the sacred writers.

For the Committee,

ELIJAH TUCKER, *Chairman.*

Dedham, Sept. 26, 1862.

HORSE TEAMS.

Whole number of entries, 8.

First premium to John Bennett, of Dorchester—one pair horses, Lion Plough, No. 61, \$8.

Second premium to Willard P. Clark, of Medway—one pair horses, Smith & Field's Plough, No. 2, \$6.

Third premium to Hiram Coldwell, of Needham—one pair mules, Lion Plough, No. 61, \$4.

Fourth premium to Benjamin White, of Milton—one pair horses, Prouty & Mears' Plough, No. 25, \$2.

Mr. Luther Eaton, of Dedham, gave a good exhibition of his skill with Subsoil Plough, and not having entered for premium, is entitled to the thanks of your Committee.

Mr. Hiram Coldwell, of Needham, entered for premium one pair of mules of large size and great strength. The Committee award to him the third premium, finding in his team the strength of two good horses, exclusive of the alligator.

For the Committee,

ROBERT PORTER, *Chairman.*

Dedham, Sept. 26, 1862.

REPORT ON SPADING.

The Committee on Spading make the following report:—

Whole number of entries five. One hundred square feet of sward land to each lot. The time allowed, thirty minutes; the shortest time taken was nineteen, and the longest twenty-two minutes to perform the work.

The Spading was all remarkably well done, and better than at any of the Society's previous exhibitions, and it was very difficult to decide on the various merits of the spaders.

The Committee beg leave to observe that too little attention is generally given to the use of the spade with our farmers, in their every-day work; it is one of the most important implements of agriculture, and they urge all in their power the free use of the spade, and deep spading, too—say from twenty to thirty inches. As an illustration of the benefit derived from a thorough pulverization of the soil, your Chairman visited the garden of Mr. Edward Ives, near the Four Corners, Dorchester, and at his request, Mr. Ives has furnished him with a statement from which the following extract is made:

“Early in March, 1861, I commenced trenching; it was done with the *spade entirely*, at a uniform depth of twenty-eight or thirty inches, the soil not reversed, but thoroughly mixed together. This trenching I consider the great secret of the success that followed, not only of the cause of the remarkable growth which the trees and vines have since made, but also of the fact that out of 600 dwarfs set out immediately afterward, not one was lost, though it will be remembered that the succeeding summer (1861) was one of unusual drought. The growth during the present season (1862) has been almost without exception from three and a half to over five feet, in both standards and dwarfs; and in a large proportion of these young trees we have felt it safe to allow considerable of the fruit to ripen. The trees are exactly eight feet apart—between these, at the same time, we set out currants, and this year, in the rows between, we have carrots and beets.

There is about one acre and one half under cultivation, covered by 900 pear trees, about 2,000 currants, 100 grape vines, as many raspberry bushes, nearly 50 blackberry bushes, a nursery of 250 peach trees, and every thing, as can be seen, in a most thriving condition, which I attribute, under Providence, first to the excellent trees, vines and plants, which I obtained from Col. Wilder; secondly, to the careful and deep trenching and to the draining; and, lastly, I ought not to omit to mention how much we owe to the attention given to the compost heap.”

So much for deep spading and thorough pulverization of the soil.

Gentlemen are invited to call and examine the grounds for themselves, and if they will call at the season of the year when the trees are loaded down with fruit, as your Chairman did, they will say with him—Spade. Spade deep. Spade thoroughly. A sure profit will be the result to the farmers of Norfolk county.

The Committee award the following premiums :

- First premium of \$5.00 to Matthew Welch, of Brookline.
- Second premium of \$4.00 to Dennis Doody, of Dorchester.
- Third premium of \$3.00 to Timothy Murphy, of Dorchester.
- Fourth premium of \$2.00 to John Calleher, of Dorchester.
- Fifth premium of \$1.00 to Patrick Tieman, of Dorchester.

All of which is respectfully submitted,

AARON D. WELD, *Chairman.*

West Roxbury, Dec. 24, 1862.



REPORT ON MANUFACTURES.

Manufactures of Carriages, Wagons, Carts, &c.

The Committee award the following premiums :

First premium to Cushman, Baker & Co., carryall and buggy, \$4.

Second premium to S. E. Morse, of Dedham, for covered wagon and buggy, \$3.

Diploma to Tappan Hale, 81 years of age, for Concord wagon.

SANFORD CARROLL, *Chairman.*

Dedham, Sept. 26, 1862.

Leather Work, &c.

The Committee award the Society's diploma to John Mann, of Walpole, for fine boots.

JOSEPH DAY, *Chairman.*

Dedham, Sept. 26, 1862.

Hats.

Diploma to Timothy Phelps, of Dedham, for moleskin hats.

E. G. COBB, *Chairman.*

Dedham, Sept. 26, 1862.

Manufactures of Straw.

Straw Braid.—Second premium to Mrs. Betsey Randall, of Sharon, \$1.

Straw Bonnets.—Diploma to Mrs. Betsey Baker, of West Dedham, aged 76, the reputed original straw bonnet maker.

Second premium to Miss Amanda M. Phillips, of East Medway, for a fine Dunstable bonnet, \$2.

WILLIAM H. CARY, *Chairman*.

Dedham, Sept. 26, 1862.

Jellies and Preserves.

Premium to Mrs. Nathaniel Clapp, Dedham, for the best collection of preserves and jelly, \$1.

H. L. STONE, *Chairman*.

Dedham, Sept. 26, 1862.

New Inventions.

The Committee on "New Inventions" report that their attention was called to articles as follows :

1. *Clothes-Wringers*—of which there were Haley, Morse and Boyden's, of South Dedham, called the Self-Adjusting ; Woodman & Young's, of Boston, called the Empire ; Rhoades' (of several forms,) manufactured by Willard Everett & Co., of South Dedham, and that of Bailey & Sayles, of Wrentham. All these machines are before the public ; all probably deserve general commendation for the advantages they possess over the primitive method of wringing clothes by hand ; but the Committee had not the time to devote to a practical test of that thoroughness which would be required to enable them to make special discriminations.

2. *Washing Machines*—of which there were Turner & Bestwick's, of Dedham, and Reuben Ware's, of Grantville. The Committee are of opinion that the compactness, simplicity, and effectiveness of the former machine justifies them in recommending it to public notice, and awarding to it the Society's diploma.

3. *Corn-Sheller*—the only entry under this head being one of Newland's Patent, offered by Reuben Ware, of Grantville. No one was present to advocate its claims, and the Committee were unable to discover in it any particular merits.

4. *Water-Elevator*—manufactured by G. W. Holmes, of Bridgewater. It is a well-bucket, with windless, chain, and an apparatus for regulating the ascent and descent of the bucket, and for suspending it at any desired point in the well. The

Committee were favorably impressed with its appearance, but forbear further endorsement of its claims till opportunity is afforded for more careful trials.

5. *Dynamometer*—made and offered by John Mears, of South Abington. This implement is more simple than most dynamometers which have hitherto been brought before the public. It was particularly designed to test the draft of ploughs, but had not been previously tried for that purpose. The Committee attached it to several ploughs which had been engaged in the ploughing-match on this occasion—ploughing a furrow of several rods in length with each plough. From this rather hurried and imperfect trial, we conclude that the implement will require to be made stronger, and the graduated scale extended. With these improvements, it is to be hoped that it may combine the essential requisite of accuracy with simplicity and comparative cheapness.

6. *Bandage-Winder*—a very simple and cheap contrivance for winding bandages for use in surgical operations—a business which the unhappy circumstances involving our country has lately made prominent. With this apparatus bandages can be wound with great rapidity and in the best manner. It was offered by John Mears, of South Abington.

7. *The Iron-Beam Universal Plough*—invented by Joel Nourse, of Boston. In this implement there are several points of novelty. It is made wholly of iron and steel, and, consequently, imperishable, except by the necessary wear. By a simple and convenient arrangement, different mould-boards are fitted to the same plough, thus adapting it to the performance of different kinds of work. It consists of three patterns, two of which are adapted to sod ploughing, and the other to stubble—the addition of a skim plough to the same beam, also transforming it into a plough similar to that called the Michigan. Without going further into a description of this implement, the Committee would express the opinion that it is particularly deserving of the attention of farmers, who, by giving it a thorough trial, may find in it various advantages.

8. *Cultivators*—two being exhibited by Urias Urry, of Dedham—one to be drawn by a horse, and the other by hand. The former appears to possess some important advantages; but to judge understandingly of its merits it is necessary to see it in actual use. It is, therefore, proposed that a delegation from the Committee take charge of the matter, and that, after they have submitted the implement to proper trials, they report such results and conclusions as may be reached.

SANFORD HOWARD, *Chairman*,

Dedham, Sept. 26, 1862.

As a Supplement to the above report, the Chairman of the Committee would state that in connection with Eben Wight and Francis Marsh, he caused the large Cultivator, (the one to be drawn by a horse,) presented at the Exhibition by Urias Urry, to be tried in various ways, on a day appointed for that purpose in November. The implement was found to operate very satisfactorily, completely cutting over and pulverizing the soil to the depth of from two to four inches, and, by a change in the teeth (or feet,) it was found very effective in tearing out witch-grass or other pernicious vegetation. It is evidently an implement which will supply a want that has long been felt in regard to the eradication of weeds and cultivating crops.

The Chairman would also state that a Root-washer and a Drill-cultivator were presented at the last Exhibition of the Society, by H. L. Stone, of Grantville, which, not being on the list of entries placed in the hands of the Committee, were not examined by them. Mr. Stone states that two bushels of roots can be cleaned by the washer at six revolutions.

In regard to the Drill-cultivator, Mr. Stone states that it is used to mark out drills, and also to cultivate five drills at one time. It is used to mark out for corn, which is planted two feet one way and four feet the other, and is cultivated with this implement each way, at the first and second hoeing. It is also used to cultivate all hoed crops, while in their early stage of growth. The implement is the invention of Mr. Stone, and appears to be very useful.



REPORT ON SEEDS.

The Committee report that no garden seeds were entered for premium.

There were but two samples of wheat, one of which did not come within the rules of the Society; the other was too inferior, in the opinion of the Committee, for a premium.

The Committee were pleased to find a large number of competitors interested in the culture of Indian corn. Many of the samples were superior, the ears large, the cob small, the kernels compact and well ripened. The premium for the best is awarded to Hiram W. Jones, of Dover, for his fine sample of *Plummer corn*. The grower stated that it was thoroughly ripe in ninety days after planting.

The Committee are sorry to state that there were no other seeds on exhibition.

CHEEVER NEWHALL, *Chairman.*

Dedham, Sept. 26, 1862.

REPORT ON LADIES' WORK.

The Committee on Ladies' Work report fifty-seven entries, and award the following premiums:

To Mrs. George Baxter, of Quincy, for best knit counterpane, the first premium,	\$3.00
To Lizzie Johnson, of Dedham, for best silk bed-quilt, the first premium of	3.00
To C. E. Barnes, of Quincy, for embroidered bed-spread, the Society's diploma and	1.00
To G. R. Mann, of Sharon, for a bed-quilt, beautifully quilted,	1.00
To Mrs. M. Hinkley, of Dorchester, for one rag-rug, nicely done, regard being had to the choice and shading of colors,	2.00
To Mrs. John Bullard, of Dedham, for <i>very handsome</i> worsted work, three pieces,	3.00
To Mrs. A. M. Sumner, of Foxboro', for wrought chair-cover,	1.00
To Miss Hattie Fales, of Dedham, for crocheted shawl, a gratuity of . . . . .	.50
To Miss Fanny Howard, of Dedham, for two crocheted hoods, a gratuity of . . . . .	.50
To Mrs. J. McTear, of Roxbury, for embroidered skirt, the first premium of	2.00
To Mrs. C. Clark, of Foxboro', (sixty-four years old,) for <i>neatly</i> embroidered skirt, a diploma and	1.00
To Miss Lizzie Allwright, of Dedham, for two embroidered handkerchiefs, a gratuity of . . . . .	.50
To Emma Curtis, of Dedham, for crocheted yoke, collars and watch-case,	1.00
To Lilla Urry, of Dedham, for crocheted tidy, "The Flag of our Union," . . . . .	.50
To Martha Smith, of Dedham, for toilet-cushion, . . . . .	.50
To Addie M. Galucia, of Dedham, for one oil painting, a diploma.	
To Lizzie Carney, of Dedham, (twelve years old), for crocheted table-cover, a gratuity of . . . . .	.50
To Mary Maroney, of Dedham, for crocheted toilet-cover, a gratuity of . . . . .	.50
To Mrs. Robert Mansfield, of West Needham, for wreath of hair work and leather frame, a diploma and	2.00
To Miss Sarah A. Ellis, of Walpole, (fourteen years old,) for two crayon drawings,	1.00
Crocheted collars and tidies by the same, a diploma.	

Abby C. Baker, of West Dedham, (fourteen years old,) exhibited some crocheted collars, very neatly done.	
To Mrs. James Farrington, of Dedham, for soldier's socks, and white yarn mittens,	1.00
To M. E. Ord, of Medfield, for worsted tidy, a diploma.	
Emma Brown, of Dedham, (twelve years old,) exhibited a bouquet of worsted flowers worthy of notice.	
To Miss Sarah Dixon, of Foxboro', for farmer's wreath, The above was made of pumpkin seeds, corn, beans and other products of the farm.	2.00
To Mrs. Robert Mansfield, of West Needham, for agricultural flowers, a diploma and	1.00
To E. P. Burgess, of Dedham, for oak flower-stand, a diploma.	
To Miss Hardyman, of Dedham, for worsted flowers and bead chairs, a diploma.	
To Olive Richards, of Sharon, for cone frame and wreath of pressed flowers,	1.00
To Mrs. H. E. Clark, of South Dedham, for hair jewelry and wax fruit, a diploma and	1.00
Mrs. Betsey Baker, of Dedham, presented a watch case, the sewing on which was fine and neatly done.	
Mrs. Nathaniel Clapp, of Dedham, exhibited a shell basket as a curiosity, (it having come from the Bahama Islands,) which was quite an addition to our table.	
A. W. Cheever, of Wrentham, exhibited a case of insects, which showed great care in collecting and arranging, and for which we recommend a diploma.	

We are sorry to have to report less than half the number of articles presented last year, especially as we were provided with funds sufficient to award larger premiums, and more of them, thus enabling people to feel paid for the trouble and inconvenience of bringing their articles for exhibition—encouraging them to come again, and to persuade their neighbors to come. But, although we were disappointed at not receiving a larger number, we feel that perhaps it speaks well for the ladies of the county, showing that their hearts and hands have been devoted to another cause, where the claims on their work were much more urgent. We hope they will increase their interest in the exhibitions of the county, and find time to prepare articles for another year. Especially would we like to see some articles of plain sewing, more specimens of knitting, and some mending by our young misses. Of the latter we had two specimens from a young lady which were very neatly and nicely done, but it is quite desirable that the specimens exhibited should be either *worn* or *torn*, and not cut in new cloth. Considering the *times*, the Exhibition

was very good, and we earnestly recommend the ladies to commence in season for next year, and make the Exhibition far excel any previous one.

For the Committee,

FANNIE GRAY, *Chairman.*

Walpole, Oct. 1, 1862.

RECAPITULATION OF PREMIUMS

AWARDED BY THE

NORFOLK AGRICULTURAL SOCIETY, FOR 1862.

GRAIN CROPS.		Macey Randall, Jr.,	6.00
Hiram W. Jones,	\$9.00	John G. Barker,	4.00
W. T. G. Morton,	6.00	G. & C. Craft,	2.00
Henry L. Stone,	6.00	Lizzie J. Watt,	2.00
		Mrs. H. P. Mackintosh,	2.00
		Miss E. J. Boyden,	1.00
		Mrs. Horatio Clarke,	1.00
UNDERDRAINING LAND.			
Henry L. Stone,	\$10.00		
W. T. G. Morton,	5.00		
		BREAD.	
IMPROVEMENT OF PASTURES.		Mrs. Nathan Longfellow,	\$8.00
Henry Goulding,	\$5.00	Miss Carrie F. Ludden,	3.75
Joel H. Robinson,	3.00	Mrs. Charles Coburn, Jr.,	2.00
		Miss Mary Longfellow,	3.75
		Miss Athea Ware,	2.00
		Miss Elizabeth S. Sewall,	2.00
VEGETABLES.			
John Sias,	\$13.00		
Ephraim Wilson,	2.00		
Jacob Wendell, Jr.,	1.00		
John Fottler,	1.00		
R. A. Holmes,	1.00		
		DAIRY.	
		E. T. Everett,	\$8.00
		William Pierce,	5.00
		Ruel Ware,	5.00
		Henry Bird,	3.00
		Miss. Luey Morse,	3.00
FRUIT.			
Frederick Clapp,	\$14.00		
Aaron D. Weld,	6.00		
J. W. Clarke,	4.00		
Joseph Crane,	3.00		
C. A. Hewins,	3.00		
C. B. Shaw,	3.00		
George Davenport,	3.00		
Nathan Longfellow,	3.00		
N. T. Davenport,	2.00		
Albert Crosby,	2.00		
Macey Randall, Jr.,	2.00		
A. B. Endicott,	1.00		
Samuel Herrick,	1.00		
A. W. Cheever,	1.00		
		HORSES.	
		R. A. Holmes,	\$10.00
		Joseph Ham,	10.00
		Benjamin H. Bailey,	8.00
		Stephen D. Snell,	7.00
		Alden Bartlett,	7.00
		G. S. Ferry,	7.00
		Amory Fisher,	7.00
		J. B. Dinsmore,	6.00
		Samuel Bradstreet,	6.00
		Oliver Deane,	5.00
		Hiram Gay,	5.00
		B. R. Ballou,	5.00
		S. J. Capen,	5.00
		James Dean,	5.00
		S. G. Williams,	4.00
FLOWERS.			
Washburn & Curtis,	\$11.00		
E. S. Rand, Jr.,	10.00		

TREASURER'S REPORT.



C. C. CHURCHILL, *Treasurer, in account with Norfolk Agricultural Society.*

Balance in the Treasury, Nov. 30, 1861,	\$186.73
Cash received from new members,	42.00
“ “ from Commonwealth,	600.00
“ “ net proceeds of Exhibition, 1862,	434.07
“ “ borrowed money,	386.68
	\$1,649.48



	CONTRA.	CR.
Cash paid incidental expenses,		\$699.15
“ “ premiums,		436.50
“ “ salary of Recording Secretary,		50.00
“ “ “ “ Treasurer,		25.00
“ “ interest,		319.54
“ in Treasury,		119.29
		\$1,649.48

C. C. CHURCHILL, *Treasurer.*

Dedham, Nov. 30, 1862.

ORDER OF EXERCISES
AT THE
AGRICULTURAL HALL,
ON THE OCCASION OF THE
FOURTEENTH ANNIVERSARY
OF THE
NORFOLK AGRICULTURAL SOCIETY,
Friday, September 26, 1862.

At 12 o'clock a procession was formed on the grounds, under the direction of Col. John W. Thomas, Chief Marshal of the day, assisted by Messrs. Alden Bartlett and Andrew J. Norris, of Dedham, as Aids, which, preceded by Gilmore's Full Band, marched to the upper hall, where plates had been laid for six hundred guests, by James Butcher, of Boston.

The large company of ladies and gentlemen being seated, the Rev. Dr. Thompson, of Jamaica Plain, implored the blessing of heaven in a short, fervent and appropriate prayer. The dinner having been disposed of, the President, Hon. Marshall P. Wilder, made the opening remarks, substantially as follows:—

This is the fourteenth year of our Association. Most sincerely do I congratulate you upon the return of another anniversary—upon the pleasant circumstances under which we are assembled—upon the presence of our distinguished guests, and upon the interest manifested in the various departments of our Exhibition.

The present occasion is eminently one for great gratitude. How thankful should we be, that far remote from the din of battle, we are once more permitted to assemble for the promotion of that peaceful art, which, in the future as in the past, must constitute the great interest, the great employment of man. Never before have we met under circumstances so well calculated to impress us with the quietude, comfort and salutary influences of rural life. We are constrained to contrast our fruitful fields and abundant crops with devastated lands, drenched in blood, and our peaceful homes with the tumults and horrors of war.

But while we rejoice in the priceless blessings with which we are here surrounded, while we cheerfully acknowledge our obligations to the good government under which we live, and would hold ourselves ready to sacrifice all that is most dear on the altar of her liberties, let us not forget the great cause we are banded together to promote, and upon which must ever rest the strength and permanency of our Republic.

Especially do I rejoice in the evidence this day manifested by the good people of Norfolk County for the support and perpetuation of our own Association. "The power of association," said Mr. Webster, at our first anniversary, "is the great practical feature of our age."

Yes, Ladies and Gentlemen, it is upon associations like our own, in other departments of life, upon the combination of men coming together for friendly intercourse, we must look in the future, as in the past, for the development of the happiness and perfection of the human race.

Let us then foster and support our own Institution with all the means in our power, and come up from year to year with the products of industry and art, and unite our congratulations and rejoicings in the celebration of this, nature's great holiday. Let us, also, take courage in the hope that, sooner or later, war must wash his bloody hand and peace once more bless our beloved land. God grant that it may come soon, and that the influences of our blessed institutions may unite the hearts of the people in kind and social ties, and thus promote the union and prosperity of our bleeding country.

The orator of the day, Hon. Benjamin F. Thomas, was introduced and then delivered the excellent and able Address which accompanies this Report. It was listened to with marked attention, and received frequent expressions of applause from the entire audience.

Next came the following Poem, by Francis P. Denny, of Brookline, which was delivered without notes, and was replete with ability, ease and elegance, and gave great satisfaction.

P O E M .

Most worthy sires, ye of gentle brow,
 Farmers of Norfolk, brethren of the plough;
 To-day we meet to view with critic's eye
 The various products that our farms supply.
 We've seen such poultry and such porky swine;
 Bewitching mutton, dressed in wool so fine;
 Such beastly bullocks and such creamy cows,
 Fresh from rich meadows and a clover browse;
 Such lordly horses, such vivacious mares,
 I fear at farming some would put on airs,
 Repel the plough-chains with a haughty snort,
 Talk loud of trotting, stock, and speed, and sport;

In fine, the farmer's beast is gladly shown,
 And each would gladly call some beast his own.
 There's still one creature, product of the farm,
 A graceful biped, carries off the palm;
 Although not labelled, he is here to-day,
 And of this creature we have more to say.
 The *farmer* now demands a passing gaze;
 We'll poke *his* ribs and make him show his ways.

The hopeless creature in this mortal strife,
 Whose sluggish being 's like a mummy's life,
 Whose steps run backwards, and whose mind is free
 No other object than himself to see,
 His farm though cumbered with his useless form,
 No more 's a farmer than the dew a storm.
 Of premium farmers only shall we speak,—
 Of course none others do we wish to seek.
 Three grades of these we can most plainly see,
 As in the forest, fern, and bush and tree.
 The fern is pretty with its varied leaves,
 Skirting the wood, the bush our praise receives;
 But these how dwarfish seem beside a tree,—
 Its grace, its grandeur, its sublimity!
 And first, the largest class of this our plan
 Is represented by the thrifty man.
 And here we have in nutshell space, the drift
 Of all his goodness, in one word, 't is thrift;
 A state most surely that demands our praise,
 It means good tillage, tells of frugal ways:
 The spring-time finds him with his team afield,
 Alert when earth casts off its icy shield;
 The wondrous seed he plants with careful hand,
 The tender plants his constant care command,
 With busy labor tends his fruitful soil,
 While bounteous harvests prove his faithful toil.
 But thrifty farmers may in some things fail,
 We'll show it quickly by a simple tale.
 Now 'Squire Butkins had a great renown,
 Within the precincts of his native town,
 For raising pumpkins of prodigious size;
 The people thought the 'squire very wise;
 At length his vines became his only thought,
 This one idea his very life-blood bought,
 For, stretched amongst them, so the neighbors say,
 A wily tendril on a growing day,
 Forced by his care, around his neck did coil,
 And put an end to 'Squire Butkins' toil:
 And on the very spot he last had been,
 There grew the largest pumpkin ever seen.
 The moral 's this; do 'nt let your crops outgrow
 The man; on him your noblest care bestow;
 Too many men neglect this *little* care,
 And to their pumpkins give the lion's share.
 Now, turning to our second class, we find
 Those who to farming bring a well-trained mind;
 Who think their life-task not a dull routine,
 A weary plodding after joys unseen,

Its only aim to keep the hearthstone warm,
 And fill the cupboard 'gainst the winter's storm;
 But for its duties see that it demands
 A mind of culture to direct their hands,
 To ease their burdens, help the sinewy arm,
 Invent some cunning tool to bless the farm,
 To richly bless the man, by showing how
 To grow two grass-blades where but one does now.
 Farming 's a science; better still, we 'll say
 Each natural science does it homage pay;
 Contributes each to it a precious store
 Of various knowledge and profoundest lore.
 One tells the farmer of his stock, their race,
 How they 're related, of their native place,
 Another shows the wondrous way they 're formed,
 Their curious structure, how their life prolonged.
 The laws that govern plants a third reveals,
 Their cunning parts, their hidden use unseals,
 The soil another in its mortar grinds,
 And tells each part, each atom there it finds;
 Tells what there 's wanting to increase its power
 To feed the giant tree, the creeping flower;
 What there is present with a baneful sway,
 To nourish tares and drive good seed away.
 But science only teaches us to know;
 In vain our knowledge, if we cannot show
 Its fruits in skilful labor, something done,
 Some foe to progress fought and overcome.
 To do, to act, the farmer's task commands;
 A trusty beacon science ever stands.
 Profound the problem how the world to feed!
 And know, O farmer, 't is your task; take heed;
 See that your power, if you will, expands
 Beyond the limits of ancestral lands,
 Beyond your town-house, ay, beyond the sea,
 And thrones and kingdoms pay it fealty.
 Now even men of mind may greatly err;
 One sees a man who thinks he can refer
 To such a page, in such a well-bound book,
 For every fact, and by that hasty look
 Can raise his crops, his horses, and his kine,
 Without much practice in the farming line.
 They tell a story of a verdant youth,
 Who would of shad-machines imbibe the truth;
 Which, by the by, are so arranged for use,
 That, when applied to shad, there 's no excuse
 For choking; by a gentle turn, each bone
 Over the shoulder of the man is thrown;
 While luscious morsels fly for opened mouth,
 As wingéd songsters seek the sunny south.
 This youth, alas! the crank the wrong way turned,
 Reversed the action, and a lesson learned;
 For while his face was like a hedgehog clad,
 Upon the floor he saw the longed-for shad.
 And to the farmer, like this tool, 's the mind;
 If rightly used it leaves no sting behind;

But when misguided, when he gives full sway,
 To vague abstractions, what the books may say,
 Without some practice, lessons from his toil,
 There comes uncalled a fearful, sad recoil :
 Instead of harvests that his brain had planned,
 His barns o'erflowing, and his cash in hand ;
 His vacant rafters, and his puny purse,
 His field of witch-grass, or of something worse,
 In troubled visions fly into his face,
 In fiendish glee to tell of his disgrace ;
 While to the winds his hopes, his joys are thrown ;
 His labor lost, his bird of promise flown.

The farmer yet presents a higher type,
 A thrifty tiller, with a mind that's ripe
 In useful knowledge, though our praise is meet
 For him, we feel that he is not complete.
 As nature's steward, at whose kind behest
 He sows and reaps, and all his labor 's blest ;
 Whose laws he studies, and whose beauties shed
 A kindly presence ever round his head ;
 If there 's not kindled in his breast a love
 For nature, and for nature's God above ;
 If there 's no answer from the life within
 To nature's whispers, nought but worldly din ;
 No deep emotion, no uplifting power,
 Enkindled by the scene at sunset hour,
 At early dawn, at dewy, star-lit eve,
 At noon, at all times, if the thought he give,
 The pine trees sigh it, and the flowers repeat,
 " There 's something wanting, thou art incomplete."
 But, when awakened, he to nature turns,
 While he is musing, lo ! the fire burns ;
 Each varied scene of homely rural life
 Throws off its mantle dull of worldly strife,
 And shines serene, and sends its quickening ray
 To bid him share in nature's harmony.

This is our model, nature's nobleman ;
 Whose life is truth, truth in his ev'ry plan.
 True to his business, and its great demands ;
 True to himself, his heart, his mind, his hands ;
 True to his neighbor, true unto his God ;
 True to his home, the land his feet have trod ;
 Ay, true to country in its hour of need,
 When traitors battle and when patriots bleed ;
 The farmer of to-day must surely stand
 The hope, the pillar of his native land.
 The giant West, a granary for the world,
 Against the foe has myriad farmers hurled ;
 And bleeding hearts, and sad, expressive sighs,
 Tell that we too have felt war's agonies.
 Farmers, to-day we 'll pledge our lives, our all,
 For country ; let her make her welcome call !
 And in these days of conflict sad to see,
 The *patriot* farmer shall our model be.

The following hymn was then sung by the audience, under the direction of S. B. Noyes, Esq., of Canton, to the tune of America, accompanied by the splendid music of the Band.

HYMN.

Praise be, O God, to thee !
 Render we heartily
 Praises to thee !
 Harvest again we see ;
 Fill'd will our garners be ;
 Nor vain our trust in thee—
 Our trust in thee !

Praise be, O God, to thee !
 Sing we unitedly
 Praises to thee !
 In peace we sow'd and reapt ;
 In peace by thee were kept,
 While many hearts have wept—
 In terror wept !

Mourn we, O God, to-day,
 War's bloody, fearful sway—
 Mourn we, to-day !
 Dark clouds our land are o'er ;
 Brothers are they no more,
 Who brothers were before—
 BROTHERS before !

Hear us, O God, to-day ;
 Most fervently we pray,
 Hear us to-day !
 The land we love protect ;
 Her way to peace direct,
 Thy glory to reflect—
 Ever reflect !

Thy might, O God, display ;
 Drive all our fears away ;
 Trusting, we pray !
 Our land's dire wrongs redress :
 Give to her arts success ;
 Her institutions bless—
 Forever bless !

Brief addresses were made by Judge Thomas, the Orator of the Day, Rev. Dr. Thompson, the Chaplain of the Day, Edward L. Pierce, Esq., late Government Agent in South Carolina, who gave an eloquent and highly interesting sketch of his experience among the plantations of the South, and Hon. John S. Sleeper, of Roxbury, who read a humorous report of the Committee on

Swine, of which he is Chairman, which was warmly applauded, and which will be found at pp. 65—71 of this Report.

The President stated that the Governor was certainly expected at the Exhibition, but his prolonged absence out of the State, on public service, was sufficient apology.

The State Board Delegate, Henry Chapin, of Milford, being obliged to leave, left his approbation of what he had seen. The awards of premiums were read by the Secretary; after which, the exercises were closed in the usual manner, by the singing of "Auld Lang Syne."

When we consider the large number of active men who have gone to the war from this county, and the engrossing cares that infest the public mind, the success of the Exhibition shows conclusively the deep hold which the Society has taken in the regard of the community, and affords a happy augury of future successes when peace shall have again returned to bless the land.

Great credit is due to the Chief Marshal and his Aids, and to the Chief of Police, Charles Coburn, Jr., for the excellent manner in which their responsible duties were performed.

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1862.

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Norfolk Agricultural Society.

[SUCCESSFUL COMPETITORS MAY RECEIVE THEIR PREMIUMS IN PLATE
OR MONEY, AT THEIR OPTION.]

LIST OF PREMIUMS FOR THE YEAR 1863.

FARMS.

EXPERIMENTS AND IMPROVEMENTS THEREON.

PROGRESSIVE HUSBANDRY.

For the best conducted and most improved Farm during five consecutive years, commencing in the year 1861,—of which the occupant shall present annually to the Trustees a satisfactory account of the whole management of the Farm,—of the crops produced, of the improvement made and of the stock kept,—a premium of *One Hundred Dollars*, to be paid in 1866.

NOTE. Whenever any farm shall be entered for this premium, the Secretary of the Society shall give notice thereof to the Committee on Progressive Husbandry annually in September, who will be required to examine the farm, and to certify the general management of it.

MANAGEMENT AND IMPROVEMENT OF FARMS.

For the best managed Farm, taking into view the condition of the buildings, fences and orchards, the cultivation of the lands, the care and management of the stock, the quantity, quality and preservation of the crops, the expenses incurred and the improvements made during the year, with a detailed statement of the whole to be rendered on or before November 15th, \$25; second best, \$20.

Competitors must give notice of their intention to the Secretary, on or before June 15th. Farms entered for premium will be viewed by the Supervisory Committee, as they shall deem expedient, between June 20th and September 20th. Any farm offered for inspection, without being entered for a premium, will be viewed and reported by the Committee, if seasonable application be made to the Chairman.

IMPROVING MEADOW AND SWAMP LANDS.

For the best experiment in reclaiming wet meadow or swamp lands, by drainage or otherwise, on not less than one-half acre,

with statement, in detail, of the previous condition and produce of the land, the method and expense of the experiment, and the produce at the present time, \$8; second best, \$4.

UNDER-DRAINING LAND.

For the best experiment in under-draining land, not less than forty square rods, regard being had to the character of the soil and subsoil, the method, extent, expense and result of the experiment, \$10; second best, \$5.

OLD PASTURE AND UNIMPROVED LANDS.

For the best conducted experiment in renovating and improving old pasture lands and lands hitherto lying waste, on not less than one acre, with or without ploughing, with a statement of the previous condition of the land, and of the method, expense and result of the experiment, \$8; second best, \$5; third, \$3.

TURNING IN CROPS AS A MANURE.

For the most satisfactory experiment of turning in crops as a manure, either *green or dry*, on not less than *one-half acre of land*, a detailed account of the whole process, expense and result to be given in writing, \$6.

MANURES.

Premiums of \$25, \$20 and \$15, are offered for the three most successful experiments in the application of Manures, in accordance with the following vote of the State Board of Agriculture:—

At a meeting of the State Board of Agriculture, held in December, 1862, it was

“*Voted*, That the several Agricultural Societies receiving the bounty of the State, be required to offer three premiums for the most thorough, exact and reliable experiments upon the proper depth of applying manures, payable in the fall of 1865, as follows:—

“Select a level piece of land of any convenient size, from twenty rods up to as many acres or more, which should be as nearly equal in its character and conditions as possible. Divide it into five equal parts, numbering them 1, 2, 3, 4 and 5, for a rotation of three years.

“Divide the manure which it is proposed to apply, and which should be of a uniform character, into four equal parts. At the time of first ploughing in the spring, spread evenly one-fourth of the manure upon plot No. 1, and then plough the whole field of an equal depth. Apply another fourth part of the manure to plot No.

2, and then cross plough the whole field to about half the depth of the ploughing. Spread another fourth of the manure upon plot No. 3, and harrow or cultivate the whole field; after which sow or plant the whole evenly, with any crop preferred. Finally, spread the remaining quarter part of the manure upon plot No. 4.

“ Observing that by pursuing this course, each of the five lots will receive equally, a deep ploughing, a shallow ploughing, and a harrowing, or cultivating, the only difference in them being that in No. 1 the manure is buried deep, in No. 2 shallow, in No. 3 buried only slightly, but coated with loam, and in No. 4 left exposed upon the surface; while No. 5 gets no manure. The manure is to be spread broadcast and as evenly as possible. The after cultivation should be the same on each of the lots, and the harvest of each should take place at the same time.

“ Let a statement of the character of the soil, whether light or heavy, dry or moist, leachy or retentive of manures, the crop of 1862, kind and amount and mode of application of manure in 1862, size of field covered by the experiment, depth of first ploughing, kind and amount of manure used in 1863, kind of crop, when and how sown, number of times and manner cultivated, and weight of product on an average rod of each plot be made in 1863, and returned in the annual report of each Society.

“ If there is a double product, as grain and straw, corn and stover, let the weight of the secondary product be given on each plot.

“ If the competitor weigh the whole crop instead of estimating it by an average rod, there will be no objection to such a course.

“ A brief synopsis of the weather for each of the following months, by dividing each month into three parts, and using the terms dry, moist and wet, to indicate the general character of the weather, will also be expected.

FIRST THIRD.	MIDDLE THIRD.	LAST THIRD.
May,		
June,		
July,		
August,		
September,		

“ A similar report of all the above items, except the nature of the soil, will be made in 1864, and in 1865, when the premiums will be awarded. No manure is to be applied to the second and third crop.”

THE MASSACHUSETTS SOCIETY FOR PROMOTING AGRICULTURE,
Offers the following premiums for Experiments with Manures, and competitors for the preceding can also compete for this, with the same experiments:—

1st premium, \$100 ; 2d do., \$100 ; 3d do., \$100.

A similar report of all the above items, except the nature of the soil, will be required in 1864, and in 1865, when the premiums will be awarded. No manure is to be applied to the second and third crop.

The above premiums are open to competitors throughout the Commonwealth. Competitors for premiums offered by other Agricultural Societies are invited also to compete for the above, the same experiments serving for both, by filing a duplicate statement with the Secretary of this Society.

In awarding the premiums, all other things being equal, preference will be given to those which are tried on the largest space of land, and also where the competitor weighs the whole crop instead of an average rod. Notice of an intention to compete must be given to the Secretary on or before the first day of January, 1864, with the statement required in the terms of the premium.

This offer of premiums for experiments on the application of manures is distinct from those on the same subject offered by the same Society, February 18th, 1861, and January 14, 1862, and requires a different series of experiments.

P. C. BROOKS, Jr., *Secretary*.

Boston, Feb. 1, 1863.

EXPERIMENTS IN SUBSOIL PLOUGHING.

For the best experiment, on not less than one acre of land, of the effect of subsoil ploughing, to be determined by the difference in the value of crops, raised on equal portions of equally manured land, of like quality, one half of which having been subsoil ploughed, the other half ploughed in the usual manner,—statements of the depth of ploughing, in each instance, together with all the particulars of culture, required, \$8 ; second best, \$6.

COMPARATIVE VALUE OF CROPS AS FOOD FOR CATTLE.

For the best experiment upon a stock of cattle, not less than four in number, to ascertain the relative value of the different kinds of fodder used, with a statement in detail of the quantity and value of the same, as compared with English hay, the experiment to be made in the three winter months, \$15 ; second best, \$10.

FATTENING CATTLE.

For the best experiment in *feeding* cattle, with a statement in detail of the process, expense and result, \$8 ; second best, \$4.

FATTENING SWINE.

For the best experiment in *feeding* swine, with a statement in detail of the process and result, \$6 ; second best, \$4.

SOILING OF CATTLE.

For the best experiment in the *soiling* of cattle, with a detailed statement of the process and the result,—regard being had to the *saving of manure*, and to the comparative *expense of pasturing*, \$15 ; second best, \$10.

GREEN FODDER.

For the best experiment in raising corn fodder or other succulent feed to be used green, and in ascertaining its value for the feed of milch cows,—on not less than *one-half acre* of land,—with a statement, in detail, of the mode and cost of cultivation, and the result of its use, \$8.

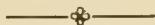
HAY.

For the largest quantity and best quality of English hay per acre, produced on any farm in the County, regard being had to the character of the soil, the mode and cost of cultivation and making, \$5 ; second best, “Flint’s Treatise on Grasses.”

CRANBERRY VINES.

For the best experiment in transplanting Cranberry Vines, or in growing them from seed, on not less than one-eighth of an acre which shall be in the most flourishing and productive state, on the 10th September, 1863, \$8 ; second best, \$4.

Competitors will be required to give an exact statement of the process, expense, and result of the experiment.



GRAIN AND ROOT CROPS.

GRAIN CROPS.

For the best experiment in raising *Wheat*, Harris’ Treatise on Insects ; second best \$3.

For the best experiment in raising *Rye*, *Oats*, or *Barley*, each, \$4 ; second best, each, \$2.

For the best experiment in raising *Indian Corn*, Harris’ Treatise on Insects ; second best, \$4 ; third best, \$2.

For the best experiment in raising *White Beans*, *Millet* or *Buckwheat*, each, \$3.

An addition of 20 per cent. to the above premiums, if the successful competitor be a youth, under 16 years of age.

Samples of each kind of Grain, not less than a half-bushel, and properly labelled, must be exhibited at the Show. The quantity of the crop to be ascertained by weight, as follows:—Corn and Rye, 56 pounds each to the bushel; Barley and Buckwheat, 48 pounds each; Oats, 32 pounds; Wheat, 60 pounds.

ROOT CROPS.

For the best experiment in raising *Potatoes*, \$5; 2d best, \$3.

For the best experiment in raising *Sugar Beets*, *Carrots*, *Parsnips*, *Mangold-Wurtzel*, or *Ruta Baga*, each \$5; 2d best, \$3.

For the best experiment in raising *Onions*, 5; second best, \$3.

For the best experiment in raising *Flat Turnips*, \$4; 2d best, \$2.

Samples of Roots, not less than one bushel, and properly labelled, must be exhibited at the Show. The quantity of the crops, which must be on not less than one quarter of an acre, shall be ascertained by the weight of the Roots—freed from dirt and without tops—as follows:—Potatoes, Sugar Beets, Mangold-Wurtzel and Ruta Bagas, 60 pounds; Carrots, 55 pounds; Onions and Flat Turnips, 50 pounds; Parsnips, 45 pounds to the bushel.

Entries must be made with the Secretary, *ten days previous to the commencement* of any experiment. Experiments will be viewed by the Committee between July 1st and September 20th.

Claimants for premiums must render to the Chairman of the Committee, on or before November 15th, a written statement of the character and previous condition of the land, its present value, and the taxes upon it; the kind, quantity and value of manure used; the quantity and cost of seed sown; the labor and expense of cultivating and harvesting the crop, and the quantity, quality and value of the crop. In awarding premiums, regard will be had to all these circumstances, and to the area of the ground in cultivation.

VEGETABLES.

For the best experiment in raising *Squashes*—one half dozen of each variety to be exhibited at the Show—\$3; second best, \$2.

For the best experiment in raising *Cabbages*—not less than six heads to be exhibited at the Show—\$3; second best, \$2.

MIXED CROPS.

For the best experiment in cultivating mixed crops of Grain and Vegetables, in alternate portions, or of different roots, in alternate rows, Harris' Treatise on Insects; second best, \$4; 3d best, \$2. The experiment must be made on not less than half an acre of land, and a detailed statement of the mode of culture, expense and product must be rendered on or before November 15th.

PLOUGHING MATCH.

DOUBLE OX TEAMS. *With Sod and Subsoil Plough.* For best performance in ploughing sward land, at least one-eighth of an acre, eight inches in depth, within an hour, \$10; second best, \$8; third best, \$6; fourth best, \$4.

With any other Plough. Same conditions. Best, \$10; second best, \$8; third best, \$6; fourth best, \$4.

DOUBLE HORSE TEAMS. *With Sod and Subsoil Plough.* Same conditions. Best, \$10; second best, \$8; third best, \$6; fourth best, \$4.

With any other Plough. Same conditions. Best, \$10; second best, \$8; third best, \$6; fourth best, \$4.

SINGLE OX TEAMS. *With any Plough.* For the best performance in ploughing sward land, at least one-eighth of an acre, six inches in depth, within an hour, \$6; second best, \$4; third best, \$2.

SINGLE HORSE TEAMS. Same conditions. Best, \$6; second best, \$4; third best, \$2.

NOTE. A DOUBLE TEAM will consist of two yokes of oxen, with or without a driver; or a team of one yoke of oxen and a horse, with or without a driver. SINGLE TEAM, one yoke of oxen or one pair horses, without a driver. Competitors must own their teams and ploughs, and enter the same in their own names. Ploughs must be held and teams driven by their owners, or by persons stably in their employ. Notice to compete must be given to the Secretary on or before the Saturday previous to the Exhibition. In awarding premiums, one hour will be allowed for the performance of the work, regard being had to the width and depth of the furrow slice, and the evenness, ease and quiet with which the work is performed.



SPADING.

For the best performance in spading, not less than ten inches in depth, on a piece of not less than one hundred square feet of sward land; the time allowed for the performance to be thirty minutes; due regard being had to the thoroughness of the pulverization of the soil, and the state in which it is left for the reception of seed, \$5; second best, \$4; third best, \$3; fourth best, \$2; fifth best, \$1.



ARBORICULTURE.

FRUIT TREES.

APPLE ORCHARD. For the best Apple Orchard, of not less than *fifty trees*, which shall have been set out at least five years, and which shall be in the best and most thriving condition in 1863, \$10; second best, \$5.

PEAR TREES. For the best engrafted or budded standard Pear Trees, set out at least five years, and which shall be in the

most thriving condition in the autumn of 1863, not less than *twenty-five trees*, \$10 ; second best, \$5.

For best engrafted or budded Pear Trees on Quince roots, with same conditions, and not less than *fifty trees*, \$10 ; 2d best, \$5.

PEACH ORCHARDS. For the best Peach Orchard, of not less than *fifty trees*, and which shall be in the most thrifty bearing condition in the autumn of 1863, \$10 ; second best, \$5.

For the Peach Orchard, of not less than *fifty trees*, grown from pits planted since 1857, on the spot where the trees stand, which shall be in the best condition in 1863, \$10 ; second best, \$5.

SEEDLING APPLES OR PEARS. For the best variety of *new Seedling Apples or Pears*, of decidedly superior quality, *one dozen specimens* to be exhibited, together with a history of the origin of the tree, a description of the growth, and its bearing character, \$10 ; second best, \$5.

SEEDLING PEACHES. For the best variety of *Seedling Peaches* of decidedly superior quality, and worthy of general cultivation—*one dozen specimens* to be exhibited two years in succession—together with a history of its origin, a description of its growth, and the bearing character of the tree, \$5 ; second best, \$3.

FOREST TREES.

For the best plantation of Forest Trees, of either of the following varieties, viz. : White Oak, Yellow Oak, Locust, Birch, White Ash, or Walnut, Scotch Larch, Norway Spruce, Pitch Pine and White Pine, or other varieties, not less than three years old, and not less than one thousand trees,—entries to be made to the Society previous to June 10th,—a premium, to be awarded in 1863, of \$15.

For the best plantation, containing not less than five hundred trees, a premium of \$6.

ORNAMENTAL PLANTING. To any city or town of Norfolk County, for the largest number and best growth of ornamental trees, not less than one hundred, which shall have been planted in a public square or on the roadside at least two years—first premium, \$15 ; second do., \$10.

To any individual or society, regard being had to the number of persons associated, for the largest number and best growth of ornamental trees, not less than fifty, which shall have been planted in a public square or on the roadside at least two years—first premium, \$10 ; second do., \$5.

These premiums to be awarded in the autumn of 1863, and if awarded to a city or town, to be graduated by the population, according to the census of 1860.

HORTICULTURE.

FLOWERS.

For the best collection of cut flowers, \$4 ; for second best, \$3 ; third best, \$2 ; fourth best, \$1. For the best bouquets, or tastefully arranged basket of flowers, not less than four, \$4 ; second best, \$3 ; third best, \$2 ; fourth best, \$1. For the best collection of twenty named dahlias, regard being had to *colors* and symmetry of flower, \$3 ; second best, \$2. For the best single bloom, \$1. For the best collection of twelve pot plants, regard being had to new and rare varieties and well grown specimens, \$3 ; second best, \$2. For the best single specimen, \$1. For the best collection of new seedling verbenas, with foliage, \$2. For the best new seedling, \$1. For the largest and best collection of wild flowers, \$2 ; second best, \$1. Any person presenting flowers for premium or exhibition, is requested to furnish a statement in writing of the sorts contributed, and of the contributor's name.

Gratuities, in publications or otherwise, to the amount of \$10, may be awarded at the discretion of the Committee.

FRUITS.

For the best collection of the most approved standard *Apples*, not less than twelve specimens of each variety—first premium, Harris' Treatise on Insects ; second do., \$4 ; third do., \$3 ; fourth do., \$2.

For the best collection of the best twelve varieties of *Pears*, not less than twelve specimens of each variety, first premium a silver cup of the value of twelve dollars ; second do., \$4 ; third do., \$3 ; fourth do., \$2.

For the best collection of the most approved standard *Peaches*, not less than twelve specimens of each variety—first premium, \$3 ; second do., \$2 ; third do., \$1.

For the best collection of the most approved varieties of *Plums*, not less than twelve specimens of each variety—first premium, \$3 ; second do., \$2.

For the best *dish* of *Pears*, not less than one dozen specimens, a premium of \$2 ; second do., \$1.

For the best *dish* of *Apples*, not less than one dozen specimens, a premium of \$2 ; second do., \$1.

For the best basket of assorted Fruits, of different kinds, \$4 ; second best, \$3 ; third best, \$2.

For the best exhibition of *Quinces*, not less than a peck, \$2.

GRAPES. For the best exhibition of *Foreign Grapes*,—first premium, \$4 ; second do., \$3, or \$3 in publications at discretion of Committee.

For the best collection of *Native Grapes*, by the ordinary mode of cultivation, and without ringing, \$3; second do., \$2; third do., \$1.

For a new variety of *Native or Seedling Grape*, equal or superior to the *Isabella*, ripening in this County in the open air, by the *middle of September*, prolific and suitable for the table, first premium, \$20; second do., \$10.

CRANBERRIES. For the best collection of Cranberries, not less than four quarts, \$3; second best, \$2; third best, \$1.

Gratuities, in publications or otherwise, to the amount of \$20, may be awarded at the discretion of the Committee.

GARDEN.

For the best VEGETABLE GARDEN, regard being had to the variety, excellence and quantity of the products thereof, and the mode and expense of cultivation, \$5; second best, \$3.

Entries must be made before the 10th of June, and an exact statement rendered before the 1st of November.

GARDEN VEGETABLES.

For the best collection and variety of GARDEN VEGETABLES, regard being had to the quantity as well as quality exhibited, \$10; second best, \$5; third do., \$4; fourth do., \$3; fifth do., \$2; sixth do., \$1. \$20 in agricultural publications, or otherwise, may also be awarded, at the discretion of the Committee.

POTATOES. For the best new variety of *Seedling Potatoes*, superior to any kind now in cultivation, a premium of \$10.

For the largest and best collection of *Potatoes*, not less than a peck of each variety, a premium of \$3; second best, \$2.

SEEDS.

For the best sample of ears of Seed Corn, not less than forty in number, \$1.

For the best collection of Onion, Carrot, Beet, Parsnip, and Ruta Baga Seeds, first premium, \$3; second do., \$2.

For the best 10 pounds of Timothy, Red Top, and Clover Seed, \$1.

For the best sample, one peck each, of Wheat, Rye, Barley and Oats, \$1.

HEDGES.

For the best *Live Hedge Fence*, not less than five hundred feet in length, \$5; second best, \$3.

ANIMALS.

All animals are to be entered in the name of the owner, who must have had them in his possession, at least six months before the exhibition.

All animals, entered in accordance with the rules and regulations, will be fed, during the Exhibition, at the expense of the Society.

No animal, entered in one class, will be allowed to compete for a premium in another, under a different entry, except working oxen and draught horses.

For any animal, worthy of the first premium, and having received a similar one at any previous Exhibition, a diploma, certifying the rank of such animal at the present Exhibition, shall be awarded instead of a premium.

A diploma may also be awarded, at the discretion of the several Committees, for any animal, worthy of exhibition, from without the limits of the Society.

CATTLE.

For the best BULL, one year old and upwards, of either Jersey, Durham, Devon, Ayrshire, Hereford, Kerry, or other foreign stock—in each class, \$5; second best, \$3.

For the best Grade BULL, \$3; second best, \$2.

For the best BULL CALF, under one year old, foreign stock, \$3; second best, \$2.

Cows. For the best Cow, three years old or upwards, foreign stock, of either class, each \$5; second best, \$4; third best, \$3.

Grade, \$5; second best, \$4; third best, \$3.

HEIFERS. For the best Heifer, two years old and under three, foreign stock, of either class, each \$3; second best, \$2; third best, \$1.

Grade, \$3; second best, \$2; third do., \$1.

For the best Heifer, one year old, of any stock, \$2; second best \$1.

MILCH COWS. Three years old and upwards. For the best Milch Cow, without regard to breed, each, \$8; second best, \$6; third do., \$4; fourth do., \$2.

For the best Milch Heifer, not over three years old, without regard to breed, each \$6; second best, \$4; third do., \$2.

A written statement of the quantity and quality of Milk, and of the manner of feeding the Cows and Heifers, will be required. Also a written statement of the butter made from milk, during two periods, of ten days each, with an interval of three months,

and previous to the Annual Exhibition. If no butter is made, the statement must give the quantity and weight of the milk, the character of the last calf, and the time when it was dropped.

HERDS OF MILCH COWS. For the largest and best herd of Milch Cows—not less than six—kept on any farm in the County, and exhibited at the Show, regard being had to their breed, age, and milking properties, with written statement thereof, first premium, \$12; second do., \$8; third do., \$6.

WORKING OXEN. For the best yoke, four years old and upwards, \$6; second best, \$4; third best, \$2.

STEERS. For the best yoke, well broken, three years old and under four, \$4; second best, \$3; third best, \$2.

For the best yoke, well broken, two years old and under three, \$3; second best, \$2.

NOTE. For Oxen or Steers, and also for Herds of Milch Cows, bred and raised by the exhibitor, twenty per cent. additional. In testing the strength, docility and training of Working Oxen, the load shall be not less than 3000 pounds for oxen five years old and upwards; and not less than 2500 pounds for oxen under five years old. In testing the character of Steers, as the Committee may direct, special regard will be paid to their docility and proper training.

TOWN TEAMS. For the largest and best team, of not less than ten yokes of Oxen or Steers, from any city or town in the County, first premium, \$12; second do., \$8.

FAT CATTLE. For the best beef animal fattened by the exhibitor, within the County, regard being had to the manner and expense of feeding—of which a written statement will be required, first premium, \$8; second do., \$6.

SWINE.

BOARS. For the best Boar, not less than six months old, \$5; second best, \$3; third best, \$2.

SOWS. For the best Sow, not less than six months old, \$5; second best, \$3; third best, \$2.

WEANED PIGS. For the best litter, not less than four in number, and not more than six months old, \$5; second best, \$3; third best, \$2.

FAT HOGS. For the best Fat Hog, regard being had to breed, age and feeding, \$5; second best, \$3; third best, \$2.

SHEEP.

For the best lot of Sheep, not less than six, \$8; second best, \$6; third best, \$4.

For the best lot of Lambs, not less than six—bred by the exhibitor, \$5; second best, \$3.

For the best Ram—Cotswold, Leicester, Oxford Down, or South Down—one year old or over, \$5; second best, \$3.

POULTRY.

For the best collection of either Shanghai, Black Spanish, Dorking, Poland, Bolton Gray, Guinea, or Bantam Fowls, each, \$2; second best, \$1.

TURKEYS. For the best collection, \$3; second best, \$2.

GEESE. For the best collection, \$3; second best, \$2.

DUCKS. For the best collection, \$3; second best, \$2.

PIGEONS. For the best collection, \$2; second best, \$1.

NOTE. Poultry must be entered before 12 o'clock, on the first day of the Exhibition, to be entitled to a premium.



HORSES.

In awarding the premiums on Roadsters, the general good qualities—such as style, action, constitution and enduring properties—as well as speed of the animals, will receive special consideration.

In testing the speed of horses, each animal—four years old and over—will be required to draw a carriage weighing, with driver included, not less than 350 pounds.

It is understood that horses which have heretofore been classed under the head of “Thorough-bred and part Thorough-bred,” may compete as Roadsters, or in any other class.

Colts and Fillies will compete in separate classes, as heretofore, the premiums being the same for either sex.

No stallion will be entitled to a premium without a guaranty of his remaining for service in the County six months.

In testing the strength, docility and training of Draught or Team Horses, the load shall not be less than 2500 pounds for a single horse, and 3500 pounds for a pair of horses.

Every entry for premium must be made before 12 o'clock of the first day of the Exhibition, and the Stock must be present the second day, on or before 9 o'clock, A. M.

It must be distinctly understood that premiums will not be awarded to any animal that does not, in the opinion of the Committee, possess decided merit and a sound constitution.

CLASS A.

ROADSTERS.

1st Division.

Stallions.

For the best Stallion, 4 years old and upwards, a prem. of \$10.

“ 2d best “ “ “ “ 7.

“ 3d best “ “ “ “ 5.

2d Div. *Brood Mares.*

For the best Brood Mare, with a Foal at her side, a prem. of	\$7.
“ 2d best “ “ “ “	5.
“ 3d best “ “ “ “	3.

3d Div. *Colts and Fillies.*

For the best 3 years old, a premium of	\$5.
“ 2d best “ “	3.
“ 3d best “ “	2.
For the best 2 years old, “	3.
“ 2d best “ “	2.
“ 3d best “ “	1.
For the best 1 year old, “	3.
“ 2d best “ “	2.
“ 3d best “ “	1.

4th Div. *Pairs in Harness.*

For the best pair of Roadsters, a premium of	\$10.
“ 2d best “ “	7.
“ 3d best “ “	5.

5th Div. *Harness Horses.*

For the best Gelding or Mare, a premium of	\$7.
“ 2d best “ “	5.
“ 3d best “ “	3.
“ 4th best “ “	2.

CLASS B.

HORSES OF ALL WORK.

1st Div. *Stallions.*

For the best Stallion, 4 years old and upwards, a prem. of	\$10.
“ 2d best “ “ “ “	7.
“ 3d best “ “ “ “	5.

2d Div. *Brood Mares.*

For the best Brood Mare, with a Foal at her side, a prem. of	\$7.
“ 2d best “ “ “ “	5.
“ 3d best “ “ “ “	3.

3d Div. *Colts and Fillies.*

For the best 3 years old, a premium of	\$5.
“ 2d best “ “	3.
“ 3d best “ “	2.
For the best 2 years old, “	5.
“ 2d best “ “	3.
“ 3d best “ “	2.

For the best 1 year old, a premium of	\$5.
“ 2d best “ “	3.
“ 3d best “ “	2.

CLASS C.

FAMILY HORSES.

1st Div. *Carriage Horses 15 to 16 Hands High.*

For the best pair of Carriage Horses, a premium of	\$10.
“ 2d best “ “	7.
“ 3d best “ “	5.

2d Div. *Buggy or Chaise Horses.*

For the best Buggy or Chaise Horse, a premium of	\$8.
“ 2d best “ “	6.
“ 3d best “ “	4.

3d Div. *Saddle Horses.*

For the best Saddle Horse, a premium of	\$6.
“ 2d best “ “	4.
“ 3d best “ “	2.

4th Div. *Walking Horses.*

For the best Walking Horse, a premium of	\$7.
“ 2d best “ “	5.
“ 3d best “ “	3.

5th Div. *Ponies.*

For the best matched Ponies, a premium of	\$6.
“ 2d best “ “	4.
“ best single Pony, “	3.
“ 2d best “ “	2.

CLASS D.

DRAUGHT OR TEAM HORSES.

1st Div. *Single Draught or Team Horses.*

For the best Draught Horse, a premium of	\$7.
“ 2d best “ “	5.
“ 3d best “ “	3.

2d Div. *Pairs of Draught or Team Horses.*

For the best pair of Draught or Team Horses, a premium of	\$7.
“ 2d best “ “	5.
“ 3d best “ “	3.

DAIRY.

BUTTER.

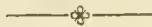
For the best produce of BUTTER, on any farm within the County, for four months, from the 20th of May to the 20th of September,—a sample of not less than twenty pounds to be exhibited,—*quantity* as well as *quality* to be taken into view, with a statement of the number of cows, and a full account of the manner of *feeding* them, and the general management of the milk and butter, first premium, \$10; second do., \$8; third do., \$5; fourth do., \$4.

NOTE. It will be seen that these premiums are offered for the best produce on the Farms, and not simply for the best specimens exhibited. Competitors will therefore be required to keep an account, and render a statement of the entire produce within the time mentioned. Each lot must be numbered, but not marked; any public, or known mark, must be completely concealed, nor must the competitors be present at the examination.

For the best box of Butter, of not less quantity than 12 pounds, first premium, \$5; second do., \$3; third do., “Flint’s Treatise on Dairy Farming.”

NOTE. Butter to be presented before 9 o’clock on the morning of the second day.

CHEESE. For the best lot of Cheese,—not less than 40 pounds to be exhibited,—a written statement of the whole process of making which will be required, first premium, \$5; second do., \$3; third do., “Flint’s Treatise on Dairy Farming.”



BREAD.

For the best loaf of Wheat and Indian, of two to four pounds weight, first premium, \$3; second do., \$2.

For the best loaf made of Unbolted Wheat, which has been grown in the County, of two to four pounds weight, first premium, \$3; second do., \$2.

For the best loaf of Rye and Indian, of four to six pounds weight, first premium, \$3; second do., 2.

For the best loaf of Wheat Bread, of two to four pounds weight, first premium, \$3; second do., \$2.

For the best specimens of each or any of the aforementioned kinds of Bread, made by young women under eighteen years of age, an additional premium of twenty-five per cent.

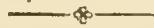
The bread presented for premium must be made on the first day of the Exhibition, by some female member of a family, (exclusive of hired persons,) in whose names the entries shall be made, and to whom the premiums shall be awarded. The bread shall be made without the use of saleratus or other alkaline substance, and baked in the oven commonly used by the family in which it shall be made, and must be presented on the second day

of the Exhibition, before 9 o'clock in the morning. A written statement of the process of making the bread shall accompany each entry, but no name or mark shall be put on the loaves, except the number of the entry in the Committee's book.

Committees shall be appointed to judge of the several descriptions of bread, to whom the names of the contributors shall not be known, and no person shall serve on said Committees if any member of his family shall be a competitor.

HONEY.

For the best specimen of Honey in the comb, not less than six pounds, \$2; second best, \$1.



MANUFACTURES.

AGRICULTURAL IMPLEMENTS.

For the largest and best collection of Agricultural and Horticultural Implements, \$12; second best, \$8.

For the best collection manufactured within the County, and exhibited by the manufacturer, \$6; second best, \$4.

For the best collection of Ploughs, with a statement of the purposes to which they are adapted, and their cost and method of operation, \$6; second best, \$4.

For any new or improved Plough, which on trial shall be found best adapted for the thorough pulverization of old ploughed land, a premium of \$6.

NEW INVENTIONS. For any new invention of decided superiority and usefulness to the farmer, a premium or gratuity, at the discretion of the Committee.

DOMESTIC MANUFACTURES.

FANCY ARTICLES—including Needlework, Crochetwork, Shellwork, Millinery, Drawings, Paintings, &c.

For such articles in this department as may be deemed worthy, a sum, not exceeding fifty dollars, shall be appropriated, to be paid in premiums or gratuities, proportioned to the cost and value of the article, at the discretion of the Committee.

NOTE. It should be understood that, in this department of Ladies' work—while other things will receive due consideration—the premiums are intended **SOLELY FOR NEWLY MADE** articles which are really useful, or particularly beautiful. For well made garments of any kind; for stocking knitting of wool, cotton or silk; for bonnet and cap making; for all articles of children's wear, well made or tastefully embroidered; for neat and thorough mending, patching, and darning; for drawing, designing, or painting in oil or water colors; for models in plaster, wood, or marble, &c.

Any article well and tastefully wrought, and offered by children under twelve years of age, will receive particular attention.

MANUFACTURES OF STRAW. For the finest collection and best manufactured *Plain Braid* Bonnets, not less than twelve in number, \$5 and diploma; second do., \$3.

For the finest collection and best manufactured *Fancy Bonnets*, whether of Straw, Hair, or other material, not less than twelve in number, \$5 and diploma; second do., \$3.

For the best specimen of *Straw Bonnets*, wholly of domestic manufacture, \$4 and diploma; second do., \$2.

For the best specimen of *Straw Braid*, of domestic straw, not less than 100 yards, \$2 and diploma; second do., \$1.

For the best specimen of *Sewing Bonnets*, made of Straw, Hair, or other material, exhibited unfinished, with blocks upon which they are made, and not less than three from each sewer, \$3 and diploma; second do., \$2.

MANUFACTURES OF CLOTH, FLANNELS, HOSIERY, &c. *Cotton Cloth.* For the best specimen of Cotton Cloth, of any description, not less than twenty-eight yards in quantity, a premium or gratuity, at the discretion of the Committee.

Woollen Cloth. For the best specimen of Woollen Cloth, of any description, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

Cotton and Woollen Mixed. For the best specimen of Cotton and Woollen Cloth of any description, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

Flannels. For the best specimen of Flannel, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

For the best specimen of Cotton Flannel, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

For the best pair of Woollen Blankets, a premium or gratuity, at the discretion of the Committee.

Hosiery, &c. For the best specimen of Silk Hose, a premium of \$1.50.

For the best specimen of Silk Half Hose, a premium of \$1.

For the best specimen of Woollen Hose, a premium of \$1.

For the best specimen of Woollen Half Hose, a premium of 50 cents.

For the best specimen of Cotton Hose, a premium of 50 cents.

For the best specimen of Cotton Half Hose, a premium of 25 cents.

For the best specimen of Worsted Hose, a premium of \$1.

For the best specimen of Worsted Half Hose, a premium of 50 cents.

For the best specimen of Sewing Silk, not less than one pound, a premium of \$2.

For the best specimen of Knitting Yarn, not less than one pound, a premium of \$1.

For the best specimen of Spool Thread, not less than one pound, a premium of \$1.

For the best Fleece of Wool, a premium of \$1.

For the best dozen Grain Bags, a premium of \$1.

For the best specimen of neat and thorough mending, patching, or darning of garments, hose, &c., a premium of \$1.

COUNTERPANES. For the best Counterpane—regard being had to quality and expense of materials—first premium, \$3; second, do., \$2.

CARPETING, RUGS AND FLOOR CLOTH.

For the best "Common" Ingrain 2-ply Carpeting;

do. do. "Fine" do. do. do.

do. do. "Superfine" do. do. do.

do. do. "Common," "Fine," or "Superfine" Ingrain
3-ply Carpeting;

do. do. Brussels Floor Carpeting;

do. do. Tapestry do. do.

do. do. Velvet Carpeting;

For each of these descriptions of Carpeting, a premium or the Society's diploma, at the discretion of the Committee.

NOTE. Ingrain 2-ply Carpeting will be judged by the comparative merits of pieces of similar weight; or, disregarding weight, by the quality of color, the taste of shading, and evenness in spinning and weaving.

For the best piece of Stair Carpeting, the Society's diploma.

For the best Hearth Rug, the Society's diploma.

For the best specimen of Painted Floor Cloth, a premium or the Society's diploma, at the discretion of the Committee.

NOTE. Any articles, in either of the foregoing departments, which shall have been manufactured in the family of the person presenting it, will receive the particular consideration of the Committee, and, if worthy, a suitable premium.

GLASS, EARTHEN, STONE AND WOODEN WARE. For the finest collections and best specimens of articles in each of these departments, a premium or gratuity, at the discretion of the Committee.

BRASS, COPPER, TIN, IRON AND BRITANNIA WARE. For the finest collection and best specimens of articles in each of these departments, a premium or gratuity, at the discretion of the Committee.

CABINET WORK. For the best specimen of Cabinet Work, a premium or the Society's diploma.

IRON FENCING, GATES AND POSTS. For the best specimens of each—regard being had to cost and utility, as well as ornament—a premium or gratuity, at the discretion of the Committee.

STOVES. For the best Farmer's Cauldron Stove ;
do. do. Cooking do.
do. do. Parlor do.

—a premium of \$2.

HORSE AND OX SHOES. For the best specimens of Horse and Ox Shoes, a premium of \$1.

For the best specimens of Horse Shoes *for meadow lands*, a premium of \$1.

INDIA RUBBER GOODS. For the finest collection and best specimens of India Rubber goods, a premium or gratuity, at the discretion of the Committee.

BRUSHES, COMBS, HATS, CAPS AND GLOVES. For the finest collection and best specimens of each of these articles, a premium or gratuity, at the discretion of the Committee.

LEATHER, AND ARTICLES MANUFACTURED THEREFROM.

For the best specimen of Thick Boots, a premium of	\$2.
do. do. Calfskin, do.	3.
do. do. Thin Boots, other than Calfskin, do.	2.
do. do. Kipskin, do.	2.
do. do. Thick Brogans, do.	1.
do. do. Fine Brogans, do.	1.
do. do. Ladies' Boots, do.	1.

For the best specimen of Upper or Sole Leather, or Morocco, a premium or gratuity, each, at the discretion of the Committee.

For the best single Carriage Harness ;

do. do. double do.

do. do. Cart Harness—a premium or gratuity, each, at the discretion of the Committee.

For the best Riding Bridle, a premium of \$1.

do. do. do. Saddle, do. 2.

do. do. Carriage or Cart Whip, a premium of 1.

CARRIAGES, WAGONS, CARTS, &c.

For the best specimen of Family Carriages, for one horse or for two horses ;

For the best Covered Wagon ;

do. do. Open do.

do. do. Farm do.

do. do. do. Cart ;

do. do. Farm Wheelbarrow—a premium or gratuity, each, at the discretion of the Committee.

JELLIES, PRESERVES, PICKLES, AND KETCHUPS. For the finest collection and best specimen of each, made of articles of domestic growth, a premium or gratuity, at the discretion of the Committee.

NATIVE WINES, CORDIALS, &c.

For the best specimen of Wines from cultivated or wild grapes, not less than two bottles to be exhibited, \$2; second best, \$1.

For the best specimen of Wine or Cordial from eurrants, blackberries, raspberries, or elder berries, not less than two bottles to be exhibited, each, \$1.

NOTE. It is to be understood that all articles presented for premium, in each of the foregoing departments, shall have been manufactured or produced within the County during the last year, and by the person presenting them. Also, that in every case, the Examining Committee shall have the right to substitute the Society's diploma for a premium or gratuity, or to give it where no premium or gratuity has been offered, at their discretion.

All discretionary premiums or gratuities shall be proportioned to the actual value and utility of the articles.

Articles in either of the above departments, contributed to the Exhibition by persons not resident in the County, shall receive suitable attention from the Committee, and if worthy, be awarded the Society's diploma.



MISCELLANEOUS.

AGRICULTURAL LABORERS.

For a certificate—signed by his employer, and countersigned by any two of the Trustees residing nearest to the applicant—of the superior qualification of any man or youth, in the employment of any member of the Society for a period next preceding, of not less than two years, attesting the industry, integrity, respectful demeanor and general good habits, during the time, of the bearer of such certificate, a premium of Membership of the Society and a diploma.

CABINET OF INSECTS.

For the largest and best Collection of Insects found within the County, beneficial or injurious to vegetation, properly arranged and classified, to be exhibited on the Society's tables, at the next Annual Fair, one copy of Harris' Treatise on Insects.

AGRICULTURAL ESSAYS.

For the best Essay on the relative importance and value, as sources of profit, of the various grasses, or cereal, fruit or vegetable crops, a premium of \$10.

For the best Essay on the relative importance and value, as sources of profit, of the breeding and raising of the different classes of farm stock, a premium of \$10.

For the best Essay on the fattening of cattle, swine or sheep, detailing the process and expense of the same, a premium of \$10.

· FOREST TREES. For the best Essay on the raising and cultivation of Forest Trees, a premium of \$10.

INSECTS. For the best Essay on the destruction of Insects injurious to vegetation, such as *Curculio*, *Borer*, *Canker-Worm*, *Caterpillar*, *Cut-Worm*, *Squash-Bug*, *Striped-Bug*, *Rose-Bug*, &c., &c., a premium of \$10.

PRESERVATION OF WINTER FRUIT. For the best Essay on the preservation of Apples and other Winter Fruits, \$10.

PRESERVATION OF VEGETABLES. For the best Essay on the preservation of Vegetables, a premium of \$10.

AGRICULTURAL EDUCATION. For the best Essay on Agricultural Education, a premium of \$10.

FARM ACCOUNTS. For the best Essay on a system of Farm Accounts, a premium of \$10.

For the best Essay on Domestic Poultry, \$10.

For the best Essay on Fences for Farms, uniting economy, strength and appearance, a premium of \$10.

For the best Essay on the extermination of Weeds and Plants, destructive to crops, a premium of \$10.

For the best Essay on the preservation and application of Liquid Manure, a premium of \$10.

For the best Essay on the Introduction of new Fruits and new articles of Field Culture, a premium of \$10.

For the best Essay on the value and application of Phosphate of Lime, or any fertilizer of the soil, a premium of \$10.

For the best Essay on Bees and Structure of Hives, with particular reference to feeding Bees, and guarding against the spoliations of the Bee Moth, a premium of \$10.

For the best plan for a Barn and Barn Yard, with regard to the keeping of the Hay, the comfort of the Cattle, the ease and convenience of tending them, and the making and preserving the Manure, a premium of \$10.

These premiums will not be awarded unless the Essays offered shall, in the judgment of the Committee appointed to decide upon them, be deemed worthy of an award, without reference to their comparative merit.

FARM BUILDINGS.

For the best planned house and out-buildings—regard being had to the cost and economy of labor—the house to be warm, well lighted and ventilated, with a cellar protected from frost and vermin, and the whole not to cost over \$1,800;—to be examined by the Committee on Farms—a premium to be adjudged by said Committee.

FORM FOR STATEMENT OF CROPS.

[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.]

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 ?

What was the crop of 1862 ?

What manure was used, and how much ?

What is the nature of the soil ?

When, and how many times ploughed, and how deep ?

What other preparation for the seed ?

Cost of ploughing and other preparation ?

Amount of manure, in loads of thirty bushels, and how applied ?

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 personal observation, we hereby certify that the above answers are true.

From actual measurement, I hereby certify that the land which the above crop of _____ covered, contained _____ rods, and no more.

I hereby certify that the weight of the above crop, as ascertained by me, on the _____ day of _____, was _____ pounds.

Committee.

In ascertaining the amount 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; or the whole crop may be measured in any vessel, and the weight of its contents once, multiplied by the number of times it is filled by the crop; and the Committee, in their certificate, or their report, shall state which method was employed.

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 Wurtzel, Ruta		
Bagas, White Beans, and Pease,	. . . . .	60 lbs. to the bushel.
Corn, Rye,	. . . . .	56 " "
Oats,	. . . . .	32 " "
Barley, Buckwheat,	. . . . .	48 " "
Cracked Corn, Corn and Rye and other meal, except		
Oat, and English Turnips,	. . . . .	50 " "
Parsnips,	. . . . .	45 " "
Carrots,	. . . . .	55 " "
Onions,	. . . . .	52 " "

RULES AND GENERAL REMARKS.

It is understood that all premiums will be restricted to articles of the growth and manufacture of the County, unless otherwise specified in the premium list. Essays and Agricultural Implements being excepted from this rule, are open to general competition.

Committees are particularly requested not to award gratuities other than diplomas, or such as are specified in the premium list.

Any gentleman, not a member of the Society, entitled to a premium of five dollars or upwards, and any lady, not a member of the Society, entitled to a premium of two dollars or upwards, shall receive the amount exceeding the sum of five dollars and two dollars, respectively, and shall thereafter become a member.

The stock and articles intended for exhibition and premium—bread and butter excepted—must be on the ground at or before 12 o'clock on Thursday, the first day of the Exhibition, to be entitled to any premium. Animals will not be allowed to be removed from the pens before 3 o'clock on Friday, the second day, and all other articles not until 5 o'clock, without the permission of the Committee having them in charge.

In order to extend liberal encouragements to citizens of the County living remote from the Society's grounds in Dedham, a sum—not exceeding fifty dollars—will be appropriated for compensation of travel to the owners of all such neat cattle, swine and sheep, as have been brought or driven more than five miles—reckoning the distance from whence they came to the place of exhibition—and receive no premium. Only one travel will be allowed to the same person. Payment will be made at the rate of ten cents per mile, for a yoke of oxen or steers; eight cents per mile, for each bull, cow, heifer or yearling; ten cents per mile, for each boar, sow or litter of weaned pigs; and eight cents for each flock of sheep. But no such payment shall be made for any animal, or animals, which, in the judgment of the Committee appointed to examine them, are not of a superior character and

worthy of exhibition, or have not been entered in accordance with the rules and regulations of the Society.

The animals, while on the ground, will be fed at the expense of the Society.

No person serving on any of the Committees shall have a vote in any case, when he shall be personally interested as a competitor.

All other Entries for premiums must be made in writing, and shall be placed in the hands of the Recording Secretary, on or before the 15th of November.

Premiums awarded, and not called for on or before the last Wednesday in March following, will be considered as given to the Society, in aid of its funds.

After the objects for Exhibition are arranged, they will be under the care of the Committees, and cannot be removed without their consent.

No object or article will be entitled to a premium, unless it possesses points of superiority; and the Committees have the discretionary power of withholding premiums, if, in their opinion, the articles or objects are not deemed worthy to receive the same.

The Trustees have carefully revised and approved of the foregoing proposals for *Premiums*. The respective Committees, appointed to award the same, are required to enforce a strict conformity to all the rules in relation to Entries and Certificates.

In the appointment of *Committees*, the Trustees will seek for the most judicious and skilful individuals in the various towns in the County, to award the *Premiums*; but should they fail to secure the aid of the ablest and most experienced men in the above capacity, they will rely upon the forbearance which, they believe, will be generously extended towards sincere and unwearyed efforts.

As it will become the duty of the Society to make to the Legislature an exact report of its doings, the Trustees deem it of the highest importance that earnest and persevering efforts should be made by the citizens of every town in the County, to bring out the results of their skill and industry.

MARSHALL P. WILDER, *President*.

HENRY O. HILDRETH, *Secretary*.

TRANSACTIONS

OF THE

NORFOLK

AGRICULTURAL SOCIETY,

FOR

1863.

PUBLISHED BY THE SOCIETY.

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ADDRESS,

BY REV. GEORGE PUTNAM, D. D.



MR. PRESIDENT, LADIES AND GENTLEMEN :

HAVING too early in life exchanged the blue frock for one of another color, I do not consider myself, and nobody else will consider me, competent to give valuable instruction on the science or the practice of Agriculture. I will not attempt it. But though I know little about farming, in its latest and best methods, I think I do know a good deal about the farmer. Therefore I will not speak of tillage, but of the tiller; not of cattle and swine, but their owner; not of land, but the land's lord. We will inquire, not how a man does or should cultivate his fields, but how his fields do and should cultivate him. For it is the case, in any business, that while the man makes the business what it is, the business in turn makes the man, in a great degree, what he is. He directs and moulds that visibly, and that invisibly but as truly directs and moulds him. He puts the mark of his mind and character upon that, and that puts its mark upon his mind and character. The influences are reciprocal. Action and reaction are equal.

Farmers are of two classes. The two classes run into each other at the edges, yet are quite distinguishable.

One of the classes consists of persons, not originally, or not exclusively agricultural. They come from other walks of life, from the manufactory, from the counting-house, from the sea, from the professions. Perhaps they have prospered sufficiently, and now only wish to enjoy their gains. Perhaps they have got disgusted with some of the ways of that more excited and adventurous

world in which they have been moving, and want to breathe a purer air, and live what seems to them a truer life. Or they are fatigued, and want rest from perplexity and strife. Or they are drawn to the farm by their childish associations with its scenes and doings, or for the realization of a life-long dream of Arcadian simplicity, and rural quietude and felicity. Or drawn, it may be, by a more abstract theory or notion, that the cultivation of the soil, as it was the first, is the most legitimate of human pursuits; that it is best to get very close to mother earth; that if some other employments are artificial, and of doubtful utility, this is surely God's ordinance; that here, if any where, is to be found health and invigoration for body and soul, and that it is very good to pass one's declining years, and close them at last, amid these most wholesome and peaceful labors and influences.

By whatever motives this class of farmers is founded and recruited, it is a very valuable class in an agricultural community.

They often bring property into the rural districts, and show what can be done by applying capital to the soil. They are the persons to try new experiments in husbandry; for when they fail in them, they can afford the loss, and when they succeed, poorer men can profit by them, as much as they. Coming from more active scenes, with a wide and diversified experience, they bring in and diffuse more liberal views of life and things. They introduce new and often better styles of rural architecture, for houses and barns and fences, and all the farm offices, and new ideas of neatness and good taste, in indoor living and outdoor surroundings. Sometimes a literary and intellectual element and influence accompanies them. They bring in some of the refinements of the city, leaving behind them, for the most part, I think, the follies and vices, and corrupting luxuries of the city. A most useful class it is in many ways.

And the benefit is reciprocal. These men learn as much from their neighbors as they teach, and receive as much good as they impart. They are a favored class. They occupy a position as fair, and with as many of the capabilities of a rational well-being, as the world affords. It is greatly coveted by multitudes who never attain to it. A great portion of the men in cities, men in trade and the professions, believe and hope that finally, when cer-

tain objects have been accomplished and a certain time arrives, they shall retire to a farm. A dream, an illusion, it is with many. They cannot do it, or will not,—an illusion, but a pleasant one. They find that the old harness will not come off so easily as they thought, that the bonds of long use and wont hold them with a firmer grip than they supposed. Comparatively few realize their dream.

And of those who do realize it or try it, not all succeed in it. To some the new way of life that looked so beautiful and sufficient in the distance, turns out to be too tame and slow. They find in it privations, annoyances, various drawbacks, that were not foreseen. No earthly condition is perfect, not even this. The experiment fails. They are not contented.

Or perhaps with a shrewd foresight of the possible short coming, they have kept some hold of the old way of life, and diversify the monotony of the farm life with some hours weekly or even daily spent amid the operations of State street, or the gossip of the insurance offices, or the din of the factory, or the odors of the wharf and dock, or the court-house, or the commodities and account books of a silent partnership in trade. And wherever this combination of diverse interests is necessary for producing content in the farm life, and does produce it, why is it not well?

To belong to this class of farmers, and to find contentment in it, by whatever means, whether in itself alone or by help of its accompaniments and alteratives,—what condition on earth is so beautiful and desirable? To us, who are not in it, it looks like the top of the world, the culmination of human well-being. We should covet it if it were not wicked to covet what is our neighbor's.

The second class of farmers comprises those who from very early life have been inured to the actual labors of the farm, with no other business, or but incidentally, with no habits of life but those of the farm-house. As a class, these men are the healthiest and strongest class in the community. Frugal in their ways of life, and generally temperate in meats and drinks, with habits of early rising and regular industry, they become hardy, capable of much endurance and long-lived as a class. Farmers, as a class, are as rich as any other class. Take, for instance, all the property of the mercantile class at a fair appraisal, and deduct from the

amount what has been sunk in bankruptcy, and then average the remainder among all those who have engaged in mercantile pursuits, and I am confident that average would not exceed that of the whole farming class. Farming is as profitable on the average as any other pursuit. The same intelligence, industry and moral rectitude and self-control which produce prosperity in other avocations, will produce it in this in an equal degree on the average. In cities and in commerce, money runs more into heaps, and there are greater inequalities. We are deceived by the few instances of great wealth thus acquired. We must look to averages. The heaps are comparatively few and far between. The holes are many and wide and deep, and a ghastly spectacle of life they present, such as is not to be seen among the green hills of the rural districts, where none, indeed, are very rich, but where even the poorest poor can hardly be said to know what real poverty is.

We find thus among farmers that condition of moderate prosperity and comfortable, but limited independence, which the wise have always regarded as most favorable to virtue and contentment, to patriotism and good citizenship.

This class of farmers, which for convenience of composition I have called the *second*, is in reality *first* in numbers, in power and in national importance. Indeed, it is every way so vastly predominant, that it may be said almost to absorb the other, and I fear it was putting too fine a point on the matter to make the distinction at all.

There is one way of putting this distinction that is inadmissible,—that by which the smaller class is sometimes spoken of as gentlemen farmers, the others being plain farmers. Gentlemen are of no one class in society, but are individuals scattered through all classes. Soft hands, rich clothes, and a leisurely or luxurious life do not constitute a man a gentleman, nor the fine language and graceful manners that characterize the more exclusive social circles. The gentlemanly qualities pertain to the soul, and consist of kindly dispositions, the unselfish spirit, forgetting one's self in taking thought for others, acting and speaking in deference to the feelings, wants and interests of others, loving to gratify and benefit them. These qualities naturally express themselves in certain courteous and intrinsically graceful modes or manners, which in

the course of time get collected into a code, and are called the manners of a gentleman. Any man favorably situated, can study these manners and practice them, but if he have not the inner qualities of heart, from which they would come unstudied, he is but a counterfeit gentleman, an imitation, and not the genuine thing. The true gentleman, with or without study, will practice what is essential in that high code. The tailor and the dancing master can produce the sham gentleman, but only the kindly and generous spirit of Almighty God possessing the heart can ever produce the true one, and where that spirit is, it cannot fail to produce him.

Accordingly the true gentlemen is as likely to be found, and is as often found among plain farmers, so called, as in any rank of society. At any rate, that is my experience. Let me illustrate.

A few weeks ago, I was passing in a light carriage along a narrow country road. Within the space of a mile I met four very broad and heavy loads of grain on their way to the threshing mill. The four drivers were plain farmers, of course, or farm laborers, and strangers to me. Each of the four, on seeing me approach, turned out his team to the very wall, and stopped it; and three out of the four, as I came up, stepped forward, and asked me with a thoughtful solicitude for my convenience, whether I thought there was room for me to pass easily. There was room enough, and I passed on, gratified, refreshed, as one always is by any such act or word of a high and beautiful courtesy. And then I called to mind some instances that I have known of, of men wearing a garb, and displaying an equipage, and driving at a pace, which they imagined made gentlemen of them, but who, after running down a child, or an aged person, rushed on without stopping to inquire what harm they had done, or whether there was any thing they could do about it. Which were the true gentlemen? these elegant men, with fast horses and heedless hearts, or those plain teamsters of mine? Perhaps neither. A single cup of cold water given in the name of a disciple, will not make a Christian, and a single act or word of gracious courtesy does not make a gentleman. But this may be said of my teamsters, that if that spirit of courtesy of which I had the benefit were uniform in them, and in the grain, if they do habitually manifest such kindly, unselfish consideration for the convenience and gratification of others, in

the intimacies of their homes, by the wayside, with strangers, on all occasions, little and large, and in all the relationships and intercourse of life,—if what I saw in them was a fair sample of their style of life, then they are gentlemen, and would be found, on close acquaintance, to have all that is essentially graceful and chivalrous in the manners of gentlemen, aye, and would be recognized by all true gentlemen throughout the world, as members of their noble fraternity, the select and God-ordained aristocracy of the race.

But there are weightier matters to consider. I am not here to flatter the farming class. They know well enough already the advantages of their condition, the dignity of their calling, and their supreme importance in the body politic. I would rather ask permission to speak some words of counsel and warning. Claiming at least an honorary membership with the class, by birth, by all the memories of childhood, and by the uninterrupted associations of a lifetime, I shall feel privileged to speak frankly of some of their deficiencies, dangers and duties. There is time but for a single point.

I confess, then, to a feeling of some solicitude respecting the intellectual condition and prospects of the agricultural classes, even in New England.

It has been maintained by some good thinkers that there is something in the life of farm laborers, as a class, less favorable to mental vigor and alertness, than the life of mechanical laborers, for instance, as a class, and that working farmers, as a body, are in fact less intellectual than mechanics, as a body. This alleged inferiority is accounted for in part, by the fact that farmers generally are more solitary in their labors, do not work so much in companies, and have therefore less opportunity and fewer provocatives to that constant discussion, and exchange of thoughts, by which intellect is stimulated, sharpened and kept awake. Then again, the work itself of farm laborers, in its ordinary details, though it admits of, does not absolutely require, that concentration of thought, and that active play of the inventive and adaptive faculties, which are required for success in mechanical or commercial pursuits.

And I have heard it maintained further, that there is some

influence in continuous field labors, early and late, in summer's heat and winter's cold, that tends to dull the brain, make it sluggish—some physical influence unfavorable to mental activity. In illustration of this view it is asserted that hard working farmers, as soon as they leave off work to rest, are more irresistibly overcome by sleep than other classes of workers, have shorter and less wakeful evenings, and of course, are less inclined and less able to fill up their leisure hours with reading or vigorous thinking. I have even heard it remarked that a Sunday congregation composed mostly of farmers, will have more numerous and sounder sleepers in it, than a congregation composed more of mechanics or merchants, not wilfully or by their own fault, but because when they stop to rest, their brain is overcome by an unconquerable stupor induced by the nature of their occupations.

This theory of the deteriorating effect of agricultural labor is a favorite one with the apologists for slavery, enabling them to maintain that the degraded mental condition of plantation slaves is not owing to their being slaves, nor wholly to alleged inferiority of race, but to the necessary influence of field-work, continued through a lifetime and from generation to generation.

Our opponents, whether those who represent the interests of the slave-system, or those who represent the interests of the old world aristocratic system, avail themselves of this theory, to justify their prediction of the sure decay and final downfall of our free-labor and democratic polity. Your field workers, they say, must by the nature of their employment, gravitate towards the peasant condition. And the peasantry, black or white, all the world over, have been, or have become, ignorant, stupid, brutal, incompetent to rule, needing to be ruled. When your working farmers, i. e. the bulk of your population, shall have reached this condition, their rule will be insufferable, and there is the end of your institutions.

To these prophecies of evil, in which the wish is father to the thought, we reply—Look around, look at the facts. Do we not continually meet with practical hard-working farmers, who are among the most intelligent, well-informed men, the most acute and vigorous thinkers, that we find in any class? And the great agricultural masses are not found to be the peril but the stay

and the strength of the nation. They are not the men who denounce popular education, or hold back from a liberal support of it. They, as a body, are steady, moderate, loyal, in political action. Not among them is engendered the venom of party politics.

It is not this class that the wily demagogue or political adventurer, or minister of treason, can delude and inflame with lies and sophistries, and collect into mobs and madden to plunder and conflagration, and put in riotous and deadly array against the government and laws of their country, or any open or covert co-operation with the banded destroyers of our magnificent civil fabric. That fabric finds its foundation and stability in the practical wisdom, and firm, intelligent patriotism of the agricultural masses. This does not look as if they were grown stupid and brutal, or were sinking to the status of the serfs, and hinds, and boors, or if you will, the peasantry, bond or free, of other communities.

But our adversaries are not silenced yet. They will say that the history of New England has been exceptional among human histories, and that the peculiar circumstances of the founding of our agricultural class, are such as to account for the present and temporary high character and position of that class. There is truth in this. The first farmers of New England were remarkable men. They were not the scum of European serfage. They were men of learning and of thought. They came hither inspired and sustained by great principles and lofty aims. They came to found a free empire and a Christian State. They betook themselves to farming here from the necessities of their position. But they were more than mere farmers. They were statesmen. They were theologians. They had borne persecution. They were ready for the greatest sacrifices, for conscience and liberty, and met them all heroically. They were versed in all the great controversies of the time, civil and ecclesiastical. They fathomed the vasty deeps of the theological problems of that day, and men who could do that could do anything intellectually. They studied the scriptures learnedly, profoundly, devoutly, and that alone is an education.

Such men, being the first possessors and tillers of the soil here, would, of course, transmit their mental strength and culture, and

high tone of character to their posterity and successors. And, then, when the revolution came, the struggles, sacrifices and responsibilities of that time, would help to keep up, renew and reinvigorate that high tone, for a generation or two more.

But then, our adversaries will say, that extraordinary influence derived from our noble founders cannot last always. It must fade out as those men and times recede farther and farther into the past, and finally disappear, and our farmers sinking into the ignorant and cloddish condition which always and every where pertains to their employment, gravitate to the bottom of the social scale. The laws of nature, as manifested in all past experience, must go into effect at length, and farm laborers here, as elsewhere, become boors—a peasantry—and that must be the end of the Republic.

We will not give in to this reasoning, nor anticipate any such result. Nevertheless, it is wise to learn something of an enemy, and set up all possible barriers against the fulfilment of evil prophecies.

Whatever may be the philosophy of it, I am inclined to think there is some ground in facts,—not much perhaps, but some,—for the opinion that farming labors are somewhat unfavorable to mental development, as compared with some other pursuits; and dropping all comparisons, which are disagreeable and inconclusive, all farmers know, or should know, that they need to take great pains to overcome the dulling tendencies, of their long, continuous field-labors.

Let us consider the means of overcoming these unfavorable tendencies, in whatever degree, large or small, they may be admitted to exist.

And, of course, among the means of mental culture and advancement, we think first of our system of free schools, the pride and hope of the land. We cannot prize them too much, nor compute the benefits of them. It would be a mistake however to suppose, that the mere going to school, summer and winter, or even the whole year, through childhood and early youth, however good the schools, or however well improved the opportunities they afford, will make the pupils intellectual, progressive, live-minded people, after they have become men and women. The schools

taught us when we were young to read, write and cypher, and the best schools cannot do much more. That is all very well, very important. But it is by no means enough to know *how* to read, write and cypher. The question is *do* we read, write and cypher, and keep on doing it after we have grown up?

Do we read?—for instance, that is, establish and maintain open and large communication with the world of mind, and keep taking in knowledge, light, strength and inspiration, from all those, the multitude of the living and the dead, who stand ready to supply them to us through books? Do we read, or only rest content with knowing how to read?

And do we write?—that is, do we possess and exercise the faculty and habit of giving a connected and visible expression to our thoughts? To make out a bill of sale and sign one's name to it is not writing, in any intellectual sense of the word. To think clearly, logically, connectedly, and be able to put down one's thought and feeling in fair, grammatical sentences, so as to communicate the thought and feeling from one mind to another,—that is alone writing. And what proportion of the farming class, or indeed of almost any class, do that or can do it?

And, then, do we cypher? That means something more than doing, or having once done, the sums in the school arithmetic, or being able to foot up a column of figures, or cast the interest on a promissory note. It means, or ought to mean, the keeping our powers of calculation, of analysis, and of severe accurate reasoning, in vigorous and habitual exercise. Mere school-cyphering is not worth much, as mental culture, except as a preparation for this.

When farmers do actually read, write, and cypher, as well as know how, they may consider that their minds are getting well educated, and not before,—neither farmers nor anybody else.

I should say that a farm itself contains and presents opportunities for mental culture, and of the noblest sort too. To carry on a farm with a high intelligence and in the best manner, observing all the facts, and studying the capacities and adaptations of soils, seasons, weathers, winds, markets, keeping an ear open to all suggested improvements, and a mind keenly discriminating between the real ones and the seeming, to master what is valuable

in agricultural science, and make that science practical, concrete it into methods, and crops, and tools, and manures, and fields, brought to the highest state of beauty and productiveness,—to do that is itself an education. To do that will keep stupidity out of a man's brain if any thing can. A farm so conducted, that is, a farm with a live mind on it, is as good a college to enter and graduate in, as any in the land. Cultivate your farm thoroughly, and your farm will cultivate you nobly. Make your farm in the best sense and at all points a first-rate farm, and the farm will make a first-rate man of you, as to your intellect and as far as in you lies. Mind geared on to matter, brains mixed with the soil, thought coupled with labor,—that makes a farm, and also a man,—and a class of men fit to rule a nation, and give tone and elevation to the politics of the world.

And beyond the mere theory and practice of farming, any country town, though secluded, and without any rich institutions in it, or any celebrity about it, is as good a university as ever was endowed by God or man, for training willing minds to power and vitality, and imparting to them the truths of science, and the facts and inspirations of nature.

Any one of the retired and quiet agricultural towns of this county,—Dover, Wrentham, Needham,—is a part of God's glorious universe, and displays as much of his creative power and providential care, as any other part. Nature unfolds her wise and beautiful mysteries there as amply as any where. And there are eyes there capable of seeing them, and brains to search them out, and souls to admire and grow up to them. Needham has as large an out-doors to it, and over it, as any other place of its size on either continent. What more would you have? Look! All the astronomy that Newton or Leverrier ever knew, or that such as they, the giants of science, ever will know, is rolling and shining over your heads there every night. The whole charming science of botany lies there spread out in the flowers and grasses that adorn your hills, and meadows, and woods, and moving on in their wondrous processes of germination and growth, and maturing. There are trees in the town, and the young man who should make a thorough study of a single one of them, and understand it, all it can teach, its whole physiology, how it grows, the laws of

it, the mysteries of it—know all—would be deemed a learned man in any scientific convention that ever assembled. There is all geology there under your feet, open to your inspection, ready to carry you back in knowledge to the flood, and beyond it, and to show you all the secrets and marvels of creation that the Lyells and Bucklands have ever written about. In your fields, and forests, and waters, and the air, there is a chance for the patient and intelligent observer to learn so much of animal life, in its various structures and habits, that he shall feel perfectly at home in Agassiz's great Museum of Zoölogy, knowing already half that can be taught there, and quite prepared to take in the other half.

It might be an excellent thing, and certainly not a new thing, for the young people of a farming town, those of them who want to be educated and want to keep the dust, and mud, and brush, and cobwebs of the farm out of their brains, to form themselves into an association for the purpose of learning together, with mutual helpfulness and stimulation, so much of nature and science as they have the materials for, right about them. They could easily come at the necessary books and apparatus. They could find time, or make it, as all live and earnest people can. They have eyes, and ears, and minds; they can read, write, and cypher. And that is enough to start with. The world of knowledge is before them, on the spot, at their very doors, over their heads and under their feet.

Finally, over and above the ordinary and universal means of intellectual development, the Divine Providence, now and then, prepares extraordinary means to the same end, in those social convulsions and calamities that shake whole nations with the mighty upheavals of thought and passion. I have already referred to an influence of that kind as experienced by our fathers in the circumstances of the settlement of New England, and again in the Revolution,—an influence not transient, but long transmitted. And now, after a long interval of national quiet, it is being repeated under circumstances different, but not less grand and awful. A war of secession and disintegration is upon us. The nation's integrity and its very life is at stake. It is an epoch that the most sluggish minds cannot sleep through. They who never thought before must think now. They who never felt before must feel

now. The intellect of the nation is aroused in the presence of this immense issue. It is an educational epoch. Its perils, trials, sacrifices, are the school-discipline of God. The mind of the people grows up whole cubits of stature in a short time. The heart of the people is moved to its deepest depths,—of all classes, but most of the most numerous and the governing class, the agricultural. And the heart is always the head's best ally. Deep feeling begets strong thinking. Sentiments of patriotism and loyalty, newborn and fervid, awaken and reinforce the intellect, raise up character, enlarge the whole man.

In the summer of last year, when the recruiting for the volunteer regiments was in progress, spending some weeks in one of our interior counties, I had occasion to attend meetings,—town meetings, mass meetings—in several small farming towns,—meetings called for promoting enlistments. The fires of patriotic ardor had reached them, and were all ablaze. The people, nearly all farmers, had risen up into sympathy with the grandeurs of the time. And there was no faltering or halting in the determination to meet the crisis like men. The cowardly and half-hearted, the disloyal, the fault-finding, the abettors of treason, the advocates of base surrender, and of that peace-at-any-price, which is but the inauguration of eternal strife,—men more anxious to save a party than to save their country,—and so could make a mock of that country's perils and distresses,—such men, if such there are in such communities, and I think there are fewer of them there than almost any where else, were not present at those meetings, or, if present, they slunk away into corners, sullen and silent, unheeded and alone. But the sacred demands of the time found abundant voice.

Men all unused to public speech, more accustomed to address their flocks and herds, than assemblies of men, had their tongues loosed, as by the forked flames of a new Pentecost, and spoke with a sublime and touching eloquence, although they knew it not for eloquence, because of its simplicity. Hands, hard and stiff from the plow and scythe, and looking little fit for such an office, were stretched out in effective appeal. They told the story of the fathers, what they did and suffered in the Revolution. They spoke of the immeasurable value of the Union, the Government,

and the Constitution, how it was worth all the blood or treasure we could pay for it. They voted their money,—little enough they had, and hard earned,—voted it freely as water. They called on their young men to take up arms. Old men cheered their sons, as they walked up to sign the roll. In more than a single instance I saw an old farmer, bent with years and toil, with weeping and trembling speech, bid his only son God speed, though it was his all, his only stay and staff, needful enough to him in the hard winter of his age and his poverty.

I tell you, I knew then, if I had heard it doubted, or had felt a doubt before, that the mind of the farming class is still capable of the highest vigor and elevation. If it has been growing stagnant and torpid, or seeming so, there is deep, strong life beneath the surface, and if there was any tendency to declension, it has been stayed by this dread calamity, that exhibits at once the severity and the goodness of God.

And this reviving and reinvigorating influence will not pass away with the trials that produced it. When God educates, it is not for a day, but for generations. When He quickens a new life in the soul of a people, it is a life that lasts. When He touches the human harp with his own mighty, but tender hand, the sound remains in the strings for an age, and for ages.

Long after this war shall have closed, and its distresses passed away, its moral and intellectual compensations will remain. Every village will have its war-worn veterans to tell the story of Antietam, and Gettysburg, and Port Hudson, and many another field of daring achievement. Almost every farm-house in the land will have its sacred and inspiring memories of a father, son or brother, who fought for his country, whom they, and their posterity after them, must henceforth love and take thought for as their very mother.

And every village graveyard will have its green mounds, that shall need no storied monuments to clothe them with a peculiar consecration,—graves that hold the dust of heroes,—graves that all men will approach with reverent steps,—graves out of whose solemn silence shall whisper inspiring voices, telling the young from generation to generation, how great is their country's worth and cost, and how beautiful and noble it was to die for it.

REPORT OF THE PRESIDENT AND SECRETARY.

TO THE SECRETARY OF THE STATE BOARD OF AGRICULTURE :

SIR,—In accordance with former usage, we submit the following Report of the Transactions of the NORFOLK AGRICULTURAL SOCIETY for the year 1863.

The operations of the Society during the past year have been attended with marked success, notwithstanding the unfavorable weather of the Spring and Summer. The result of the Annual Exhibition was highly satisfactory, and compared very favorably with those of preceding years.

For more specific information with reference to the present condition and future prospects of the Agricultural Interests of the County, we would refer to the interesting and valuable report of the Supervisory Committee, which, with the reports of the several Committees of the Society, is herewith subjoined.

MARSHALL P. WILDER, *President.*

HENRY O. HILDRETH, *Recording Secretary.*

REPORT OF SUPERVISORY COMMITTEE.

The Supervisory Committee for the Norfolk Agricultural Society, in submitting their Report for the year 1863, deem it proper to notice some facts connected with the season, which influenced, more or less, agricultural productions.

The winter of 1862-3 was the mildest that has occurred for several years. There was but little snow during the winter months; but soon after the first of March, enough fell to make good sleighing, and it remained till near the close of the month. The mean temperature for March was several degrees lower than that of either of the three months immediately preceding, and nearly all the ice which was stored for summer was formed during this month. Thus the respective characters of winter and spring were, to some extent, reversed.

It was feared that the openness of the winter would be unfavorable to grass and winter grain; but the injury proved to be not greater than is usually experienced. Probably the exemption was due chiefly to the covering of snow during March, and the even temperature of that month,—March being usually the most critical in reference to the crops alluded to. The destruction of grain and grass by the upheaving action of frost, or by alternate thawing and freezing,—usually termed “winter-killing,”—might, with more propriety, be termed *spring-killing*, as it is generally in the early part of spring that freezing and thawing succeed each other most frequently.

The season opened rather late. May and June were quite dry, and July commenced so, giving rise to fears of a scanty hay crop, from drought; but on the 8th of the latter month, the drought was broken by a moderate rain, which was soon followed by others more copious, and before the close of the month upwards of twelve inches of water fell, flooding much of the grass-land of this section, retarding the process of hay-making, and doing great damage to hay in the field. The month will be long remembered as “the wet July.” In consequence of so much wet weather, the hay-crop, though abundant in quantity, was generally of inferior quality. It is proper to say, however, in this connection, that where *hay-caps* were used, the hay was much less damaged; and, from all the evidence we have been able to obtain, we believe these articles can be economically used by farmers in the protection of their hay.

August was much more wet than the average for that month ; the low grass-lands being so frequently overflowed that they could not be mowed, and the hay-harvest was prolonged, in many instances, into September, the first and the after growth being then cut together. The constant supply of moisture, however, had the effect to keep up the growth of grass, and the result was that on uplands, where the first crop was cut at the usual time, a large crop of rowen was obtained, which, where it was well cured, went far to balance the damage done to the first crop.

The season continued wet to the close. Professor G. P. Bond has kindly furnished for this Report the annexed table, showing the monthly fall of water in rain and snow, at the Observatory of Cambridge College, for the year 1863 :—

January,	.	.	.	.	4.427 inches.
February,	.	.	.	.	1.634 “
March,	.	.	.	.	2.457 “
April,	.	.	.	.	7.391 “
May,	.	.	.	.	1.672 “
June,	.	.	.	.	2.470 “
July,	.	.	.	.	12.426 “
August,	.	.	.	.	5.567 “
September,	.	.	.	.	2.983 “
October,	.	.	.	.	3.401 “
November,	.	.	.	.	6.536 “
December,	.	.	.	.	5.457 “

Making a total of 56.417 inches, which is 13.411 inches more than the yearly average for 34 years. We have now had two consecutive years in which the quantity of rain has been considerably greater than the general average.

But while this section of the country has been thus copiously watered, some other sections, particularly the Northwestern States, have been so scantily supplied that many crops suffered from drought. The latter section was also visited by untimely frosts, which cut off the Indian corn crop to such an extent that the price of that grain has been and still is higher in the eastern markets than it has been for many years previously. It is worthy of note, that at the time the damaging frosts occurred at the West, viz. :—on the 17th and 18th of July, and the 30th and 31st of August, there was none to injure vegetation eastward of Lake Erie.

The visits of the Committee to farms, have not been as numerous during the season of 1863, as in some former years. We had one entry for the premium offered for the best cultivated farm,

viz. :—that of Walter H. Fisher, of Franklin. Some remarks in regard to this farm, will be found in another part of this Report.

The Committee made a brief visit to the farm of E. W. Clap, of Walpole. It consists of about 500 acres, a large proportion of which is woodland. About 100 acres, comprising the homestead, is of superior quality, naturally, and being well cultivated, is very productive. A barn 100 feet long, 40 feet wide, with posts 24 feet high, was erected by Mr. C. in 1861, and, in connection with its appurtenances, is one of the best in the county,—we might say, in any part of the country. There is a cellar under the whole of it, 9 1-2 feet deep, the bottom of which is overlaid with hydraulic cement. The cellar opens to the south-east, on which side, and attached to the whole length of the barn, is a row of pens for swine. The floor of the pens is several feet above that of the cellar. Sections of the pens can be readily raised by pulleys, to admit the passage of teams to the cellar. The cellar is divided crosswise by plank partitions, extending from the divisions between the pens to the rear wall. This gives to the inmates of each pen a portion of cellar-room.

The main object of this arrangement is to keep the hogs, for a certain portion of the time, on the manure made by the stock, which is kept in the barn above. By this means the hogs mix with the manure the materials which are thrown in to absorb the liquids, thus saving a large portion of the labor which would otherwise be required in composting. It will be seen that from the tightness of the bottom of the cellar, nothing can be lost from it. The liquid and solid excrements of the cattle and horses, together with those from the swine, are here combined, and the quantity of strong manure thus made, is 250 cords a year,—a quantity which must soon produce a striking effect on the productions of the farm.

The live stock kept consists of four oxen, thirty cows, ten young cattle, seven horses, thirty breeding sows and two boars. The milk of the cows is sold at South Dedham. An average of 250 pigs a year, are sold before they reach the age of three months. The pens are so constructed that they are warm in winter. They have glass on one side, to admit the sun's rays, and young pigs thrive well here, even in cold weather. The pigs bred are chiefly a cross from Suffolk boars with strong, well-made sows. Mr. C. is now using the noted boar "Sherman," imported by Mr. Stickney, of Watertown.

In 1861 Mr. Clap commenced the reclamation of a tract of bog, comprising ten acres. It was then totally unproductive, and as unsightly a spot as could well be imagined. Ditches have been

cut round and through it, and already the change for the better is quite obvious. A portion of it,—about three acres,—has been set to cultivated grasses, and produced this year from three to four tons of hay to the acre. Mr. C. has obtained such control over the water, that there will be no difficulty in bringing the whole tract into a high state of productiveness.

Mr. Clap uses many labor-saving implements, among which may be mentioned the Buckeye mowing machine, Bullard's hay-spreader, Palmer's horse-pitchfork, the wheel horse-rake, &c. He is well pleased with all these, but especially so with the hay-spreader and pitchfork. The former, he says, will save the labor of many men, besides drying the hay more rapidly than it can be done in any other way; and the latter is a great saving in the time required to unload hay, and a no less saving of human strength usually required in the operation. At a trial witnessed by some of the Committee, a ton of hay was pitched off in six minutes. The force engaged was a man on the load, who managed the fork, a horse which lifted the hay by a pulley, and a boy to lead the horse. Two men took away the hay as it was dropped from the fork.

Water is brought to Mr. C.'s buildings by a hydraulic ram, from a stream about eighty rods distant. All the water required for the stock, cooking for the swine, (and nearly all their food is cooked,) washing dairy utensils, &c., is thus supplied. The ram has been in operation for two years, and has not required a cent's worth of repairs. This is a convenient and cheap mode of conveying water, and might be more extensively adopted by our farmers with advantage.

It should be remarked that the cooking of the food for the swine is done by steam, and that the boiler by which the steam is produced, is placed in a building one hundred feet from the piggery, where the cooking is done. The steam is conveyed this distance by a pipe laid under ground, and the food is cooked in large wooden vats. By this plan, the danger arising from having fire near the barn is obviated.

A portion of the Committee visited, unofficially, Rev. C. C. Sewall, of Medfield, the Corresponding Secretary of the Society. Mr. Sewall's farm is mostly of rather light soil. It produces readily good crops of Indian corn and rye. Spring wheat has, also, been cultivated with general success for several years. On some portions of the farm, more moist than the rest, very heavy crops of hay are produced.

Mr. Sewall's stock consists mostly of cows, the milk from which is devoted to making butter. It will be recollected that

the premiums offered for this article by our Society, have many times gone to this dairy.

A point connected with Mr. Sewall's management of pastures, deserves mention. A field near the barn is set chiefly to red-top, and what is known as Kentucky blue-grass,—*Poa pratensis*. (The latter is one of several species to which the term June-grass is applied in this section.) The grass grows very rapidly the fore part of the season, if the weather is moist, and unless the pasture is stocked to its utmost capacity, patches of grass will be left. The cattle will not feed down the grass thus left, unless impelled by severe hunger. Thus, whatever grows here during the season, is lost. Not only this, but the growth of succeeding seasons is generally rejected by cattle, on account of its being mixed with the "old fog," which makes it unpalatable. Mr. Sewall mows these rejected spots of grass, which, well cured, makes good hay. The after-growth, being fresh and sweet, the cattle keep it smoothly fed down. The hay costs nothing but the cutting and curing, while more feed is obtained than if the hay had not been cut.

Mr. A. B. Balch, on whom we called for a few minutes, showed us a handsome and productive apple-orchard, and a neat and well-kept kitchen garden,—the bountiful crops of vegetables attesting the advantages of the clean and perfect culture bestowed.

A call was also made at the farm of Joseph Bailey, of North Wrentham. It consists of 120 acres. It has for several years been quite noted for the production of apples. The orcharding covers forty acres. One orchard of seven acres produced in 1862, one thousand barrels of merchantable apples. Mr. B. sold the same year, 1700 bushels of cider apples, delivered at East Medway, for ten cents a bushel, and made, besides, 100 barrels of cider. Mr. B.'s cider is of superior quality, and readily sells at a good price. His orchards are kept in fine order,—though but little manure is applied to them, and the profits are satisfactory. In one orchard, where the trees are large, sheep are pastured. They keep down the sprouts, keep the ground clear of all wild vegetation, and, in Mr. B.'s opinion, promote the productiveness of the trees. The ground is high, stony and moist. Some of that on which the oldest trees stand, was never ploughed, and could not be ploughed without first expending an immense amount of labor in removing boulders. Such situations seem well adapted to apple-trees. A considerable portion of the ground where Mr. B. cuts his hay, was never ploughed from the same cause just mentioned, and yet it produces heavy crops of grass of good quality.

In August the Committee visited the farm of A. A. Lawrence, of Brookline. This farm is situated in Newton, and contains 120 acres. It was purchased by Mr. L. in 1860, at which time it was much out of order, both as regards the condition of the soil, and the buildings and fences. Since Mr. L. took possession, various improvements have been made, and others are in progress. Handsome and substantial walls have been built along the highways, and for the principal division lines of the farm. The house has been remodelled, and rendered tasteful exteriorly and convenient internally. A stone barn has been built, 100 feet long and 50 feet wide, with a deep cellar under the whole. The manure from the cattle and horses is deposited in the cellar, where muck and loam are frequently thrown over it to absorb the urine.

A considerable portion of the farm lies on the sides of pretty high hills, and is naturally quite moist,—too much so for the success of crops in general. Drains have been made here with very satisfactory results. A basin, on another part of the farm, formerly a pond for a considerable portion of the year, has been drained the present season, and the ground promises to become valuable. Most of the soil of the farm is a strong, rather tenacious loam, and under the system of high manuring and thorough cultivation which Mr. L. practices, cannot fail to become very fertile and productive.

Mr. Lawrence keeps twenty cows, twelve of which, on the average, are in milk all the time. Nearly all the milk is used for making butter, the quantity of which, weekly, ranges from forty to seventy pounds. It is all sold to regular customers at fifty cents per pound, at which rate a better return is probably obtained for the milk than could be had in any other way. The dairy is managed with much care and scrupulous neatness, and the butter, as would be inferred from the price it brings, is of superior quality. The cows are generally fine. Some of the best are a cross of the Jersey, and a very fine bull of this breed, bred by the late J. P. Cushing, is now in use in the herd.

In September, some members of the Committee, in company with several other gentlemen, visited the cranberry meadows of Dr. E. D. Miller, of Dorchester, the meadows being in Franklin. Dr. M. has about twenty-five acres set more or less to cranberry vines, part being of natural growth and part having been planted. Of the latter, there are ten or twelve acres. The vines were chiefly planted in 1853, but did not reach their maximum production for several years. To obtain security against the crop being injured by frost, one of the first steps taken was to form a reservoir for water, by which the plantation could be flooded in a short time. This has rendered the crop certain, there having been but

one failure from frost, and that arose from neglect to let on the water during a cold night in spring. The water can be made to cover the vines in an hour and a half. The crop this year, on the cultivated plantation, was very large. Upwards of one hundred people were engaged in picking at the time of our visit, and about three hundred bushels of fruit had been gathered. The best portions of the plantation yielded four hundred bushels to the acre. There seemed literally to be as many berries as the ground and the vines could possibly produce. They were large, dark-colored and heavy—the quality being so superior that an extra price had been offered for them. We understand that the aggregate yield was 1050 barrels, and that they sold at an average of \$10 per barrel. We had no opportunity to obtain the particulars in regard to the cultivation of this cranberry plantation, but we hope Dr. M. will, on a future occasion, furnish for the annals of the Society, those interesting and important facts.

Of the farm of Walter H. Fisher, which, as previously stated, was this year entered for the premium offered for the best cultivated farm, something has been said in former reports of the Committee. It has long been known as a well-managed farm. The cardinal principles of Mr. F.'s management are evidently ORDER and NEATNESS, and there can be no doubt that agricultural operations conducted on this basis, produce the greatest results in proportion to the expense. This is strikingly exemplified by Mr. F.'s success. A prominent article in his farming creed is, that he "cannot afford to raise weeds." On this point his practice certainly corresponds with his faith. His farm, from one end to the other, including the road-sides as far as his land extends, is almost entirely free from every thing that ought not to grow. The only exception to this, which we noticed, were some rushes and other aquatic plants on a tract of reclaimed swamp, where very large crops of hay have been obtained for several years. The wetness of this season and that of 1862, has probably aided in bringing in this wild vegetation. But we believe it might be entirely eradicated by more perfect drainage. The drains at present are open, and too shallow. If more were made, which would effectually cut off the soak from the surrounding and higher ground, and all were cut to the depth of two and a half to three feet, and *covered*, the effect would probably be to render the hay produced on the tract of more value in the aggregate, on account of its improved quality, even though the quantity should not be increased. The covering of the drains would add an amount of productive soil to the lot corresponding to the space now occupied by the open ditches.

Mr. F.'s buildings are all attached together, and the different

departments are generally convenient in reference to their respective purposes. It would be difficult to give such a description of them as would be understood, without diagrams.

Mr. F. takes much pains in regard to the saving of manure. It is kept in the barn-cellar in winter, mixed with loam. The soil of the farm is mostly of rather a light character. Sward-land is ploughed in August or early in September, to the depth of about six inches. It is not cross-ploughed the following spring, the use of the Bucklin harrow bringing the inverted furrows into a good condition for Indian corn or potatoes, and, at the same time, mixing in with the soil such portion of the manure as is spread on the surface. In the fall of the next year, after the crops are off, the land is again ploughed, and in the succeeding spring is generally seeded to grass with barley.

The Committee feel that, while they are not called upon to sanction every particular connected with Mr. Fisher's farm management, it has points of merit which amply justify them in awarding to him, as they do, the first premium offered by the Society for the best cultivated farm. His statement is herewith appended.

SANFORD HOWARD, *Chairman.*

STATEMENT OF WALTER H. FISHER.

In giving you a description of my farm, I cannot, as is often the case in the advertisements of farms, represent it as being "divided into mowing, tillage, pasturing and woodland;" but I can truthfully say, that it has all been mowed by me, woodland excepted. It has never been my purpose to beautify one part of my farm to the entire neglect of all the rest. But, it has been, and always will be my aim, to make it all produce something besides bushes, weeds and briars. There should be no unsightly, unproductive acres, and need be none where all are properly cared for. I cannot afford to raise weeds in my cultivated fields, or a border of bushes beside my fences. I think the farmer's home should present some attractions to himself and to the traveller.

I will now give you an account of my labors and crops during the past year. On account of the scarcity and high price of labor, I did not deem it prudent to attempt more than I could accomplish with the aid of my son, a lad fifteen years old; consequently my cultivation of crops this year has been limited.

My farm at this time is occupied as follows:—Of Indian corn, 2 acres; potatoes, $7\frac{1}{2}$ acres; barley, 2 acres; English mowing, 10 acres; swamp and swale, $2\frac{1}{2}$ acres; pasturing, 12 acres. The

pasture which I have been reclaiming for the past two years, has been mowed this year,—some of it twice. The balance of my farm is woodland.

The productions of my farm for the past season, stand as follows:—English hay, 22 tons, as near as I can estimate; 4 tons of the best swamp hay; $1\frac{1}{2}$ tons of barley straw, and one ton of rye straw, also the fodder of two acres of corn. Of grain, 22 bushels of rye, 27 bushels of barley. Of fruits, I generally have enough for my own use. In a few years shall probably have some for the market, as I intend to give more of my attention to that class of farm products.

My present stock consists of one yoke of oxen, one horse, four cows and one heifer, and I shall keep more when I get ready to occupy my reclaimed pastures. Since the middle of February I have fattened and sold two yoke of heavy cattle. Of swine, I have five.

I have paid out for labor, \$66.44,—most of it for haying. In the same time I have received, for myself and team, \$31.75, so that my expenses for labor, over and above that of myself and boy, amount to \$34.67.

In regard to improvements, I have perfected some previously begun, and think I can say that my farm is gradually improving.

Of my system of farming I need say but little, leaving it for the Committee to judge whether it is judicious and safe to be followed. The care and management of my crops, I also leave for their inspection and decision. All that it would become me to say, is, I have endeavored that the cultivation should be thorough, and the crops kept clear from every thing which might hinder their growth. The general plan of my buildings, I have no wish to improve; the Committee have seen them, and can judge for themselves.

In September, 1861, my farm was divided into two equal parts, as near as practicable, my son taking one part, and I retaining the homestead. It reduced my hay crop about one-third, which is now nearly made good by the increase. The original farm contained about 170 acres, a large proportion being woodland. My present number of acres is 85. My conviction is, that the crops of any large farm may be doubled by a division. In June, when the Committee examined my farm, my crops gave promise of large returns; but in consequence of two very severe rain storms, accompanied by high winds, my corn was twice prostrated almost level with the ground. This, occurring about the time of setting of the ears, greatly injured it. On three-quarters of an acre, the yield was 80 baskets, which would yield at least 40 bushels. On another small piece, containing 20 rods, the yield was 20 bushels of ears.

The oxen which I sold for beef, cost me as follows:—The first pair was bought in November, 1861, for \$100. They were sold in February, 1863, for \$165, doing, in the interval, all my work. The second pair was purchased in November, 1862, for \$85, and sold in June, 1863, for \$165. Of pork, I have slaughtered and sold one hog, having two more to kill, and three to keep through the winter.

WALTER H. FISHER.

Franklin, Oct. 7, 1863.



EXPERIMENTS ON MANURES.

The Committee of Experiments on Manures submit the following Report:—

It is of serious moment to the farmer that he should learn, by actual experiment, the best method of applying manure to his crops; indeed, its importance can hardly be overrated. We know of no way by which he can arrive at more correct conclusions, than by the method required by the Society, in accordance with instructions from the State Board of Agriculture, to entitle the applicant to the premium offered.

We regret to state that there have been but two entries for the County premiums, one by Charles Breck, Esq., of Milton, the other by Aaron D. Weld, Esq., of West Roxbury, and but one for that of the State, made by Charles Breck, Esq.

The large number of experiments made in different parts of the Commonwealth, as proposed by the State Board of Agriculture, when reported and published, will invite attention to facts and statements, that will be invaluable to the farmer, particularly when continued for a series of years.

The Committee award the first premium of \$25 to Charles Breck, Esq., the second, of \$20, to Aaron D. Weld, Esq. Their several statements are herewith submitted.

For the Committee,

CHEEVER NEWHALL, *Chairman.*

Dorchester, Feb. 2, 1864.

STATEMENTS OF CHARLES BRECK.

CHEEVER NEWHALL, ESQ. :

Sir—In concluding my experiment with manure, commenced in 1861 for the Society's premium, I have to state that the crop for the present year was hay, which was somewhat injured by the dry weather in June. The result is as follows:—

No.	lbs.	Amount per acre.	Value per acre, at \$1 per hundred.
No. 1.	37 lbs.	1480 lbs.	\$14.80
" 2.	42 "	1680 "	16.80
" 3.	28 "	1120 "	11.20
" 4.	20 "	800 "	8.00
" 5.	8½ "	340 "	3.40

Taking, again, No. 5 as the standard by which to estimate the value of the manure, we have the following result:—On No. 1, a gain of \$11.40; No. 2, \$13.40; No. 3, \$7.80; and on No. 4, \$4.60, which sums added to the gain or loss of the two previous years, gives the following:—

1861	profit on	No. 1,	above cost of manure,	\$18.97
1862	"	"	"	32.55
1863	"	"	"	11.40—\$62.92
1861	"	No. 2,	"	22.73
1862	"	"	"	32.24
1863	"	"	"	13.40—\$68.37
1861	"	No. 3,	"	13.76
1862	"	"	"	21.24
1863	"	"	"	7.80—\$42.80
1861	loss on	No. 4,	"	23.96
1862	profit on	"	"	19.50
1863	"	"	"	4.60— .14

Thus it will be seen that the manure has given the best return when it was plowed in at the second plowing. This experiment, in addition to testing the value of the various ways of applying manure, as proposed by the Society, goes far towards settling the question so often asked by farmers, "Will it pay to buy manure?"

The manure used, as stated in my first report, was 6¼ cords per acre, value \$7.00 per cord, or \$43.75 per acre, which is a fair value for it in this vicinity, and the return from it, taking the average of the three first lots, Nos. 1, 2, and 3, where it was applied to the best advantage, over and above No. 5, which had no manure, was \$58.00 per acre.

Synopsis of the Weather.

	First third.	Middle third.	Last third.	Average of thermometer.	Remarks.
May,	Dry,	Moist,	Dry,	57°.49,	about 2° warmer than the average.
June,	Dry,	Dry,	Dry,	62°.18,	about 4½° colder than the average, and the coldest June for many years.
July,	Moist,	Wet,	Moist,	70°.33,	about 1° colder than the average.
August,	Moist,	Wet,	Moist,	72°	about 4° warmer than the average, and the warmest Aug. for many years.
Sept.	Dry,	Wet,	Dry,	59°.53,	about 3° colder than the average.

64°. ³⁰	average	for	the	five	months	in	1863
63°. ⁶⁶	"	"	"	"	"	"	1862
64°. ⁵³	"	"	"	"	"	"	1861
64°. ¹⁶	"	"	"	3	years.		
63°. ⁹⁶	"	"	"	last	15	years.	

Respectfully submitted,

CHARLES BRECK.

Milton, Nov. 30, 1863.

CHEEVER NEWHALL, ESQ. :

SIR—Having notified the Secretary of the Society of my intention to compete for the County and State premiums, for experiments in the application of manure, I have to state that the ground selected for the experiment was an old pasture which probably had not been plowed for fifty years until the fall of 1861, at which time it was plowed between seven and eight inches deep, after spreading upon it at the rate of about three cords of cow manure to the acre. The soil was a dark loam, rather moist, but not what would be called retentive of manure, as the subsoil was a gravelly loam. In the spring of 1862 about three cords more of horse manure were spread to the acre, and the piece cross-plowed between seven and eight inches deep, and the whole planted with potatoes, which rotted badly and gave a poor crop.

In the spring of 1863 I commenced the experiment by selecting a piece as nearly equal in quality as could be, and containing twenty-five rods, divided as follows:—five lots of four rods each, to comply with the Society's requirements, and to which I added two more for my own gratification,—one lot of four rods and one of one rod. The five lots were manured, plowed, cultivated and planted strictly according to the requirements of the State Board of Agriculture. The lots were square, of four rods each, the manure used was partly rotted stable manure, $1\frac{1}{4}$ foot to each lot, or at the rate of $6\frac{1}{4}$ cords per acre for the four lots which were to have manure. No. 6 had double the quantity of manure, or at the rate of $12\frac{1}{2}$ cords per acre, half of which was spread before the first plowing, and the other half was put in the hill. There were ten rows running lengthwise through the piece, with sixteen hills in each, making exactly 160 hills in each of the lots. No. 7 had the same quantity of manure as the first four lots, that is, at the rate of $6\frac{1}{4}$ cords per acre, which was put in the hill. The whole plot had exactly the same treatment. The first plowing was between seven and eight inches deep, the second between three and four inches, then the cultivator was used. It was planted the 26th of May with improved Canada corn, cultivated

and hoed the 13th of June, which, with the exception of pulling out the weeds, was all the cultivation which it had.

It was harvested Oct. 28th. The whole product has been carefully weighed, and is as follows :—

	Weight of corn on the cob.	Weight of fodder.	Bushels of shelled corn per acre.	Weight of fodder per acre.	Value of corn per acre.	Value of fodder per acre.	Total value per acre.
No. 1.	124 lbs.	156 lbs.	63 bu.	6240 lbs.	\$63.00	\$31.20	\$94.20
“ 2.	112	142	57.43	5680	57.43	28.40	85.83
“ 3.	129.5	156	66.41	6240	66.41	31.20	97.61
“ 4.	95.5	112.5	40.77	4500	40.77	22.50	63.27
“ 5.	69.5	80	33.88	3200	38.88	16.00	54.88
“ 6.	165.5	247	84.87	9880	84.87	49.40	134.27
“ 7.	33.5	40	68.70	6400	68.70	32.00	100.70

Synopsis of the Weather.

	First third.	Middle third.	Last third.	Average of thermometer.	Remarks.
May,	Dry,	Moist,	Dry,	57°.49	about 2° warmer than the average.
June,	Dry,	Dry,	Dry,	62°.18	about 4½° colder than the average, and the coldest June for many years.
July,	Moist,	Wet,	Moist,	70°.33	about 1° colder than the average.
August,	Moist,	Wet,	Moist,	72°	about 4° warmer than the average, and the warmest Aug. for many years.
Sept.	Dry,	Wet,	Dry,	59°.53	about 3° colder than the average.

From the above table, it will be seen that where a double quantity of manure was used, the extra crop a little more than paid for the extra manure ; that is, taking average of the five lots which had manure, we find a gain over the cost of the manure of \$44.57, and the value of No. 6, which had double the quantity of manure, or \$87.50 worth to the acre, to be \$46.77. This calculation is made estimating the corn at \$1.00 per bushel, the value in the fall ; but if we should estimate it at its present value, \$1.40 per bushel, it would add about \$10 more to the value of crop No. 6. But this is but one trial, and upon land that had been planted but one year before for at least fifty years ; perhaps on land which had been highly cultivated the result would be different, as many farmers suppose that 12½ cords of manure per acre is more than is profitable to use for corn. One other fact appears by this experiment which is different from the commonly received opinion, that is in reference to the product of No. 7,

where the manure was all put in the hill, was greater than the average of the four lots which had the manure spread, by \$15, but perhaps the next two years it may be less; this has been a very wet season, and very favorable to that method of applying it, as it had no chance of baking in the hill, as in dry seasons.

Respectfully submitted,

CHARLES BRECK.

STATEMENTS OF AARON D. WELD.

CHEEVER NEWHALL, Esq. :

DEAR SIR—I enclose my final report on the “Experiments with Manures,” first series, by the Norfolk Agricultural Society, and also my second report for your second series.

The calculations, in dollars and cents, I have not gone into, as it is not required, as each person can fix his own estimate of the value in making his calculation as to the results.

I am very respectfully your obedient servant,

AARON D. WELD.

Weld Farm, West Roxbury, Jan. 20, 1864.

CHEEVER NEWHALL, Esq. :

DEAR SIR—I refer you to my reports, “Experiments on Manures,” pages 34, 35, 36, of Transactions for 1861, and pages 33 and 34 of Transactions for 1862, for the land, soil and experiments of those years, and now submit the final report for 1863.

The hay on these lots was cut August 10th, dried and weighed as follows :—

Lots.	Hay.	Hay per acre.
No. 1.	225 lbs.	1800 lbs.
No. 2.	270	2160
No. 3.	265	2120
No. 4.	280	2240
No. 5.	240	1920
No. 6.	570	4560

Nos. 4 and 5 contained a large proportion of sorrel, which made them weigh heavier, but the quality of the hay was poor on these two lots, but very good on the remaining lots.

Result per Acre for Three Years.

Lots.	1861.			1862.		1863.
	Shelled Corn.	Stover.	Cleaned Rye.	Straw.	Hay.	
No. 1.	68 bush.	7.1240 tons.	27.48-56 bush.	1.1560 tons.	1800 lbs.	
No. 2.	80.48-56	8.1544	35.48-56	2. 152	2160	
No. 3.	74.48-56	7.1408	35.15-56	1.1944	2120	
No. 4.	59.12-56	7. 160	35.40-56	1.1840	2240	
No. 5.	49.12-56	4.1912	28.16-56	1.1376	1920	
No. 6.	74.48-56	7. 64	51.24-56	3. 80	4560	

Synopsis of the Weather.

	First third.	Middle third.	Last third.
April,	Wet,	Wet,	Moist.
May,	Moist,	Dry,	Dry.
June,	Moist,	Moist,	Dry.
July,	Dry,	Wet,	Wet.
August,	Dry,	Moist,	Moist.
September,	Moist,	Dry,	Moist.

These experiments show that the application of the manure in lot No. 2, where it was plowed in four inches, produced the largest crops in each instance (with the exception of the hay on lot No. 4, owing to the weight of the sorrel).

The effect of the top dressing on lot No. 6, in the fall of 1862, and the application of compost to the hills, is very marked, as will be seen by the tabular statement.

All of which is respectfully submitted,

AARON D. WELD.

Weld Farm, West Roxbury, Dec. 31, 1863.

CHEEVER NEWHALL, ESQ.:

DEAR SIR—I beg reference to my report of December 24, 1862,—the first report on “Experiments with Manures,” for your second series, for particulars in regard to the land, soil, and the experiments for that year, and now submit my second report for 1863.

The rye on this plot was cut and stoked July 13, 1863, and weighed Aug. 7th, with the following result:—

Lot.	Rye and Straw.	Rye and Straw per acre.
No. 1.	345 lbs.	2760 lbs.
No. 2.	510	4080
No. 3.	430	3440
No. 4.	360	2880
No. 5.	300	2400

Aug. 29th the rye was threshed, winnowed and weighed, with the following result:—

Lot.	Rye cleaned.	Straw.	Per acre, Rye—bushel.	Per acre, Straw.
No. 1.	75 lbs.	270 lbs.	10.40-56	1. 160 tons.
No. 2.	117	393	16.40-56	1.1144
No. 3.	97	333	13.48-56	1. 664
No. 4.	78	282	11. 8-56	1. 256
No. 5.	43	257	6. 8-56	1. 56

Result per Acre for Two Years.

Lots.	1862.		1863.	
	Shelled Corn.	Stover.	Cleaned Rye.	Straw.
No. 1.	85.24-56 bush.	3.1360 tons.	10.40-56 bush.	1. 160 tons.
No. 2.	108.24-56	4. 464	16.40-56	1.1144
No. 3.	88.40-56	3. 256	13.48-56	1. 664
No. 4.	85.24-56	3.1360	11. 8-56	1. 256
No. 5.	52.32-56	1. 576	6. 8-56	1. 56

Synopsis of the Weather.

	First third.	Middle third.	Last third.
April,	Wet,	Wet,	Moist.
May,	Moist,	Dry,	Dry.
June,	Moist,	Moist,	Dry.
July,	Dry,	Wet,	Wet.
August,	Dry,	Moist,	Moist.
September,	Moist,	Dry,	Moist.

All of which is respectfully submitted,

AARON D. WELD.

Weld Farm, West Roxbury, Dec. 31, 1863.



REPORT ON UNDERDRAINING LAND.

The Committee on Underdraining Land regret to be obliged to report that no applications have been made to them to examine any improvements which have been made by underdraining land during the past year, and, of course, we are unable to award any premiums. In the year 1862, two entries were made and two premiums awarded. Those were the first ever made since the Society was formed, but we hope they will not be the last. The importance of the subject is now so generally admitted by all enterprising and progressive farmers, that it seems unnecessary for us to attempt to add any thing to what has already been said and written by abler men in regard to it. Those who have already commenced thoroughly underdraining their land in a judicious manner, will hardly need any words of encouragement from us, as the practical benefits will undoubtedly be a sufficient inducement for them to "continue in well-doing." To those who have not commenced any improvements in that direction, we would say, "go thou and do likewise."

For the Committee,

S. W. RICHARDSON, *Chairman.*

Franklin, Dec. 1, 1863.

REPORT ON VEGETABLE AND ROOT CULTURE.

The Committee report eleven entries in this department, a much smaller number than usual. The following premiums were awarded:—

To E. Wilson, of Dover, the Committee award, for the best collection of potatoes, the first premium of \$3.00.

To G. H. Houghton, of Dedham, for the best squashes, a gratuity of \$2.00.

To L. H. Bullard, of Dedham, for three mammoth squashes, Flint's Work on Grasses.

To M. S. Knight, of Dedham, for two mammoth squashes—both weighing 229 pounds—Flint's Dairy.

To O. Kennedy, of Dover, for collection of Hubbard squashes, a gratuity of \$1.00.

To F. Friermont, of Needham, for a collection of seed cucumbers and marrow squash, a gratuity of \$1.00.

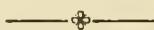
To L. Eaton, of Dedham, for crookneck squashes, Flint's Work on Milch Cows. These last were the only pure squashes exhibited this year.

The thanks of the Society are due to C. C. Sewall, of Medfield, for his seedling potatoes, imported from Belgium by the State Agricultural Society. They bear a close resemblance to the Jackson White, and appear to be a very good variety.

We regret to state that there were no root vegetables exhibited this year, and hope that the farmers of Norfolk will awake to their interests in this matter, and enter into a lively competition for the liberal premiums offered in this department next year.

ANDREW T. MESERVE, *Chairman.*

West Roxbury, Sept. 25, 1863.



REPORT ON FRUITS.

Apples.

First premium to Frederic Clapp, Dorchester, Harris's Treatise.

Second premium to A. D. Weld, West Roxbury, \$4.

Third premium to E. Wilson, Dover, \$3.

Fourth premium to H. Goulding, Dover, \$2.

Pears.

First premium to F. Clapp, Dorchester, Society's Silver Cup.

Second premium to Samuel Gilbert, Dorchester, \$4.

Third premium to A. D. Weld, West Roxbury, \$3.

Fourth premium to J. H. Billings, West Roxbury, \$2.

Apples—Best Dish.

First premium to F. Clapp, Dorchester, \$2.

Second premium to Richard Richardson, Medway, \$1.

Foreign Grapes.

First premium to J. W. Clark, Dedham, \$4.

Second premium to John Pearce, West Roxbury, \$3.

Native Grapes.

First premium to George Davenport, Dedham, \$3.

Cranberries.

First premium to Nathan Longfellow, Needham, \$3.

Second premium to Mrs. H. P. McIntosh, East Needham, \$2.

Third premium to J. H. Kingsbury, Franklin, \$1.

Hon. Marshall P. Wilder exhibited one hundred varieties of pears. Not for competition.

C. A. HEWINS, *Chairman.*

West Roxbury, Sept. 25, 1863.



REPORT ON FLOWERS.

“ The delicate forest flower,
With scented breath, and look so like a smile,
Seems, as it issues from the shapeless mould,
An emanation of the indwelling life,
A visible token of the upholding love,
That are the soul of this wide universe.”

The show of flowers failed to sustain the well-earned reputation of our Society. Just before the Fair, severe frosts cut off a large proportion of those that are cultivated in gardens. The Massachusetts Horticultural Society, also, held its annual exhibition in Boston on the same day with our Fair. We had depended, to a large extent, on the contributions of the florists from the lower parts of the county, and never before has our confidence been misplaced. It was natural and right that they should take the beautiful products of their gardens and hot-houses to Boston, to be seen by delighted thousands. It was a serious disappointment to us. We hope that arrangements satisfactory to all parties will be made to prevent such an occurrence again.

But though the show lacked the curious and gorgeous plants from conservatories, which from their variety as well as beauty attract attention, we had many excellent flowers of the more common sorts. And we had abundant evidence that the cultivation

of flowers is extending in families and in gardens. As men and women become more intelligent and refined, they are more attracted by the specimens of the Creator's handiwork, which dwell beside our paths and in our homes; and they feel that their admiration and love are justified and repaid. God reveals his overflowing goodness in these humble tokens of his presence.

"Your voiceless lips, O flowers, are living preachers—
Each cup a pulpit, and each leaf a book,
Supplying to my fancy numerous teachers,
From lowliest nook!"

Nor did the Saviour consider them beneath his notice, assuring us that Solomon in his glorious apparel was not arrayed in such attractive loveliness. He appeals to our sense of the beautiful,—a sense developed in some of us with exceeding difficulty. Circumstances, indeed, have much to do with this.

At first our people's energies were fully occupied in procuring the means of sustaining life; then in settling their political institutions; then in enlarging the domain of material civilization, by agriculture and commerce. "Under such considerations the love of utility must be expected to predominate over that of beauty." But when increasing means allowed a more thorough and generous cultivation, a pure taste grew up, and found expression in floriculture. It is seen in the humble ornaments of the garden, and the splendid beauties of the conservatory, and indicates a heart open to impressions from the works of the Divine hand, and an enlightened intellect capable of appreciating them.

"The enamelled earth, that from her verdant breast,
Lavished spontaneously ambrosial flowers,
The very sight of which can soothe to rest
A thousand cares, and charm our sweetest hours."

It is true the most beautiful fail and fade; but not till they have answered their purpose, exciting our admiration, and our thankfulness to the Creator. It may be, too, that we prize them more, knowing how little time we may retain them.

"Loveliest of lovely things are they
On earth, that soonest pass away;
The rose that lives its little hour,
Is prized beyond the sculptured flower."

The Committee, after careful examination of the flowers and bouquets offered for premium, make the following awards:—

Best Collection Cut Flowers—First premium to G. & C. Craft, Brookline, \$4.

Second premium to Macey Randall, Jr., Sharon, \$3.

Third premium to John H. Adams, Milton, \$2.

Bouquets—First and second premiums not awarded.

Third premium to William Dunbar, Canton, \$2.

Fourth premium to Mrs. Hannah P. McIntosh, Needham, \$1.

Twenty named Dahlias—First premium to Macey Randall, Jr., Sharon, \$3.

Single Bloom—William Foster, Milton, \$1.

Gratuities—Mrs. Hannah P. McIntosh, Needham, for Flower Baskets, \$1.

Miss Lizzie J. Watt, West Roxbury, for Cut Flowers, \$2.

Mrs. Hannah P. McIntosh, Needham, for fourteen Asters in Pots, \$1.

Stillman S. Whitney, Dedham, for Jerusalem Cherry Tree, \$1.

A Diploma to Mrs. H. P. McIntosh, Needham, for Cut Flowers.

For the Committee,

ROBERT WATT, *Chairman.*

West Roxbury, Nov. 25, 1863.



REPORT ON RREAD.

Whole number of entries, twenty-eight.

Wheat and Indian—First premium to Miss Elizabeth S. Sewall, of Medfield, \$3.

Second premium to Mrs. N. Longfellow, of Needham, \$2.

Unbolted Wheat—First premium to Miss Elizabeth S. Sewall, of Medfield, \$3.

Second premium to Miss Martha S. Hardy, of Needham (14 years old), \$2.

Rye and Indian—First premium to Miss Lucy Morse, of Medfield, \$3.

Second premium to Mrs. Nathan Longfellow, of Needham, \$2.

White—First premium to Miss Carrie E. Coburn, of Dedham (13 years old), \$3.

Second premium to Mrs. Mary H. Harding, of Medfield, \$2.

Honey—There was but one specimen of honey offered, which was excellent, and the Committee award the first premium, of \$2, to Mr. Nathan Longfellow, of Needham.

For the Committee,

EDMUND QUINCY, *Chairman.*

Dedham, Sept. 25, 1863.

REPORT ON THE DAIRY.

Whole number of contributors, eleven.

Butter—First premium to Mrs. John Mansfield, of Needham, for the best produce of not less than 20 pounds, \$10.

Second premium to A. W. Cheever, of Wrentham, \$8.

First premium to Ruel Ware, of Needham, for the best box of butter of not less than 12 pounds, \$5.

Second premium to Lucy Morse, of Medfield, \$3.

Third premium to Lyman Adams, of Medway, Flint's Treatise on Dairy Farming.

Cheese—Whole number of contributors, two.

First premium to Ruel Ware, of Needham, \$5.

Second premium to Henry Bird, of Stoughton, \$3.

For the Committee,

J. W. GAY, *Chairman*.

Dedham, Sept. 25, 1863.



REPORT ON NATIVE WINES, JELLIES, PRESERVES, &c.

Whole number of contributors, two.

The Committee award a diploma to Mr. H. L. Stone, of Grantville, for two bottles of superior Tomato Wine, there being no premium offered for that article.

Mr. Stone also offered two bottles of Black Currant Wine, of good quality, but not having been manufactured within the past year, it did not come within the rules of the Society.

For the Committee,

GEORGE VOSE, *Chairman*.

Milton, Sept. 25, 1863.



REPORT ON HORSES.

The Committee on Horses have attended to the duties assigned them, and report as follows:—

The Committee made a special effort to secure a full attendance of the "Equine race" at this exhibition, and it is left for the Society to judge of our success by the entries made and the attend-

ance. We would like to call the attention of those who have horses to exhibit, and wish to enter them as "roadsters," that they must be broke to harness, so that the Committee may judge of their merits and general good qualities. We cannot do justice to a really deserving horse, unless he is able to be moved over the track freely and easily. The owner may know his ancestry, and expect great things from the known good qualities of his "sire" and "dam," but the Committee must judge from what they see. Many are entered under this class that are not broke even to the saddle. We would recommend that those hereafter who intend to show their horses at our annual exhibitions should carefully peruse the rules and regulations of the Society, and examine the premium lists for the different classes, and decide beforehand under what class they will have them entered. It will save much trouble and give universal satisfaction.

We are satisfied that the exhibition may be made more profitable and interesting from year to year to all concerned, by a little extra effort on the part of the several Committees, co-operating as they have this year. Old Norfolk boasts of as good stock of "roadsters" as can be found in the State, and, by a judicious policy, they can be brought out. Suggestions will be made at the next meeting of the Society that will more fully develop the wants of the county and the interests of the members.

We find on the several "Books of Entry," under the four classes and fifteen divisions, eighty-one entries, as follows:—Under class A, 40; under class B, 8; under class C, 26; under class D, 7. Annexed will be found the awards made by the several Committees.

CLASS A—ROADSTERS.

Stallions—To Oliver Dean, of Canton, for his black stallion, "John Franklin," first premium, \$10.

To John S. Eldridge, of Canton, for his imported English thoroughbred, "Treasurer," the Society's diploma. Unfortunately the Society had no place among the several classes assigned for this noble horse to compete. Not being broke to harness, he could not be driven over the track, to show his travelling qualities.

Brood Mares, with Foal at side—To Amos A. Lawrence, of Brookline, for the best brood mare, first premium, \$7.

To Gibson Willard, of Medfield, second premium, \$5.

To E. R. Andrews, of West Roxbury, third premium, \$3.

Colts and Fillies—To Peter B. Prescott, of Dorchester, for the best three years' old, first premium, \$5.

To Charles Kingsbury, of Medway, second best, second premium, \$3.

To Levi Mann, of North Wrentham, third best, third premium, \$2.

On two years' old, the second premium of \$2 was awarded to Frederick Freedmonth, of Needham. None worthy of the first premium were offered, in the estimation of the Committee.

To Albert S. Payson, of Foxboro', for the best one year old, first premium, \$3.

To Nicholas Lunt, of South Dedham, second premium, \$2.

To J. S. Eldridge, of Canton, third premium, \$1.

Pairs in Harness—To Richard Holmes, of Roxbury, for his pair of sorrels, ranking No. 1, diploma. He having taken the first premium of the Society on the same horses last year, according to the rules of the Society it could not be awarded to him this, but the "rank" and Society's diploma he is entitled to.

Harness Horses—To Hiram Gay, of Stoughton, for his trotting sorrel, first premium, \$7.

To George A. Fenno, of Roxbury, for his gray Morgan, second premium, \$5.

To Hiram Jones, of Stoughton, for his gray horse, third premium, \$3.

To Bradford Kinsley, of Stoughton, for his black mare, fourth premium, \$2.

There has never been a time when so many good roadsters have been present at our Annual Exhibition. There were many worthy of special mention, that showed themselves strong and powerful as well as fleet of foot; and your Committee must say that the time and place was not ample to do them justice, and we trust that arrangements will be made another year to give this class of horses more time and space to show themselves. By some misunderstanding, some family horses were classed among the roadsters, and were thereby debarred from competing with their own class. It was discovered too late to change. The Committee would gladly have done so, if it had been in their power. As it was, the fault was not at their door.

CLASS B—HORSES OF ALL WORK.

Stallions—To S. T. Willard, of Medfield, for his four years' old sorrel, third premium, \$5.

No others offered.

Brood Mares, with Foal at side—To Reuben Clapp, of Sharon, for the best mare and colt, first premium, \$7.

To John S. Eldridge, of Canton, second premium, \$5.

Colts and Fillies—To James Dean, of Dedham, for his three years' old chestnut mare, "Fanny," first premium, \$5.

To Dr. E. P. Burgess, of Dedham, for his two years' old stallion, second premium, \$3.

To Patrick McFreeman, of South Walpole, for his one year old, first premium, \$5.

CLASS C—FAMILY HORSES, ETC.

The Committee award as follows :—

First division, to John S. Eldridge, of Canton, for the best pair of carriage horses, "Hamiltonians," first premium, \$10.

To John S. Fogg, of South Weymouth, for his pair of blacks, second premium, \$7.

To W. A. Shaw, of South Weymouth, for his pair of bays, third premium, \$5.

To I. B. Dinsmore, of Roxbury, for his pair of bays, diploma.

To Albert Tirrell, of South Weymouth, for his fine pair of bays, diploma.

Buggy or Chaise Horses—To F. B. Ray, of Franklin, for his sorrel Messenger, first premium, \$8.

To James Hill, of Stoughton, for his brown horse, second premium, \$6.

To J. S. Eldridge, of Canton, for his black horse, third premium, \$4.

Saddle Horses—For the best saddle horse, to N. W. Warren, for his brown horse, first premium, \$6. This horse was rode by Superintendent, E. Tucker.

To Albert D. Nason, of Franklin, brown horse, second premium, \$4. This horse had seen service, having been rode by a New York Colonel in the army.

To B. R. Ballou, of Stoughton, for his gray Morgan, third premium, \$2.

Your Committee award to Miss Stevens, of Jamaica Plain, and Miss Zane, of Needham, each a diploma, for their "horsemanship." Also a diploma to Albert Drake, of Stoughton, for his bay Morgan mare.

For the best walking horse, to J. G. Ray, of Franklin, first premium, \$7.

For the best single pony, to A. Barnard, of Wrentham, first premium, \$3.

Your Committee would take this occasion to thank Mr. James Gray, of Wellesley, for the interest he manifested in our Society by allowing his fine Kentucky mare to run over the track, and will endeavor to match her, if he shall see fit to present her again at any future exhibition.

We would also state that we could not do justice to ourselves

on the buggy and chaise horses presented. It was impossible to get them together. We would therefore recommend that they be disposed of the first day in future, as it is well known that the public desire to see the roadsters on the second day.

CLASS D—TEAM HORSES.

For the best team horse, to James McLane, of Dedham, for his sorrel mare, four years old, first premium, \$7.

For the second best team horse, to Amory Fisher, of Dedham, for his gray horse, five years old, \$5.

To C. A. Bigelow, of Dover, for his fine gray horse, diploma.

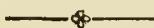
The Committee would call the attention of the people in Norfolk County to that class of horses known as "saddle horses," and would express the hope that another year a greater number will be presented. For in no place does a good horse look so well, and show himself to so good an advantage, as under the saddle of a skillful rider. It is an easy, "every day gait," with which we wish to see them move on the track, such as would be safe for a lady to ride, unaccompanied by a gentleman.

We would say to those who entered their horses under the class of roadster and family horses, that the time allowed them was not sufficient for the Committee to do them justice, on account of the rain coming on as it did. We, therefore, desire those interested to pardon whatever seemed amiss, and assure them that our good will was with them.

For the Committee,

WILLIAM R. MANN, *Chairman.*

Sharon, Sept. 28, 1863.



REPORT ON BULLS.

Whole number of entries, seventeen.

Durham—First premium to E. W. Clapp, of Walpole, \$5.

Devon—Second premium to Wm. C. Allen, of Medfield, \$3.

Ayrshire—First premium to Allen Brothers, of Medfield, \$5.

Second premium to Joshua Wilkins, of Dorchester, \$3.

Kerry—First premium to Arthur W. Austin, of West Roxbury, \$5.

Jersey—First premium to Allen Brothers, of Medfield, \$5.

Second premium to J. G. Ray, of Franklin, \$3.

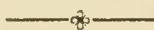
Grade—First premium to George F. Richards, of Dedham, \$3.
Second premium to Jesse Farrington, of Dedham, \$2.

Best Bull Calf under one year old, foreign stock—First premium to W. T. G. Morton, of Needham, for his two months' old Jersey calf, \$3.

For the Committee,

ABNER L. SMITH, *Chairman*.

Dover, Sept. 25, 1863.



REPORT ON WORKING OXEN.

Second premium to Luther Eaton, of Dedham, \$4.

Third premium to William Fales, of Dedham, \$2.

JEREMIAH W. GAY, *Chairman*.

Dedham, Sept. 25, 1863.



REPORT ON FAT CATTLE.

Number of entries, four.

First premium to Obed Baker, of West Dedham, \$8.

Second premium to James Colburn, of West Dedham, \$6.

For the Committee,

ABIATHAR RICHARDS, *Chairman*.

Dedham, Sept. 25, 1863.



REPORT ON COWS.

The Committee on Cows, in presenting their report, regret to be compelled to say that many very superior animals were ruled out from competition for premiums, in consequence of non-compliance with the imperative rules of the Society. The following premiums were awarded:—

Best Cow of foreign stock—First premium to Jonathan French, of Roxbury, for Jersey cow Rose, \$5.

Second premium to J. G. Ray, of Franklin, cow Mayday, \$4.

Third premium to J. S. Eldridge, of Canton, Jersey cow, \$3.

Grade—First premium to M. P. Wilder, of Dorchester, \$5.

Second premium to A. A. Lawrence, of Brookline, \$4.

Third premium to Abner Alden, of Dedham, \$3.

Milk Cows—First premium to Wm. T. G. Morton, of Needham, \$8.

Second premium to Wm. T. G. Morton, of Needham, \$6.

Third premium to J. G. Ray, of Franklin, \$4.

Fourth premium to A. A. Lawrence, of Brookline, \$2.

Milk Heifers—First premium to J. S. Eldridge, of Canton, \$6.

Second premium to Wm. T. G. Morton, of Needham, \$4.

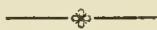
Third premium to J. S. Eldridge, of Canton, \$2.

Herds—First premium to J. S. Eldridge, of Canton, \$12.

Second premium to W. T. G. Morton, of Needham, \$8.

ELISHA P. CHAPMAN, *Chairman*.

Franklin, Sept. 25, 1863.



REPORT ON HEIFERS.

Whole number of contributors, twelve.

Jersey, two years and under three—First premium to John S. Eldridge, of Canton, \$3.

Jersey, one year and under two—First premium to John S. Eldridge, of Canton, \$2.

Second premium to W. T. G. Morton, of West Needham, \$1.

Jamestown, one year and under two—First premium to J. W. Gay, of Dedham, \$2.

Second premium to Miss A. Clarke, of Milton, \$1.

Ayrshire, two years and under three—First premium to P. O'Neal, of West Roxbury, \$3.

Ayrshire, one year and under two—First premium to Joseph O'Neal of West Roxbury, \$2.

Devon—First premium to Allen Brothers, of Medfield, \$3.

Second premium to Allen Brothers, of Medfield, \$2.

Durham—First premium to Allen Brothers, of Medfield, \$3.

Native, one year and under two—First premium to J. W. Clark, of Dedham, \$2.

Grade—First premium to H. O. Hildreth, of Dedham, \$3.

Second premium to Jason Houghton, of Milton, \$2.

Third premium to Jonathan French, of Roxbury, \$1.

EPHRAIM WILSON, *Chairman*.

Dover, Sept. 25, 1863.

REPORT ON SHEEP.

The Committee appointed to award premiums on Sheep for the Norfolk Agricultural Society, at the Show of 1863, report as follows :

Edward R. Andrews, of West Roxbury, presented a Cotswold ram and five ewes for the premium offered for the best lot of sheep ; also, two lots of lambs (grade Cotswolds) for the premiums offered under that head. There was no other claimant for these premiums ; yet the Committee, believing that the merit possessed by Mr. Andrews' sheep would justify it, have awarded to him the first premium of \$8 on the sheep ; the first premium of \$5 on one of the lots of lambs, and the second premium of \$3 on the other lot.

The ram above mentioned was last year the recipient of the premium offered by the Society for the best ram, and is, therefore, ineligible for that premium ; but in accordance with the Society's rules, the Committee award a diploma, certifying that he is the best on exhibition.

J. G. Ray, of Franklin, presented four Chinese sheep. They could not compete for any premium offered by the Society. The Committee would tender their thanks to Mr. Ray for sending these sheep to the exhibition, thus affording an opportunity for many people to see them who probably never saw any of this curious breed before. They are chiefly valuable for their prolific habits, producing from two to four lambs at a birth, and breeding as often as they can, consistently with the period of gestation, five months. They belong to the *fat-tailed* tribe of sheep, though their tails are not as large as those of some varieties of the tribe. They seem to fatten easily, though the fat is chiefly accumulated about the tail and along the rump,—it being sometimes quite thick in these parts, when other parts are comparatively destitute of fat, and thin of flesh. The wool is soft, silky and glossy, but is mixed more or less with short, stiff hairs, which much reduce the value of the fleece for manufacturing purposes.

For the Committee,

SANFORD HOWARD, *Chairman.*

Dedham, Sept. 25, 1863.



REPORT ON SWINE.

Boars—First premium to W. T. G. Morton, of Needham, \$5.
Second premium to E. W. Clap, of Walpole, \$3.

Sows—First premium to W. T. G. Morton, of Needham, \$5.
Second premium to W. T. G. Morton, of Needham, \$3.

Weaned Pigs—First premium to W. T. G. Morton, of Needham, \$5.

Second premium to Solomon Flagg, of Needham, \$3.

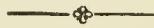
Eat Hogs—First premium to Samuel Beless, of Needham, \$5.

Second premium to Samuel Beless, of Needham, \$3.

Third premium to W. T. G. Morton, of Needham, \$2.

JAMES CAPEN, *Chairman*.

Foxboro', Sept. 23, 1863.



REPORT ON LIVE FOWLS.

Black Spanish—First premium to Eben Wight, of Dedham, \$2.

Second premium to E. B. Ward, of Dedham, \$1.

Shanghai—First premium to James Farrington, of Dedham, \$2.

Bolton Gray—Second prem. to Supply Clapp, of Dedham, \$1.

Bantams—First premium to S. S. Whitney, of Dedham, \$2.

Second premium to Timothy Mack, of Dedham, \$1.

Dorkings—First premium to Eben Wight, of Dedham, \$2.

Turkeys—First premium to Lemuel Kingsbury, of Needham, \$3.

Geese—First premium to W. T. G. Morton, of Needham, \$3.

Ducks—First premium to W. T. G. Morton, of Needham, \$3.

Second premium to Eben Wight, of Dedham, \$2.

Pigeons—First premium to James Dean, of Dedham, \$2.

Second premium to Geo. D. Houghton, of Milton, \$1.

ELISHA P. CHAPMAN, *Chairman*.

Franklin, Sept. 25, 1863.



REPORT ON PLOWING.

DOUBLE OX TEAMS.

Whole number of entries, three.

Second premium to Luther Eaton, of Dedham, (Ames's Plow, No. 155,) \$8.

Third premium to Moses Whiting, of Dedham, (Michigan Sod and Subsoil Plow, No. 134,) \$6.

Fourth premium to William Fales, of Dedham, (Eagle Plow, No. 20,) \$4. NATHAN LONGFELLOW, *Chairman*.

Needham, Sept. 25, 1863.

DOUBLE HORSE TEAMS.

Whole number of entries, two.

First premium to Sawin & Bigelow, of Dover, (Whittemore & Belcher's Universal Plow, No. 20,) \$10.

First premium with Michigan Sod and Subsoil Plow, to Luther Eaton, of Dedham, \$10.

HENRY GOULDING, *Chairman.*

Dover, Sept. 25, 1863.

SINGLE OX TEAMS.

The Committee on Plowing with single ox teams report that Mr. Dan'l Sullivan, of Dover, was the only person who entered for a premium, and they were unanimous in awarding him the first one of \$6. Mr. Sullivan was plowman and driver, using a plow from the establishment of Whittemore, Belcher & Co., called the "Doe No. E, 4." Mr. Sullivan also made an entry last year and obtained the 2d premium. At that time he had owned his team but a few days, and the Committee in speaking of that circumstance, then used the following language. "Mr. S. had owned his cattle but a short time, consequently they did not move so well as they probably would have done, had he owned them longer." He had the same oxen this year, and their movements fully verified the truth of that prediction. They appeared to be well trained, travelled in good style, and without much effort of the driver to guide them, plowed with ease the lot assigned them in forty minutes. The last furrow in particular, which requires the most skill, was very well turned. In short, the performance throughout was quite creditable to Mr. Sullivan and gratifying to the Committee.

For the Committee,

ELIJAH TUCKER, *Chairman.*

Milton, Sept. 25th, 1863.

SINGLE HORSE TEAMS.

First premium to John Bennett, of Dorchester, (Eagle Plow, No. 50,) \$6.

Second premium to Henry Goulding, of Dover, (Prouty & Mears's Plow, No. 155,) \$4.

Third premium to William F. Lynch, of Dedham, (Doe E Plow, No. 4,) \$2.

H. L. STONE, *Chairman.*

Needham, Sept. 25, 1863.

REPORT ON SPADING.

Whole number of entries, six.

First premium to Francis Rooney, of Dedham, \$5.

Second premium to Dennis Doody, of Dorchester, \$4.

Third premium to Timothy Murphy, of Dorchester, \$3.

Fourth premium to Morris Maloney, of Dorchester, \$2.

Fifth premium to John Foot, of Dorchester, \$1.

For the Committee,

ROBERT WATT, *Chairman.*

West Roxbury, Sept. 25, 1863.



REPORT ON AGRICULTURAL IMPLEMENTS.

The Committee on Agricultural Implements submit the following report:—

To Whittemore, Belcher & Co., of Boston, for the largest and best collection of agricultural implements, the first premium of \$12.

To Parker, Gannett & Osgood, of Boston, the second premium of \$8.

With the above, Whittemore, Belcher & Co. presented the "Union Mowing Machine," and Parker, Gannett & Osgood, the "Buckeye Mowing Machine." For the other classes of premiums in this department no entries were made.

CYRUS STEDMAN, *Chairman.*

Medfield, Sept. 28, 1863.



REPORT ON NEW INVENTIONS.

In this department the following contributions are noticed:—

Bailey's Patent Washing and Wringing Machine, by George Coolidge, of Boston.

Bay State Clothes Wringer, by John C. Clapp, of Boston.

Metropolitan Universal Clothes Wringer, by T. F. Shattuck, of Dedham.

The Empire Clothes Wringer, by Young & Co., of Boston.

Clothes Wringer, by Albert Mowry, of North Bridgewater.

All these clothes wringers have their claims, but the Committee

had no opportunity to test their practical operations, therefore cannot discriminate as to the relative merits of each.

C. Stedman and Joel Morse, of Medfield, exhibited Newland's Patent Corn Sheller.

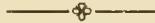
Wm. B. Wadman, of Boston, offered his Patent Oscillating Coal Sifter.

S. R. Streeter, of Boston, offered the model of Howe & Murdock's Stump Extractor, or Lifting Jack. This implement would seem to combine many desirable qualities, not only to the farmer but to the mechanic. It can be used for extracting stumps and for raising heavy bodies. If it can accomplish all that is claimed for it, it should meet with favor by all who desire such an implement. The fact that the several Navy Yards are to be supplied with them, speaks well for their value as a Lifting Jack, and the same principle which makes them of utility in this capacity, will recommend them to the farmer as a Stump Extractor.

For the Committee,

CYRUS STEDMAN, *Chairman.*

Medfield, Sept. 28, 1863.

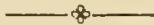


REPORT ON CARRIAGES.

There were but two carriages entered, one carryall and one milk wagon, both by S. E. Morse, of Dedham. The Committee would recommend a premium of \$2 on the carryall; also, a premium of \$3 on the covered milk wagon, it being a very nice and convenient carriage for the use for which it is designed.

SANFORD CARROLL, *Chairman.*

Dedham, Sept. 25, 1863.



REPORT ON MANUFACTURES OF LEATHER.

The Committee award a premium to Alfred Allwright, of Dedham, for best pair of thick boots, and the Society's diploma for the best pair of calf boots.

For the Committee,

JOSEPH DAY, *Chairman.*

Dedham, Sept. 25, 1863.

REPORT ON LADIES' WORK.

The Committee report fifty-nine entries, and award the following premiums :—

Mrs. Nancy March, of Sharon, for three bed-quilts of patch work, \$1.50.

Miss C. Smith, of South Dedham; aged 75, one patch work quilt, 75 cents.

Mrs. J. S. Luce, of Sharon, one bed-quilt, very nicely quilted, \$1.

Mrs. Walter White, of Dedham, one crocheted table cover, 75 cents.

Miss Belle Boyd, of Rockville, Medway, one crocheted shawl, 50 cents.

Miss Olive W. Smith, of South Dedham, two cone frames, 50 cents.

Miss Maria Phillips, of West Dedham, shell frame and pressed flowers, 50 cents.

Mrs. A. E. Gardner, of West Dedham, shell flowers and moss, very beautifully arranged, the Society's diploma.

Miss Elizabeth S. Sewall, of Medfield, embroidered ottoman covers, very handsome, \$1.

Mrs. J. C. Brooks, of Dedham, ottoman cover, (raised work,) 50 cents.

Miss Sarah A. Ellis, of Dedham, two crayon drawings, ("Evangeline" and "The Twins,") \$1.

Miss Jennie A. Richards, of Dover, crayon and pencil drawings, \$1.

Miss Julia M. Hamant, of Medfield, for worsted work, slippers and ottoman cover, 50 cents.

Mr. J. H. Clement, of Dedham, a rigolette, knit by him, after the amputation of his leg, while in the hospital, 50 cents. Although this was not knit by a lady, we gladly welcome such specimens to our tables. We feel assured that the knitter must have wiled away the tedious hours of convalescence by pleasant musings.

Mrs. H. T. Ward, of Roxbury, a very neatly embroidered travelling bag, \$1.

Miss Lucy M. Carroll, of Foxboro', crocheted chair tidy, 50 cts.

Mrs. W. D. Hennessy, of Roxbury, one embroidered skirt, very neatly done, \$2.

Mr. H. E. Hill, of South Dedham, a card box of sawed fret work, *very neatly made*, a diploma.

Miss Urry, of Dedham, two very handsome crocheted chair tidies, 75 cents.

Mrs. H. W. Robinson, of Roxbury, knit articles for an infant, (socks, cap and jacket,) 50 cents.

Miss Jenny White, of Weymouth, one bead sofa cushion and a bible cushion, \$1.

Mrs. James Farrington, of Dedham, one pair of knit linen hose, and one pair of soldier's socks, very nicely knit, 75 cents.

Miss Bridget Crowe, of Dedham, open-work hose, 33 cents.

Miss Eliza Marshall, of Dedham, tatting collars, neatly made, 25 cents.

Miss Sarah A. Ellis, of Walpole, tatting collars, 25 cents.

Mrs. J. L. Luce, of Sharon, one pair of knit worsted hose, 50 cents.

Miss Sarah J. Boyd, of Rockville, Medway, one bead embroidered handkerchief box, *very neatly finished*—the quilting in the inside was very evenly done, \$2.

Mrs. J. C. Brooks, of Dedham, one hair wreath, very beautiful, \$2.

Mrs. Edward Hutchins, of Dedham, embroidered articles, \$1.

Miss Hattie Curtis, of Dedham, child's dress, braided and crochet work, 50 cents:

Miss Ella Boyd, of Dedham, embroidered slippers, 25 cents.

Miss A. C. Gardner, of West Dedham, one infant skirt, embroidered, \$1.

Miss Lizzie B. Endicott, of Dedham, aged 12 years, one rag rug, 50 cents.

Some toy furniture made from pine boughs attracted much attention.

Mrs. Betsy Baker sent in some book marks, which were neatly made.

In awarding the above premiums, regard was especially had to those which were neatly made and evenly embroidered. Most of the articles on exhibition were from Dedham, and nearly all of the ornamental order. We were sorry to see no more *useful* articles. There is an especial premium awarded by the Society for specimens of plain sewing, neatly finished, and we would urge the parents of this county to encourage their children in plain sewing or neat mending, materials for which are within the means of every family in the county, and emulation in this department is certainly worthy of attention. A child who acquires the habit of sewing neatly and finishing neatly will also acquire facility in the use of the needle, and when the attention is turned to ornamental work, of course, that will be of a superior order. "The war" and "our soldiers" are the all-absorbing topic with our people, and

the effect is seen in the agricultural exhibitions in this and adjoining counties. May the time soon come when swords shall be beaten into plowshares, and peace and the advancement of the arts of peace, resume their wonted sway, and our nation learn war no more.

For the Committee,

MRS. R. RICHARDSON, *Chairman.*

Medway, Sept. 28, 1863.

RECAPITULATION OF PREMIUMS

AWARDED BY THE

NORFOLK AGRICULTURAL SOCIETY, FOR 1863.

FARMS.		BREAD.	
Walter H. Fisher,	\$25.00	Elizabeth S. Sewall,	\$6.00
EXPERIMENTS ON MANURES.		Mrs. N. Longfellow,	4.00
Charles Breck,	\$25.00	Lucy Morse,	3.00
A. D. Weld,	20.00	Carrie E. Coburn,	3.00
VEGETABLES.		Martha S. Hardy,	2.00
Ephraim Wilson,	\$3.00	Mary H. Harding,	2.00
G. H. Houghton,	2.00	DAIRY.	
O. Kennedy,	1.00	Mrs. John Mansfield,	\$10.00
F. Friermont,	1.00	Renel Ware,	10.00
FRUIT.		A. W. Cheever,	8.00
A. D. Weld,	\$7.00	Lucy Morse,	3.00
Samuel Gilbert,	4.00	Henry Bird,	3.00
J. W. Clark,	4.00	HONEY.	
Ephraim Wilson,	3.00	N. Longfellow,	2.00
John Pearce,	3.00	HORSES.	
George Davenport,	3.00	John S. Eldridge,	\$20.00
Nathan Longfellow,	3.00	Oliver Dean,	10.00
Henry Goulding,	2.00	F. B. Ray,	8.00
J. H. Billings,	2.00	A. A. Lawrence,	7.00
Frederick Clapp,	2.00	Hiram Gay,	7.00
H. P. Mackintosh,	2.00	Reuben Clapp,	7.00
R. Richardson,	1.00	John S. Fogg,	7.00
J. H. Kingsbury,	1.00	J. G. Ray,	7.00
FLOWERS.		James McLane,	7.00
Macey Randall, Jr.,	\$6.00	James Hill,	6.00
G. & C. Craft,	4.00	N. W. Warren,	6.00
H. P. McIntosh,	3.00	Gibson Willard,	5.00
John H. Adams,	2.00	S. T. Willard,	5.00
William Dunbar,	2.00	Peter B. Prescott,	5.00
Lizzie J. Watt,	2.00	George A. Fenno,	5.00
William Foster,	1.00	James Dean,	5.00
Stillman S. Whitney,	1.00	Patriek McFreeman,	5.00

William A. Shaw,	5.00		
Amory Fisher,	5.00		
Albert D. Nason,	4.00		
E. R. Andrews,	3.00		
Charles Kingsbury,	3.00		
Albert S. Payson,	3.00		
Hiram Jones,	3.00		
Ebenezer P. Burgess,	3.00		
Alfred Barnard,	3.00		
Levi Mann,	2.00		
F. Freedmonth,	2.00		
Nicholas Lunt,	2.00		
Bradford Kinsley,	2.00		
B. R. Ballou,	2.00		
BULLS.			
Allen Brothers,	\$10.00		
Edmund W. Clap,	5.00		
Arthur W. Austin,	5.00		
William C. Allen,	3.00		
Joshua Wilkins,	3.00		
J. G. Ray,	3.00		
George F. Richards,	3.00		
W. T. G. Morton,	3.00		
Jesse Farrington,	2.00		
WORKING OXEN.			
Luther Eaton,	\$4.00		
William Fales,	2.00		
FAT CATTLE.			
Obed Baker,	\$8.00		
James Colburn,	6.00		
COWS.			
W. T. G. Morton,	\$26.00		
John S. Eldridge,	23.00		
J. G. Ray,	8.00		
A. A. Lawrence,	6.00		
Jonathan French,	5.00		
M. P. Wilder,	5.00		
Abner Alden,	3.00		
HEIFERS.			
Allen Brothers,	\$8.00		
J. S. Eldridge,	5.00		
P. O'Neal,	3.00		
H. O. Hildreth,	3.00		
J. W. Gay,	2.00		
Joseph O'Neal,	2.00		
J. W. Clark,	2.00		
Jason Houghton,	2.00		
W. T. G. Morton,	1.00		
Miss A. Clarke,	1.00		
Jonathan French,	1.00		
			SHEEP.
		E. R. Andrews,	\$16.00
		SWINE.	
		W. T. G. Morton,	\$20.00
		Thomas Beless,	8.00
		E. W. Clap,	3.00
		Solomon Flagg,	3.00
		POULTRY.	
		Eben Wight,	\$6.00
		W. T. G. Morton,	6.00
		Lemuel Kingsbury,	3.00
		James Farrington,	2.00
		S. S. Whitney,	2.00
		James Dean,	2.00
		C. B. Ward,	1.00
		Supply Clapp,	1.00
		Timothy Mack,	1.00
		Geo. D. Houghton,	1.00
		PLOWING.	
		Luther Eaton,	\$18.00
		Sawin & Bigelow,	10.00
		Moses Whiting,	6.00
		Daniel Sullivan,	6.00
		John Bennett,	6.00
		William Fales,	4.00
		Henry Goulding,	4.00
		William F. Lynch,	2.00
		SPADING.	
		Francis Rooney,	\$5.00
		Dennis Doody,	4.00
		Timothy Murphy,	3.00
		Morris Maloney,	2.00
		John Foot,	1.00
		AGRICULTURAL IMPLEMENTS.	
		Whittemore, Belcher & Co.,	\$12.00
		Parker, Gannett & Osgood,	8.00
		CARRIAGES.	
		S. E. Morse,	\$5.00
		LEATHER WORK.	
		Alfred Allwright,	\$3.00
		LADIES' WORK.	
		See pp. 52, 53.	\$25.08
			<hr/> \$717.08

TREASURER'S REPORT.



C. C. CHURCHILL, *Treasurer, in account with Norfolk Agricultural Society.*

	DR.
Balance in Treasury, Nov. 30, 1862,	\$119.29
Cash received from new members,	94.00
“ “ from Commonwealth,	600.00
“ “ net proceeds of Exhibition, 1863,	676.33
	\$1,489.62



	CONTRA.	CR.
Cash paid incidental expenses,		\$426.68
“ “ premiums,		484.00
“ “ salary of Recording Secretary,		50.00
“ “ “ “ Treasurer,		25.00
“ “ interest,		312.00
“ “ in Treasury,		191.94
		\$1,489.62

C. C. CHURCHILL, *Treasurer.*

Dedham, Nov. 30, 1863.

ORDER OF EXERCISES
AT THE
AGRICULTURAL HALL,
ON THE OCCASION OF THE
FIFTEENTH ANNIVERSARY
OF THE
NORFOLK AGRICULTURAL SOCIETY,
Friday, September 25, 1863.

AT 12 o'clock, a procession was formed on the grounds under the direction of Rufus C. Wood, of Canton, Chief Marshal of the day, assisted by the following gentlemen as Aids:—Joseph W. Wattles, Frank M. Ames, and George A. Fenno, of Canton; Hiram Gay, J. R. Gay, and Bradford Kinsley, of Stoughton; and Chas. G. Mackintosh, of W. Roxbury. Preceded by the Dedham Brass Band, which furnished excellent music for the occasion, the procession marched to the upper hall, where, after an appropriate prayer by Rev. Jonathan Edwards, of Dedham, Chaplain of the day, the audience proceeded to partake of the collation.

At the conclusion of the dinner, John Gardner, Esq., of Dedham, senior Vice President of the Society, who occupied the chair in the absence of the President, made a brief and appropriate introductory address, in which he paid a feeling tribute to the distinguished services which the President had rendered to the Society, and alluded to the deep interest which, though absent, he felt in its welfare and prosperity. He closed by introducing Rev. Dr. Putnam, of Roxbury, as the orator of the occasion.

Dr. Putnam then proceeded to deliver the instructive, beautiful and impressive address, which may be found in the preceding

pages of this volume, and which was listened to with the deepest attention to the close, when the audience testified their appreciation by prolonged applause.

The following hymn, written for the occasion by Rev. Charles C. Sewall, of Medfield, Corresponding Secretary of the Society, was then sung by the audience, under the direction of Samuel B. Noyes, Esq., of Canton, to the tune of St. Martins.

HYMN.

To plant and till, O Lord! is ours;
 To give the increase, thine;
 In vain we toil, for countless hours,
 Without thy help divine.

The harvest we are reaping now,
 Thy gracious aid declares;
 But poorly with it, seest Thou,
 Our gratitude compares.

O, touch the hearts unmoved before;
 The thoughtful more impress;
 That all may feel, and all adore
 Thy constant faithfulness.

Our trust revive; our faith increase,
 Since Thou art always true;
 Nor will thy goodness ever cease
 Its gifts to grant anew.

And let our lives, henceforth, O Lord!
 Be consecrate to Thee,
 Till Heaven-reapt harvests the reward
 Of our devotion be.

The following regular toasts were then read by the President:—

1. THE COMMONWEALTH—Consecrated by glorious memories, exalted by noblest institutions, held dear by every patriot citizen; her honor, her loyalty and her proudest name have been fully sustained by the administration of her Executive, through a period of difficulties unexampled, and of labors unsurpassed.

His Excellency Governor Andrew, was expected to be present and respond to this sentiment, but he being absent from the State, the President called upon Hon. James Ritchie, of Roxbury, who made a brief, but most happy and eloquent response, which was warmly applauded.

2. THE COLLEGES OF NEW ENGLAND—Fountains of learning, of patriotism, and of true manliness; the lights sent forth from their halls shine only to benefit mankind.

This toast was responded to by Rev. Dr. Hill, President of Harvard College, in an excellent speech, in which he spoke of the true and reciprocal relations which exist between Education and Agriculture, and the importance and necessity of a proper recognition of those relations.

3. THE CLERGY—They sow the good seed, the fruits of which shall ripen in the sunshine and swell the harvests of eternity.

Rev. Jonathan Edwards, of Dedham, briefly and happily responded.

4. WOMAN—Inseparably associated, in every feeling heart, with the memories of home, the sanctities of religion and the best sympathies of humanity; with our purest enjoyments and our brightest hopes.

The President called upon Rev. Mr. Bailey, of Dedham, who, though unexpectedly called out, responded in a most felicitous manner, alluding in eloquent and feeling terms to the heroic sacrifices which the women of the North and the West had made in behalf of the cause of their country, and paid to the sex an earnest tribute of respect and gratitude.

The exercises at the table having been concluded, the members adjourned to the track, where the day's performance closed with the display of horses.

Viewed as a whole, the Exhibition was a decided success; a fact the more gratifying, as, owing to the peculiar circumstances under which it was held, grave fears were felt that it would fall far behind those of former years. The enforced absence of the President, Hon. Marshall P. Wilder, whose genial and inspiring presence, and whose hearty and generous co-operation have done so much to make these Farmers' Gatherings the happiest occasions of the year, was every where felt, and the many tender and solicitous inquiries which were made concerning him, testified, in the strongest manner, to the deep regard and affection in which he is held by the whole community. May another year's revolving sun witness his restoration to health and strength, and his return to that sphere of eminent usefulness which, for so many years, he has dignified and adorned.

Another source of anxiety arose from the fact that the Exhibition of the Massachusetts Horticultural Society, one half of whose contributions are from Norfolk County, was held at the same time in Boston. As it was, many of those who have usually sent large contributions to the Exhibition, were this year entirely unrepresented, owing to their being obliged to send to the show in Boston. When, in addition to this great drawback, the peculiar unfruitfulness of the season, the early frosts, and the great scarcity of laborers, is taken into the account, the members of the Society have great reason for congratulation in the fact, that not only were some important departments of the Exhibition better represented than ever before, but the receipts were much greater than those of last year, being largely in excess of the expenses.

The entire proceedings of the two days were characterized by good order and decorum, for much of which, great credit is due to the Chief Marshal and his Assistants, whose responsible duties were performed in the most admirable manner.

Officers of the Society.

1863.



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THE
FIFTEENTH ANNUAL
CATTLE SHOW AND FAIR

OF THE
Norfolk Agricultural Society,

WILL BE HOLDEN

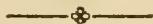
AT DEDHAM,

ON

Thursday and Friday, Sept. 24 & 25, 1863.



☞ The Trustees invite the Agriculturists, Mechanics, Manufacturers, Horticulturists, and Ladies of the County, to join their endeavors to render it worthy of the patronage of the Commonwealth, and creditable to themselves.



BOSTON:
J. M. HEWES, PRINTER, 81 CORNHILL.
1863.

Norfolk Agricultural Society.

[SUCCESSFUL COMPETITORS MAY RECEIVE THEIR PREMIUMS IN PLATE
OR MONEY, AT THEIR OPTION.]

LIST OF PREMIUMS FOR THE YEAR 1863.

FARMS.

EXPERIMENTS AND IMPROVEMENTS THEREON.

PROGRESSIVE HUSBANDRY.

For the best conducted and most improved Farm during five consecutive years, commencing in the year 1861,—of which the occupant shall present annually to the Trustees a satisfactory account of the whole management of the Farm,—of the crops produced, of the improvement made and of the stock kept,—a premium of *One Hundred Dollars*, to be paid in 1866.

NOTE. Whenever any farm shall be entered for this premium, the Secretary of the Society shall give notice thereof to the Committee on Progressive Husbandry annually in September, who will be required to examine the farm, and to certify the general management of it.

MANAGEMENT AND IMPROVEMENT OF FARMS.

For the best managed Farm, taking into view the condition of the buildings, fences and orchards, the cultivation of the lands, the care and management of the stock, the quantity, quality and preservation of the crops, the expenses incurred and the improvements made during the year, with a detailed statement of the whole to be rendered on or before November 15th, \$25; second best, \$20.

Competitors must give notice of their intention to the Secretary, on or before June 15th. Farms entered for premium will be viewed by the Supervisory Committee, as they shall deem expedient, between June 20th and September 20th. Any farm offered for inspection, without being entered for a premium, will be viewed and reported by the Committee, if seasonable application be made to the Chairman.

IMPROVING MEADOW AND SWAMP LANDS.

For the best experiment in reclaiming wet meadow or swamp lands, by drainage or otherwise, on not less than one-half acre,

with statement, in detail, of the previous condition and produce of the land, the method and expense of the experiment, and the produce at the present time, \$8; second best, \$4.

UNDER-DRAINING LAND.

For the best experiment in under-draining land, not less than forty square rods, regard being had to the character of the soil and subsoil, the method, extent, expense and result of the experiment, \$10; second best, \$5.

OLD PASTURE AND UNIMPROVED LANDS.

For the best conducted experiment in renovating and improving old pasture lands and lands hitherto lying waste, on not less than one acre, with or without ploughing, with a statement of the previous condition of the land, and of the method, expense and result of the experiment, \$8; second best, \$5; third, \$3.

TURNING IN CROPS AS A MANURE.

For the most satisfactory experiment of turning in crops as a manure, either *green or dry*, on not less than *one-half acre of land*, a detailed account of the whole process, expense and result to be given in writing, \$6.

MANURES.

Premiums of \$25, \$20 and \$15, are offered for the three most successful experiments in the application of Manures, in accordance with the following vote of the State Board of Agriculture:—

At a meeting of the State Board of Agriculture, held in December, 1862, it was

“*Voted*, That the several Agricultural Societies receiving the bounty of the State, be required to offer three premiums for the most thorough, exact and reliable experiments upon the proper depth of applying manures, payable in the fall of 1865, as follows:—

“Select a level piece of land of any convenient size, from twenty rods up to as many acres or more, which should be as nearly equal in its character and conditions as possible. Divide it into five equal parts, numbering them 1, 2, 3, 4 and 5, for a rotation of three years.

“Divide the manure which it is proposed to apply, and which should be of a uniform character, into four equal parts. At the time of first ploughing in the spring, spread evenly one-fourth of the manure upon plot No. 1, and then plough the whole field of an equal depth. Apply another fourth part of the manure to plot No.

2, and then cross plough the whole field to about half the depth of the ploughing. Spread another fourth of the manure upon plot No. 3, and harrow or cultivate the whole field; after which sow or plant the whole evenly, with any crop preferred. Finally, spread the remaining quarter part of the manure upon plot No. 4.

“ Observing that by pursuing this course, each of the five lots will receive equally, a deep ploughing, a shallow ploughing, and a harrowing, or cultivating, the only difference in them being that in No. 1 the manure is buried deep, in No. 2 shallow, in No. 3 buried only slightly, but coated with loam, and in No. 4 left exposed upon the surface; while No. 5 gets no manure. The manure is to be spread broadcast and as evenly as possible. The after cultivation should be the same on each of the lots, and the harvest of each should take place at the same time.

“ Let a statement of the character of the soil, whether light or heavy, dry or moist, leachy or retentive of manures, the crop of 1862, kind and amount and mode of application of manure in 1862, size of field covered by the experiment, depth of first ploughing, kind and amount of manure used in 1863, kind of crop, when and how sown, number of times and manner cultivated, and weight of product on an average rod of each plot be made in 1863, and returned in the annual report of each Society.

“ If there is a double product, as grain and straw, corn and stover, let the weight of the secondary product be given on each plot.

“ If the competitor weigh the whole crop instead of estimating it by an average rod, there will be no objection to such a course.

“ A brief synopsis of the weather for each of the following months, by dividing each month into three parts, and using the terms dry, moist and wet, to indicate the general character of the weather, will also be expected.

FIRST THIRD.	MIDDLE THIRD.	LAST THIRD.
May,		
June,		
July,		
August,		
September,		

“ A similar report of all the above items, except the nature of the soil, will be made in 1864, and in 1865, when the premiums will be awarded. No manure is to be applied to the second and third crop.”

THE MASSACHUSETTS SOCIETY FOR PROMOTING AGRICULTURE,
Offers the following premiums for Experiments with Manures, and competitors for the preceding can also compete for this, with the same experiments :—

1st premium, \$100 ; 2d do., \$100 ; 3d do., \$100.

A similar report of all the above items, except the nature of the soil, will be required in 1864, and in 1865, when the premiums will be awarded. No manure is to be applied to the second and third crop.

The above premiums are open to competitors throughout the Commonwealth. Competitors for premiums offered by other Agricultural Societies are invited also to compete for the above, the same experiments serving for both, by filing a duplicate statement with the Secretary of this Society.

In awarding the premiums, all other things being equal, preference will be given to those which are tried on the largest space of land, and also where the competitor weighs the whole crop instead of an average rod. Notice of an intention to compete must be given to the Secretary on or before the first day of January, 1864, with the statement required in the terms of the premium.

This offer of premiums for experiments on the application of manures is distinct from those on the same subject offered by the same Society, February 18th, 1861, and January 14, 1862, and requires a different series of experiments.

P. C. BROOKS, Jr., *Secretary.*

Boston, Feb. 1, 1863.

EXPERIMENTS IN SUBSOIL PLOUGHING.

For the best experiment, on not less than one acre of land, of the effect of subsoil ploughing, to be determined by the difference in the value of crops, raised on equal portions of equally manured land, of like quality, one half of which having been subsoil ploughed, the other half ploughed in the usual manner,—statements of the depth of ploughing, in each instance, together with all the particulars of culture, required, \$8 ; second best, \$6.

COMPARATIVE VALUE OF CROPS AS FOOD FOR CATTLE.

For the best experiment upon a stock of cattle, not less than four in number, to ascertain the relative value of the different kinds of fodder used, with a statement in detail of the quantity and value of the same, as compared with English hay, the experiment to be made in the three winter months, \$15 ; second best, \$10.

FATTENING CATTLE.

For the best experiment in *feeding* cattle, with a statement in detail of the process, expense and result, \$8; second best, \$4.

FATTENING SWINE.

For the best experiment in *feeding* swine, with a statement in detail of the process and result, \$6; second best, \$4.

SOILING OF CATTLE.

For the best experiment in the *soiling* of cattle, with a detailed statement of the process and the result,—regard being had to the *saving of manure*, and to the comparative *expense of pasturing*, \$15; second best, \$10.

GREEN FODDER.

For the best experiment in raising corn fodder or other succulent feed to be used green, and in ascertaining its value for the feed of milch cows,—on not less than *one-half acre* of land,—with a statement, in detail, of the mode and cost of cultivation, and the result of its use, \$8.

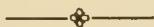
HAY.

For the largest quantity and best quality of English hay per acre, produced on any farm in the County, regard being had to the character of the soil, the mode and cost of cultivation and making, \$5; second best, “Flint’s Treatise on Grasses.”

CRANBERRY VINES.

For the best experiment in transplanting Cranberry Vines, or in growing them from seed, on not less than one-eighth of an acre which shall be in the most flourishing and productive state, on the 10th September, 1863, \$8; second best, \$4.

Competitors will be required to give an exact statement of the process, expense, and result of the experiment.



GRAIN AND ROOT CROPS.

GRAIN CROPS.

For the best experiment in raising *Wheat*, Harris’ Treatise on Insects; second best \$3.

For the best experiment in raising *Rye*, *Oats*, or *Barley*, each, \$4; second best, each, \$2.

For the best experiment in raising *Indian Corn*, Harris’ Treatise on Insects; second best, \$4; third best, \$2.

For the best experiment in raising *White Beans*, *Millet* or *Buckwheat*, each, \$3.

An addition of 20 per cent. to the above premiums, if the successful competitor be a youth, under 16 years of age.

Samples of each kind of Grain, not less than a half-bushel, and properly labelled, must be exhibited at the Show. The quantity of the crop to be ascertained by weight, as follows:—Corn and Rye, 56 pounds each to the bushel; Barley and Buckwheat, 48 pounds each; Oats, 32 pounds; Wheat, 60 pounds.

ROOT CROPS.

For the best experiment in raising *Potatoes*, \$5; 2d best, \$3.

For the best experiment in raising *Sugar Beets*, *Carrots*, *Parsnips*, *Mangold-Wurtzel*, or *Ruta Baga*, each \$5; 2d best, \$3.

For the best experiment in raising *Onions*, 5; second best, \$3.

For the best experiment in raising *Flat Turnips*, \$4; 2d best, \$2.

Samples of Roots, not less than one bushel, and properly labelled, must be exhibited at the Show. The quantity of the crops, which must be on not less than one quarter of an acre, shall be ascertained by the weight of the Roots—freed from dirt and without tops—as follows:—Potatoes, Sugar Beets, Mangold-Wurtzel and Ruta Bagas, 60 pounds; Carrots, 55 pounds; Onions and Flat Turnips, 50 pounds; Parsnips, 45 pounds to the bushel.

Entries must be made with the Secretary, *ten days previous to the commencement* of any experiment. Experiments will be viewed by the Committee between July 1st and September 20th.

Claimants for premiums must render to the Chairman of the Committee, on or before November 15th, a written statement of the character and previous condition of the land, its present value, and the taxes upon it; the kind, quantity and value of manure used; the quantity and cost of seed sown; the labor and expense of cultivating and harvesting the crop, and the quantity, quality and value of the crop. In awarding premiums, regard will be had to all these circumstances, and to the area of the ground in cultivation.

VEGETABLES.

For the best experiment in raising *Squashes*—one half dozen of each variety to be exhibited at the Show—\$3; second best, \$2.

For the best experiment in raising *Cabbages*—not less than six heads to be exhibited at the Show—\$3; second best, \$2.

MIXED CROPS.

For the best experiment in cultivating mixed crops of Grain and Vegetables, in alternate portions, or of different roots, in alternate rows, Harris' Treatise on Insects; second best, \$4; 3d best, \$2. The experiment must be made on not less than half an acre of land, and a detailed statement of the mode of culture, expense and product must be rendered on or before November 15th.

ANIMALS.

All animals are to be entered in the name of the owner, who must have had them in his possession, at least six months before the exhibition.

All animals, entered in accordance with the rules and regulations, will be fed, during the Exhibition, at the expense of the Society.

No animal, entered in one class, will be allowed to compete for a premium in another, under a different entry, except working oxen and draught horses.

For any animal, worthy of the first premium, and having received a similar one at any previous Exhibition, a diploma, certifying the rank of such animal at the present Exhibition, shall be awarded instead of a premium.

A diploma may also be awarded, at the discretion of the several Committees, for any animal, worthy of exhibition, from without the limits of the Society.

CATTLE.

For the best BULL, one year old and upwards, of either Jersey, Durham, Devon, Ayrshire, Hereford, Kerry, or other foreign stock—in each class, \$5 ; second best, \$3.

For the best Grade BULL, \$3 ; second best, \$2.

For the best BULL CALF, under one year old, foreign stock, \$3 ; second best, \$2.

Cows. For the best Cow, three years old or upwards, foreign stock, of either class, each \$5 ; second best, \$4 ; third best, \$3.

Grade, \$5 ; second best, \$4 ; third best, \$3.

HEIFERS. For the best Heifer, two years old and under three, foreign stock, of either class, each \$3 ; second best, \$2 ; third best, \$1.

Grade, \$3 ; second best, \$2 ; third do., \$1.

For the best Heifer, one year old, of any stock, \$2 ; second best \$1.

MILCH Cows. Three years old and upwards. For the best Milch Cow, without regard to breed, each, \$8 ; second best, \$6 ; third do., \$4 ; fourth do., \$2.

For the best Milch Heifer, not over three years old, without regard to breed, each \$6 ; second best, \$4 ; third do., \$2.

A written statement of the quantity and quality of Milk, and of the manner of feeding the Cows and Heifers, will be required. Also a written statement of the butter made from milk, during two periods, of ten days each, with an interval of three months,

and previous to the Annual Exhibition. If no butter is made, the statement must give the quantity and weight of the milk, the character of the last calf, and the time when it was dropped.

HERDS OF MILCH COWS. For the largest and best herd of Milch Cows—not less than six—kept on any farm in the County, and exhibited at the Show, regard being had to their breed, age, and milking properties, with written statement thereof, first premium, \$12; second do., \$8; third do., \$6.

WORKING OXEN. For the best yoke, four years old and upwards, \$6; second best, \$4; third best, \$2.

STEERS. For the best yoke, well broken, three years old and under four, \$4; second best, \$3; third best, \$2.

For the best yoke, well broken, two years old and under three, \$3; second best, \$2.

NOTE. For Oxen or Steers, and also for Herds of Milch Cows, bred and raised by the exhibitor, twenty per cent. additional. In testing the strength, docility and training of Working Oxen, the load shall be not less than 3000 pounds for oxen five years old and upwards; and not less than 2500 pounds for oxen under five years old. In testing the character of Steers, as the Committee may direct, special regard will be paid to their docility and proper training.

TOWN TEAMS. For the largest and best team, of not less than ten yokes of Oxen or Steers, from any city or town in the County, first premium, \$12; second do., \$8.

FAT CATTLE. For the best beef animal fattened by the exhibitor, within the County, regard being had to the manner and expense of feeding—of which a written statement will be required, first premium, \$8; second do., \$6.

SWINE.

BOARS. For the best Boar, not less than six months old, \$5; second best, \$3; third best, \$2.

SOWS. For the best Sow, not less than six months old, \$5; second best, \$3; third best, \$2.

WEANED PIGS. For the best litter, not less than four in number, and not more than six months old, \$5; second best, \$3; third best, \$2.

FAT HOGS. For the best Fat Hog, regard being had to breed, age and feeding, \$5; second best, \$3; third best, \$2.

SHEEP.

For the best lot of Sheep, not less than six, \$8; second best, \$6; third best, \$4.

For the best lot of Lambs, not less than six—bred by the exhibitor, \$5; second best, \$3.

For the best Ram—Cotswold, Leicester, Oxford Down, or South Down—one year old or over, \$5; second best, \$3.

POULTRY.

For the best collection of either Shanghai, Black Spanish, Dorking, Poland, Bolton Gray, Guinea, or Bantam Fowls, each, \$2; second best, \$1.

TURKEYS. For the best collection, \$3; second best, \$2.

GEESE. For the best collection, \$3; second best, \$2.

DUCKS. For the best collection, \$3; second best, \$2.

PIGEONS. For the best collection, \$2; second best, \$1.

NOTE. Poultry must be entered before 12 o'clock, on the first day of the Exhibition, to be entitled to a premium.



HORSES.

In awarding the premiums on Roadsters, the general good qualities—such as style, action, constitution and enduring properties—as well as speed of the animals, will receive special consideration.

In testing the speed of horses, each animal—four years old and over—will be required to draw a carriage weighing, with driver included, not less than 350 pounds.

It is understood that horses which have heretofore been classed under the head of “Thorough-bred and part Thorough-bred,” may compete as Roadsters, or in any other class.

Colts and Fillies will compete in separate classes, as heretofore, the premiums being the same for either sex.

No stallion will be entitled to a premium without a guaranty of his remaining for service in the County six months.

In testing the strength, docility and training of Draught or Team Horses, the load shall not be less than 2500 pounds for a single horse, and 3500 pounds for a pair of horses.

Every entry for premium must be made before 12 o'clock of the first day of the Exhibition, and the Stock must be present the second day, on or before 9 o'clock, A. M.

It must be distinctly understood that premiums will not be awarded to any animal that does not, in the opinion of the Committee, possess decided merit and a sound constitution.

CLASS A.

ROADSTERS.

1st Division.

Stallions.

For the best Stallion, 4 years old and upwards, a prem. of \$10.

“ 2d best “ “ “ “ 7.

“ 3d best “ “ “ “ 5.

2d Div. *Brood Mares.*

For the best Brood Mare, with a Foal at her side, a prem. of	\$7.
“ 2d best “ “ “ “	5.
“ 3d best “ “ “ “	3.

3d Div. *Colts and Fillies.*

For the best 3 years old, a premium of	\$5.
“ 2d best “ “	3.
“ 3d best “ “	2.
For the best 2 years old, “	3.
“ 2d best “ “	2.
“ 3d best “ “	1.
For the best 1 year old, “	3.
“ 2d best “ “	2.
“ 3d best “ “	1.

4th Div. *Pairs in Harness.*

For the best pair of Roadsters, a premium of	\$10.
“ 2d best “ “	7.
“ 3d best “ “	5.

5th Div. *Harness Horses.*

For the best Gelding or Mare, a premium of	\$7.
“ 2d best “ “ “	5.
“ 3d best “ “ “	3.
“ 4th best “ “ “	2.

CLASS B.

HORSES OF ALL WORK.

1st Div. *Stallions.*

For the best Stallion, 4 years old and upwards, a prem. of	\$10.
“ 2d best “ “ “ “	7.
“ 3d best “ “ “ “	5.

2d Div. *Brood Mares.*

For the best Brood Mare, with a Foal at her side, a prem. of	\$7.
“ 2d best “ “ “ “	5.
“ 3d best “ “ “ “	3.

3d Div. *Colts and Fillies.*

For the best 3 years old, a premium of	\$5.
“ 2d best “ “	3.
“ 3d best “ “	2.
For the best 2 years old, “	5.
“ 2d best “ “	3.
“ 3d best “ “	2.

PLOUGHING MATCH.

DOUBLE OX TEAMS. *With Sod and Subsoil Plough.* For best performance in ploughing *sward* land, at least one-eighth of an acre, eight inches in depth, within an hour, \$10; second best, \$8; third best, \$6; fourth best, \$4.

With any other Plough. Same conditions. Best, \$10; second best, \$8; third best, \$6; fourth best, \$4.

DOUBLE HORSE TEAMS. *With Sod and Subsoil Plough.* Same conditions. Best, \$10; second best, \$8; third best, \$6; fourth best, \$4.

With any other Plough. Same conditions. Best, \$10; second best, \$8; third best, \$6; fourth best, \$4.

SINGLE OX TEAMS. *With any Plough.* For the best performance in ploughing *sward* land, at least one-eighth of an acre, six inches in depth, within an hour, \$6; second best, \$4; third best, \$2.

SINGLE HORSE TEAMS. Same conditions. Best, \$6; second best, \$4; third best, \$2.

NOTE. A DOUBLE TEAM will consist of two yokes of oxen, with or without a driver; or a team of one yoke of oxen and a horse, with or without a driver. SINGLE TEAM, one yoke of oxen or one pair horses, without a driver. Competitors must own their teams and ploughs, and enter the same in their own names. Ploughs must be held and teams driven by their owners, or by persons stably in their employ. Notice to compete must be given to the Secretary on or before the Saturday previous to the Exhibition. In awarding premiums, one hour will be allowed for the performance of the work, regard being had to the width and depth of the furrow slice, and the evenness, ease and quiet with which the work is performed.



SPADING.

For the best performance in spading, not less than ten inches in depth, on a piece of not less than one hundred square feet of *sward* land; the time allowed for the performance to be thirty minutes; due regard being had to the thoroughness of the pulverization of the soil, and the state in which it is left for the reception of seed, \$5; second best, \$4; third best, \$3; fourth best, \$2; fifth best, \$1.



ARBORICULTURE.

FRUIT TREES.

APPLE ORCHARD. For the best Apple Orchard, of not less than *fifty trees*, which shall have been set out at least five years, and which shall be in the best and most thriving condition in 1863, \$10; second best, \$5.

PEAR TREES. For the best engrafted or budded standard Pear Trees, set out at least five years, and which shall be in the

most thriving condition in the autumn of 1863, not less than *twenty-five trees*, \$10 ; second best, \$5.

For best grafted or budded Pear Trees on Quince roots, with same conditions, and not less than *fifty trees*, \$10 ; 2d best, \$5.

PEACH ORCHARDS. For the best Peach Orchard, of not less than *fifty trees*, and which shall be in the most thrifty bearing condition in the autumn of 1863, \$10 ; second best, \$5.

For the Peach Orchard, of not less than *fifty trees*, grown from pits planted since 1857, on the spot where the trees stand, which shall be in the best condition in 1863, \$10 ; second best, \$5.

SEEDLING APPLES OR PEARS. For the best variety of *new Seedling Apples or Pears*, of decidedly superior quality, *one dozen specimens* to be exhibited, together with a history of the origin of the tree, a description of the growth, and its bearing character, \$10 ; second best, \$5.

SEEDLING PEACHES. For the best variety of *Seedling Peaches* of decidedly superior quality, and worthy of general cultivation—*one dozen specimens* to be exhibited two years in succession—together with a history of its origin, a description of its growth, and the bearing character of the tree, \$5 ; second best, \$3.

FOREST TREES.

For the best plantation of Forest Trees, of either of the following varieties, viz. : White Oak, Yellow Oak, Locust, Birch, White Ash, or Walnut, Scotch Larch, Norway Spruce, Pitch Pine and White Pine, or other varieties, not less than three years old, and not less than one thousand trees,—entries to be made to the Society previous to June 10th,—a premium, to be awarded in 1863, of \$15.

For the best plantation, containing not less than five hundred trees, a premium of \$6.

ORNAMENTAL PLANTING. To any city or town of Norfolk County, for the largest number and best growth of ornamental trees, not less than one hundred, which shall have been planted in a public square or on the roadside at least two years—first premium, \$15 ; second do., \$10.

To any individual or society, regard being had to the number of persons associated, for the largest number and best growth of ornamental trees, not less than fifty, which shall have been planted in a public square or on the roadside at least two years—first premium, \$10 ; second do., \$5.

These premiums to be awarded in the autumn of 1863, and if awarded to a city or town, to be graduated by the population, according to the census of 1860.

HORTICULTURE.

FLOWERS.

For the best collection of cut flowers, \$4 ; for second best, \$3 ; third best, \$2 ; fourth best, \$1. For the best bouquets, or tastefully arranged basket of flowers, not less than four, \$4 ; second best, \$3 ; third best, \$2 ; fourth best, \$1. For the best collection of twenty named dahlias, regard being had to *colors* and symmetry of flower, \$3 ; second best, \$2. For the best single bloom, \$1. For the best collection of twelve pot plants, regard being had to new and rare varieties and well grown specimens, \$3 ; second best, \$2. For the best single specimen, \$1. For the best collection of new seedling verbenas, with foliage, \$2. For the best new seedling, \$1. For the largest and best collection of wild flowers, \$2 ; second best, \$1. Any person presenting flowers for premium or exhibition, is requested to furnish a statement in writing of the sorts contributed, and of the contributor's name.

Gratuities, in publications or otherwise, to the amount of \$10, may be awarded at the discretion of the Committee.

FRUITS.

For the best collection of the most approved standard *Apples*, not less than twelve specimens of each variety—first premium, Harris' Treatise on Insects ; second do., \$4 ; third do., \$3 ; fourth do., \$2.

For the best collection of the best twelve varieties of *Pears*, not less than twelve specimens of each variety, first premium a silver cup of the value of twelve dollars ; second do., \$4 ; third do., \$3 ; fourth do., \$2.

For the best collection of the most approved standard *Peaches*, not less than twelve specimens of each variety—first premium, \$3 ; second do., \$2 ; third do., \$1.

For the best collection of the most approved varieties of *Plums*, not less than twelve specimens of each variety—first premium, \$3 ; second do., \$2.

For the best *dish* of *Pears*, not less than one dozen specimens, a premium of \$2 ; second do., \$1.

For the best *dish* of *Apples*, not less than one dozen specimens, a premium of \$2 ; second do., \$1.

For the best basket of assorted *Fruits*, of different kinds, \$4 ; second best, \$3 ; third best, \$2.

For the best exhibition of *Quinces*, not less than a peck, \$2.

GRAPES. For the best exhibition of *Foreign Grapes*,—first premium, \$4 ; second do., \$3, or \$3 in publications at discretion of Committee.

For the best collection of *Native Grapes*, by the ordinary mode of cultivation, and without ringing, \$3; second do., \$2; third do., \$1.

For a new variety of *Native* or *Seedling Grape*, equal or superior to the *Isabella*, ripening in this County in the open air, by the *middle of September*, prolific and suitable for the table, first premium, \$20; second do., \$10.

CRANBERRIES. For the best collection of Cranberries, not less than four quarts, \$3; second best, \$2; third best, \$1.

Gratuities, in publications or otherwise, to the amount of \$20, may be awarded at the discretion of the Committee.

GARDEN.

For the best VEGETABLE GARDEN, regard being had to the variety, excellence and quantity of the products thereof, and the mode and expense of cultivation, \$5; second best, \$3.

Entries must be made before the 10th of June, and an exact statement rendered before the 1st of November.

GARDEN VEGETABLES.

For the best collection and variety of GARDEN VEGETABLES, regard being had to the quantity as well as quality exhibited, \$10; second best, \$5; third do., \$4; fourth do., \$3; fifth do., \$2; sixth do., \$1. \$20 in agricultural publications, or otherwise, may also be awarded, at the discretion of the Committee.

POTATOES. For the best new variety of *Seedling Potatoes*, superior to any kind now in cultivation, a premium of \$10.

For the largest and best collection of *Potatoes*, not less than a *peck* of each variety, a premium of \$3; second best, \$2.

SEEDS.

For the best sample of ears of Seed Corn, not less than forty in number, \$1.

For the best collection of Onion, Carrot, Beet, Parsnip, and Ruta Baga Seeds, first premium, \$3; second do., \$2.

For the best 10 pounds of Timothy, Red Top, and Clover Seed, \$1.

For the best sample, one peck each, of Wheat, Rye, Barley and Oats, \$1.

HEDGES.

For the best *Live Hedge Fence*, not less than five hundred feet in length, \$5; second best, \$3.

For the best 1 year old, a premium of	\$5.
“ 2d best “ “	3.
“ 3d best “ “	2.

CLASS C.

FAMILY HORSES.

1st Div. *Carriage Horses 15 to 16 Hands High.*

For the best pair of Carriage Horses, a premium of	\$10.
“ 2d best “ “	7.
“ 3d best “ “	5.

2d Div. *Buggy or Chaise Horses.*

For the best Buggy or Chaise Horse, a premium of	\$8.
“ 2d best “ “	6.
“ 3d best “ “	4.

3d Div. *Saddle Horses.*

For the best Saddle Horse, a premium of	\$6.
“ 2d best “ “	4.
“ 3d best “ “	2.

4th Div. *Walking Horses.*

For the best Walking Horse, a premium of	\$7.
“ 2d best “ “	5.
“ 3d best “ “	3.

5th Div. *Ponies.*

For the best matched Ponies, a premium of	\$6.
“ 2d best “ “	4.
“ best single Pony, “	3.
“ 2d best “ “	2.

CLASS D.

DRAUGHT OR TEAM HORSES.

1st Div. *Single Draught or Team Horses.*

For the best Draught Horse, a premium of	\$7.
“ 2d best “ “	5.
“ 3d best “ “	3.

2d Div. *Pairs of Draught or Team Horses.*

For the best pair of Draught or Team Horses, a premium of	\$7.
“ 2d best “ “ “	5.
“ 3d best “ “ “	3.

DAIRY.

BUTTER.

For the best produce of BUTTER, on any farm within the County, for four months, from the 20th of May to the 20th of September,—a sample of not less than twenty pounds to be exhibited,—*quantity* as well as *quality* to be taken into view, with a statement of the number of cows, and a full account of the manner of *feeding* them, and the general management of the milk and butter, first premium, \$10; second do., \$8; third do., \$5; fourth do., \$4.

NOTE. It will be seen that these premiums are offered for the best produce on the Farms, and not simply for the best specimens exhibited. Competitors will therefore be required to keep an account, and render a statement of the entire produce within the time mentioned. Each lot must be numbered, but not marked; any public, or known mark, must be completely concealed, nor must the competitors be present at the examination.

For the best box of Butter, of not less quantity than 12 pounds, first premium; \$5; second do., \$3; third do., “Flint’s Treatise on Dairy Farming.”

NOTE. Butter to be presented before 9 o’clock on the morning of the second day.

CHEESE. For the best lot of Cheese,—not less than 40 pounds to be exhibited,—a written statement of the whole process of making which will be required, first premium, \$5; second do., \$3; third do., “Flint’s Treatise on Dairy Farming.”



BREAD.

For the best loaf of Wheat and Indian, of two to four pounds weight, first premium, \$3; second do., \$2.

For the best loaf made of Unbolted Wheat, which has been grown in the County, of two to four pounds weight, first premium, \$3; second do., \$2.

For the best loaf of Rye and Indian, of four to six pounds weight, first premium, \$3; second do., 2.

For the best loaf of Wheat Bread, of two to four pounds weight, first premium, \$3; second do., \$2.

For the best specimens of each or any of the aforementioned kinds of Bread, made by young women under eighteen years of age, an additional premium of twenty-five per cent.

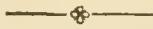
The bread presented for premium must be made on the first day of the Exhibition, by some female member of a family, (exclusive of hired persons,) in whose names the entries shall be made, and to whom the premiums shall be awarded. The bread shall be made without the use of saleratus or other alkaline substance, and baked in the oven commonly used by the family in which it shall be made, and must be presented on the second day

of the Exhibition, before 9 o'clock in the morning. A written statement of the process of making the bread shall accompany each entry, but no name or mark shall be put on the loaves, except the number of the entry in the Committee's book.

Committees shall be appointed to judge of the several descriptions of bread, to whom the names of the contributors shall not be known, and no person shall serve on said Committees if any member of his family shall be a competitor.

HONEY.

For the best specimen of Honey in the comb, not less than six pounds, \$2; second best, \$1.



MANUFACTURES.

AGRICULTURAL IMPLEMENTS.

For the largest and best collection of Agricultural and Horticultural Implements, \$12; second best, \$8.

For the best collection manufactured within the County, and exhibited by the manufacturer, \$6; second best, \$4.

For the best collection of Ploughs, with a statement of the purposes to which they are adapted, and their cost and method of operation, \$6; second best, \$4.

For any new or improved Plough, which on trial shall be found best adapted for the thorough pulverization of old ploughed land, a premium of \$6.

NEW INVENTIONS. For any new invention of decided superiority and usefulness to the farmer, a premium or gratuity, at the discretion of the Committee.

DOMESTIC MANUFACTURES.

FANCY ARTICLES—including Needlework, Crochetwork, Shellwork, Millinery, Drawings, Paintings, &c.

For such articles in this department as may be deemed worthy, a sum, not exceeding fifty dollars, shall be appropriated, to be paid in premiums or gratuities, proportioned to the cost and value of the article, at the discretion of the Committee.

NOTE. It should be understood that, in this department of Ladies' work—while other things will receive due consideration—the premiums are intended **SOLELY FOR NEWLY MADE** articles which are really useful, or particularly beautiful. For well made garments of any kind; for stocking knitting of wool, cotton or silk; or bonnet and cap making; for all articles of children's wear, well made or tastefully embroidered; for neat and thorough mending, patching, and darning; for drawing, designing, or painting in oil or water colors; for models in plaster, wood, or marble, &c.

Any article well and tastefully wrought, and offered by children under twelve years of age, will receive particular attention.

MANUFACTURES OF STRAW. For the finest collection and best manufactured *Plain Braid Bonnets*, not less than twelve in number, \$5 and diploma; second do., \$3.

For the finest collection and best manufactured *Fancy Bonnets*, whether of Straw, Hair, or other material, not less than twelve in number, \$5 and diploma; second do., \$3.

For the best specimen of *Straw Bonnets*, wholly of domestic manufacture, \$4 and diploma; second do., \$2.

For the best specimen of *Straw Braid*, of domestic straw, not less than 100 yards, \$2 and diploma; second do., \$1.

For the best specimen of *Sewing Bonnets*, made of Straw, Hair, or other material, exhibited unfinished, with blocks upon which they are made, and not less than three from each sewer, \$3 and diploma; second do., \$2.

MANUFACTURES OF CLOTH, FLANNELS, HOSIERY, &c. *Cotton Cloth*. For the best specimen of Cotton Cloth, of any description, not less than twenty-eight yards in quantity, a premium or gratuity, at the discretion of the Committee.

Woollen Cloth. For the best specimen of Woollen Cloth, of any description, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

Cotton and Woollen Mixed. For the best specimen of Cotton and Woollen Cloth of any description, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

Flannels. For the best specimen of Flannel, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

For the best specimen of Cotton Flannel, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

For the best pair of Woollen Blankets, a premium or gratuity, at the discretion of the Committee.

Hosiery, &c. For the best specimen of Silk Hose, a premium of \$1.50.

For the best specimen of Silk Half Hose, a premium of \$1.

For the best specimen of Woollen Hose, a premium of \$1.

For the best specimen of Woollen Half Hose, a premium of 50 cents.

For the best specimen of Cotton Hose, a premium of 50 cents.

For the best specimen of Cotton Half Hose, a premium of 25 cents.

For the best specimen of Worsted Hose, a premium of \$1.

For the best specimen of Worsted Half Hose, a premium of 50 cents.

For the best specimen of Sewing Silk, not less than one pound, a premium of \$2.

For the best specimen of Knitting Yarn, not less than one pound, a premium of \$1.

For the best specimen of Spool Thread, not less than one pound, a premium of \$1.

For the best Fleece of Wool, a premium of \$1.

For the best dozen Grain Bags, a premium of \$1.

For the best specimen of neat and thorough mending, patching, or darning of garments, hose, &c., a premium of \$1.

COUNTERPANES. For the best Counterpane—regard being had to quality and expense of materials—first premium, \$3; second, do., \$2.

CARPETING, RUGS AND FLOOR CLOTH.

For the best "Common" Ingrain 2-ply Carpeting;

do. do. "Fine" do. do. do.

do. do. "Superfine" do. do. do.

do. do. "Common," "Fine," or "Superfine" Ingrain
3-ply Carpeting;

do. do. Brussels Floor Carpeting;

do. do. Tapestry do. do.

do. do. Velvet Carpeting;

For each of these descriptions of Carpeting, a premium or the Society's diploma, at the discretion of the Committee.

NOTE. Ingrain 2-ply Carpeting will be judged by the comparative merits of pieces of similar weight; or, disregarding weight, by the quality of color, the taste of shading, and evenness in spinning and weaving.

For the best piece of Stair Carpeting, the Society's diploma.

For the best Hearth Rug, the Society's diploma.

For the best specimen of Painted Floor Cloth, a premium or the Society's diploma, at the discretion of the Committee.

NOTE. Any articles, in either of the foregoing departments, which shall have been manufactured in the FAMILY of the person presenting it, will receive the particular consideration of the Committee, and, if worthy, a suitable premium.

GLASS, EARTHEN, STONE AND WOODEN WARE. For the finest collections and best specimens of articles in each of these departments, a premium or gratuity, at the discretion of the Committee.

BRASS, COPPER, TIN, IRON AND BRITANNIA WARE. For the finest collection and best specimens of articles in each of these departments, a premium or gratuity, at the discretion of the Committee.

CABINET WORK. For the best specimen of Cabinet Work, a premium or the Society's diploma.

IRON FENCING, GATES AND POSTS. For the best specimens of each—regard being had to cost and utility, as well as ornament—a premium or gratuity, at the discretion of the Committee.

STOVES. For the best Farmer's Cauldron Stove ;
do. do. Cooking do.
do. do. Parlor do.

—a premium of \$2.

HORSE AND OX SHOES. For the best specimens of Horse and Ox Shoes, a premium of \$1.

For the best specimens of Horse Shoes *for meadow lands*, a premium of \$1.

INDIA RUBBER GOODS. For the finest collection and best specimens of India Rubber goods, a premium or gratuity, at the discretion of the Committee.

BRUSHES, COMBS, HATS, CAPS AND GLOVES. For the finest collection and best specimens of each of these articles, a premium or gratuity, at the discretion of the Committee.

LEATHER, AND ARTICLES MANUFACTURED THEREFROM.

For the best specimen of Thick Boots, a premium of			\$2.
do. do. Calfskin, do.			3.
do. do. Thin Boots, other			
	than Calfskin, do.		2.
do. do. Kipskin, do.			2.
do. do. Thick Brogans, do.			1.
do. do. Fine Brogans, do.			1.
do. do. Ladies' Boots, do.			1.

For the best specimen of Upper or Sole Leather, or Morocco, a premium or gratuity, each, at the discretion of the Committee.

For the best single Carriage Harness ;

do. do. double do.

do. do. Cart Harness—a premium or gratuity, each, at the discretion of the Committee.

For the best Riding Bridle, a premium of \$1.

do. do. do. Saddle, do. 2.

do. do. Carriage or Cart Whip, a premium of 1.

CARRIAGES, WAGONS, CARTS, &c.

For the best specimen of Family Carriages, for one horse or for two horses ;

For the best Covered Wagon ;

do. do. Open do.

do. do. Farm do.

do. do. do. Cart ;

do. do. Farm Wheelbarrow—a premium or gratuity, each, at the discretion of the Committee.

JELLIES, PRESERVES, PICKLES, AND KETCHUPS. For the finest collection and best specimen of each, made of articles of domestic growth, a premium or gratuity, at the discretion of the Committee.

NATIVE WINES, CORDIALS, &c.

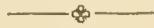
For the best specimen of Wines from cultivated or wild grapes, not less than two bottles to be exhibited, \$2; second best, \$1.

For the best specimen of Wine or Cordial from currants, blackberries, raspberries, or elder berries, not less than two bottles to be exhibited, each, \$1.

NOTE. It is to be understood that all articles presented for premium, in each of the foregoing departments, shall have been manufactured or produced within the County during the last year, and by the person presenting them. Also, that in every case, the Examining Committee shall have the right to substitute the Society's diploma for a premium or gratuity, or to give it where no premium or gratuity has been offered, at their discretion.

All discretionary premiums or gratuities shall be proportioned to the actual value and utility of the articles.

Articles in either of the above departments, contributed to the Exhibition by persons not resident in the County, shall receive suitable attention from the Committee, and if worthy, be awarded the Society's diploma.



MISCELLANEOUS.

AGRICULTURAL LABORERS.

For a certificate—signed by his employer, and countersigned by any two of the Trustees residing nearest to the applicant—of the superior qualification of any man or youth, in the employment of any member of the Society for a period next preceding, of not less than two years, attesting the industry, integrity, respectful demeanor and general good habits, during the time, of the bearer of such certificate, a premium of Membership of the Society and a diploma.

CABINET OF INSECTS.

For the largest and best Collection of Insects found within the County, beneficial or injurious to vegetation, properly arranged and classified, to be exhibited on the Society's tables, at the next Annual Fair, one copy of Harris' Treatise on Insects.

AGRICULTURAL ESSAYS.

For the best Essay on the relative importance and value, as sources of profit, of the various grasses, or cereal, fruit or vegetable crops, a premium of \$10.

For the best Essay on the relative importance and value, as sources of profit, of the breeding and raising of the different classes of farm stock, a premium of \$10.

For the best Essay on the fattening of cattle, swine or sheep, detailing the process and expense of the same, a premium of \$10.

FOREST TREES. For the best Essay on the raising and cultivation of Forest Trees, a premium of \$10.

INSECTS. For the best Essay on the destruction of Insects injurious to vegetation, such as *Curculio*, *Borer*, *Canker-Worm*, *Caterpillar*, *Cut-Worm*, *Squash-Bug*, *Striped-Bug*, *Rose-Bug*, &c., &c., a premium of \$10.

PRESERVATION OF WINTER FRUIT. For the best Essay on the preservation of Apples and other Winter Fruits, \$10.

PRESERVATION OF VEGETABLES. For the best Essay on the preservation of Vegetables, a premium of \$10.

AGRICULTURAL EDUCATION. For the best Essay on Agricultural Education, a premium of \$10.

FARM ACCOUNTS. For the best Essay on a system of Farm Accounts, a premium of \$10.

For the best Essay on Domestic Poultry, \$10.

For the best Essay on Fences for Farms, uniting economy, strength and appearance, a premium of \$10.

For the best Essay on the extermination of Weeds and Plants, destructive to crops, a premium of \$10.

For the best Essay on the preservation and application of Liquid Manure, a premium of \$10.

For the best Essay on the Introduction of new Fruits and new articles of Field Culture, a premium of \$10.

For the best Essay on the value and application of Phosphate of Lime, or any fertilizer of the soil, a premium of \$10.

For the best Essay on Bees and Structure of Hives, with particular reference to feeding Bees, and guarding against the spoliations of the Bee Moth, a premium of \$10.

For the best plan for a Barn and Barn Yard, with regard to the keeping of the Hay, the comfort of the Cattle, the ease and convenience of tending them, and the making and preserving the Manure, a premium of \$10.

These premiums will not be awarded unless the Essays offered shall, in the judgment of the Committee appointed to decide upon them, be deemed worthy of an award, without reference to their comparative merit.

FARM BUILDINGS.

For the best planned house and out-buildings—regard being had to the cost and economy of labor—the house to be warm, well lighted and ventilated, with a cellar protected from frost and vermin, and the whole not to cost over \$1,800;—to be examined by the Committee on Farms—a premium to be adjudged by said Committee.

FORM FOR STATEMENT OF CROPS.

[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.]

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 ?

What was the crop of 1862 ?

What manure was used, and how much ?

What is the nature of the soil ?

When, and how many times ploughed, and how deep ?

What other preparation for the seed ?

Cost of ploughing and other preparation ?

Amount of manure, in loads of thirty bushels, and how applied ?

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 personal observation, we hereby certify that the above answers are true.

From actual measurement, I hereby certify that the land which the above crop of _____ covered, contained _____ rods, and no more.

I hereby certify that the weight of the above crop, as ascertained by me, on the _____ day of _____, was _____ pounds.

Committee.

In ascertaining the amount 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; or the whole crop may be measured in any vessel, and the weight of its contents once, multiplied by the number of times it is filled by the crop; and the Committee, in their certificate, or their report, shall state which method was employed.

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 Wurtzel, Ruta		
Bagas, White Beans, and Pease,	60 lbs.	to the bushel.
Corn, Rye,	56 "	"
Oats,	32 "	"
Barley, Buckwheat,	48 "	"
Cracked Corn, Corn and Rye and other meal, except		
Oat, and English Turnips,	50 "	"
Parsnips,	45 "	"
Carrots,	55 "	"
Onions,	52 "	"

RULES AND GENERAL REMARKS.

It is understood that all premiums will be restricted to articles of the growth and manufacture of the County, unless otherwise specified in the premium list. Essays and Agricultural Implements being excepted from this rule, are open to general competition.

Committees are particularly requested not to award gratuities other than diplomas, or such as are specified in the premium list.

Any gentleman, not a member of the Society, entitled to a premium of five dollars or upwards, and any lady, not a member of the Society, entitled to a premium of two dollars or upwards, shall receive the amount exceeding the sum of five dollars and two dollars, respectively, and shall thereafter become a member.

The stock and articles intended for exhibition and premium—bread and butter excepted—must be on the ground at or before 12 o'clock on Thursday, the first day of the Exhibition, to be entitled to any premium. Animals will not be allowed to be removed from the pens before 3 o'clock on Friday, the second day, and all other articles not until 5 o'clock, without the permission of the Committee having them in charge.

In order to extend liberal encouragements to citizens of the County living remote from the Society's grounds in Dedham, a sum—not exceeding fifty dollars—will be appropriated for compensation of travel to the owners of all such neat cattle, swine and sheep, as have been brought or driven more than five miles—reckoning the distance from whence they came to the place of exhibition—and receive no premium. Only one travel will be allowed to the same person. Payment will be made at the rate of ten cents per mile, for a yoke of oxen or steers; eight cents per mile, for each bull, cow, heifer or yearling; ten cents per mile, for each boar, sow or litter of weaned pigs; and eight cents for each flock of sheep. But no such payment shall be made for any animal, or animals, which, in the judgment of the Committee appointed to examine them, are not of a superior character and

worthy of exhibition, or have not been entered in accordance with the rules and regulations of the Society.

The animals, while on the ground, will be fed at the expense of the Society.

No person serving on any of the Committees shall have a vote in any case, when he shall be personally interested as a competitor.

All other Entries for premiums must be made in writing, and shall be placed in the hands of the Recording Secretary, on or before the 15th of November.

Premiums awarded, and not called for on or before the last Wednesday in March following, will be considered as given to the Society, in aid of its funds.

After the objects for Exhibition are arranged, they will be under the care of the Committees, and cannot be removed without their consent.

No object or article will be entitled to a premium, unless it possesses points of superiority; and the Committees have the discretionary power of withholding premiums, if, in their opinion, the articles or objects are not deemed worthy to receive the same.

The Trustees have carefully revised and approved of the foregoing proposals for *Premiums*. The respective Committees, appointed to award the same, are required to enforce a strict conformity to all the rules in relation to Entries and Certificates.

In the appointment of *Committees*, the Trustees will seek for the most judicious and skilful individuals in the various towns in the County, to award the *Premiums*; but should they fail to secure the aid of the ablest and most experienced men in the above capacity, they will rely upon the forbearance which, they believe, will be generously extended towards sincere and unwearyed efforts.

As it will become the duty of the Society to make to the Legislature an exact report of its doings, the Trustees deem it of the highest importance that earnest and persevering efforts should be made by the citizens of every town in the County, to bring out the results of their skill and industry.

MARSHALL P. WILDER, *President*.

HENRY O. HILDRETH, *Secretary*.

TRANSACTIONS

OF THE

NORFOLK

AGRICULTURAL SOCIETY,

FOR

1864.

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REPORT OF THE PRESIDENT AND SECRETARY.

TO THE SECRETARY OF THE STATE BOARD OF AGRICULTURE :

SIR,—The following brief Report of the Transactions of the NORFOLK AGRICULTURAL SOCIETY for the year 1864, is submitted in accordance with former usage.

During the past year, owing to the continued illness of the President, the removal from the State of Sanford Howard, Esq., who for the past three years had been Chairman of the Supervisory Committee, (he having also been re-elected at the annual meeting in March,) and the peculiarly unfavorable conditions of the season, the Supervisory Committee made no visits, and therefore have made no report.

Although the two days on which the Annual Exhibition was held were both stormy, the result was very satisfactory, and compared very favorably with that of any preceding year. Had the weather been pleasant, the Exhibition would undoubtedly have been the most successful ever held by the Society.

The able and interesting address delivered by Hon. Henry F. French at the Annual Exhibition, was given without notes, and we regret that he has been unable to find time to write out a report of his remarks for publication in the present volume.

The detailed reports of the several Committees of the Society are herewith subjoined.

MARSHALL P. WILDER, *President.*

HENRY O. HILDRETH, *Recording Secretary.*

REPORT ON ESSAYS.

The Committee on Essays take pleasure in submitting the two following papers, both of which were presented by gentlemen, who are practically engaged in proving the correctness of their several theories, and whose statements are worthy of entire confidence.

The Committee award to William E. Rice, M. D., of South Boston, for his Essay on "The Culture of the Grape in Open Air," a premium of ten dollars, also to Mr. E. A. Samuels, of Dorchester, for his Essay on "The Breeding and Economical Management of Domestic Poultry," a premium of ten dollars.

For the Committee,

CHARLES C. SEWALL.

Medfield, Dec. 26, 1864.

OPEN AIR GRAPE CULTURE.

BY WM. E. RICE, M. D.

There is no fruit which will so richly repay the care and expense of its cultivation as the grape. By a judicious selection of varieties, it can be raised with profit in all parts of this State. By care to supply it with a favorable soil and exposure, and a moderate expense for suitable manures, it will yield a large crop of delicious and noble fruit. If, on account of distance from market, or other reasons, it does not find a ready sale, it can be made into wine, with but little more care than is required to make good cider. In this State, there are thousands of gravelly hill-sides inclining to the S. S. W. and W., which are now given up to shrubs and dwarf trees; they might be reclaimed and made to yield an income of from \$300 to \$1200 per acre, every year. Good, ripe grapes can be sold in Boston, in large quantities, at from eight to fifteen cents per lb. A cultivator of the vine, who has had a large experience, told me, that with land worth fifty dollars per acre, it cost him five cents per lb. (all expenses included) to raise Concord grapes. This was in the vicinity of Lowell. In three years from the time of planting, the vines commence to yield; if spur pruned, at that age, they will average four or five lbs. to the vine. In the fourth year they will ripen ten or twelve lbs.; and after that, with good treatment, from fifteen to twenty lbs. every year, for at least from thirty to fifty

years. In Europe there are many vineyards that have been in cultivation for more than a century. The fruit of the vine is considered so healthy, that, in many parts of Europe, "Grape Cures" are established; where the sick are treated with a regulated diet, consisting mainly of ripe and juicy grapes, and, in many cases, we are told, with the best results. The man who stands in a European vineyard looks upon the result of twenty centuries of culture and improvement; for the original stock of the European wine grape (*Vitis Vinifera*) was a small, hard and sour grape, brought from Syria. In the Botanical Garden of the city of Dijon, in France, there are six hundred varieties of grape vine. It is unfortunate for the present generation, that the highly improved and saccharine grapes of Europe cannot be naturalized in this country and grown in the open air. All experiments, in this direction, have failed, unless protection has been given either by means of glass, or high walls. The foliage is thin and tender, and cannot resist the rapid and extreme changes of temperature incident to this climate. The vine becomes sickly, and, at once, falls a prey to mildew. We must follow the example of Europe, and grow our own vines from strong and hardy stocks to be found in our woods. In them are the parents of a long line of noble descendants destined to ornament our hill-sides with purple and golden clusters, and to rival the luscious sweetness and rich perfume of European grapes. The intelligent skill of man has produced from bitter, sour, and worthless originals, all the noble and improved varieties of fruit which we have through *seedlings*. The same law has been, and must be, applied to the grape. Some thirty years ago, the only grapes generally known and sold from our nurseries, were the Catawba and Isabella. These are good where they will ripen thoroughly, which they rarely do in this State, our season not being long enough to ripen either wood or fruit. The Isabella originated in the South, and was introduced by Mrs. Isabella Gibbs. The Catawba was introduced by Major John Adlum, of Georgetown, D. C., and was adopted, and used in vineyard culture, by Nicholas Longworth, Esq., of Cincinnati, Ohio. Next came the Diana; a seedling of the Catawba, raised by Mrs. Diana Crehore, of Milton, Mass. This grape ripens a week earlier than the above named varieties. Then came the Delaware, said to have originated in New Jersey, and introduced by A. Thompson, of Ohio. But, to the intelligence and enterprise of a citizen of our own State, we are indebted for the most valuable, hardy grape for general culture yet introduced. I refer to the Concord Grape, produced by the Hon. E. W. Bull, of Concord, Mass. Not only has the Concord been a direct benefit to us, but its success has stimulated others to work in the same direction, and new and improved varieties are rapidly succeeding

each other. We have positive evidence that all parts of this country are adapted to the cultivation of the vine in the numerous varieties of the wild grape, which overrun the States, from Maine to Florida. I think it may be safely assumed, that we shall succeed in obtaining varieties best adapted to each part of the Union, by improving upon the wild type of adjoining woods; i. e., by planting seeds of the earliest, sweetest and best wild grape, in highly enriched and mellow soil. When the vines fruit, select the seeds of those which have improved most, and plant them; and so on, to any extent. In this way was the Concord produced in two generations from the wild *Vitis Labrusca* of the woods. Seedlings have since been produced from the Concord superior to the parent. Soil and situation modify all young seedlings, and great variations in color, flavor, and period of ripening; are produced. This is an extension of the theory which Van Mons applied to the pear. Mr. Bull advises us not to go back to the wild type, but to plant the seed of the best varieties now in cultivation. This will save time, though the seedlings frequently sport and return to the rankest of wild forms.

Soil, Situation and Aspect.

The best soil for the grape is one that is light, warm and moderately rich, also, sufficiently porous to let air, heat and water pass freely through it. Rich soils, loaded with manure, encourage the growth of wood at the expense of fruit. In this State, the best soil for the vine is sandy loam, from ten to fifteen inches deep, with an open or well-drained subsoil. The best soils are those which are composed of crumbling limestone, granite or volcanic rocks. Some of the finest vineyards in Europe are planted in soil composed mostly of carbonate and sulphate of lime (chalk and gypsum). But the most successful vineyards, both in Europe and California, are planted in a red, sandy clay, and in such soils vineyards are commonly planted. Most writers on the grape advise deep trenching, and the preparation of a soil from eighteen inches to three feet in depth. There is no doubt that this tends to prolong the vigor and life of the vine in a warm climate, but as the ripening of the wood and fruit depend a great deal upon the heat applied to the roots, they should be kept near the surface in all northern countries, where the season is too short to heat the earth to the depth of two or three feet. To prevent damage from drouth, the ground may be mulched, with any cheap material, in hot and dry summers. Even the most unpromising, gravelly or sandy land can, by a judicious mixture of either muck, pond mud, or leaf mould, with clay and manure, be rendered extremely fertile. These materials may be carted on to the land in the mild days of winter, and worked in the next spring. In

Europe they sow lupines, (a kind of bean,) or clover, and plough them in when in flower; and, the next year, they plant the vines. Grapes will grow in almost any kind of soil, from nearly pure clay to nearly pure sand; but a mixture of the two with a little vegetable mould will be the most successful. Put clay upon sandy land, and sand upon clayey land. The vine cannot bear stagnant water about the roots, but loves to ramble in dry, open soil. If the soil is not dry, build stone drains. Level ground will answer; but the sweetest grapes and finest wines are always grown on the hill-sides. The heat that is absorbed and radiated from the ground does more to ripen grapes than the direct rays of the sun; and, on the hill-sides, the fruit has the advantage of this heat. The best exposure is S. S. W. and W. and S. E., in the order given. Least favorable E. N. E. and N. The vine should not be shaded directly, either by trees or buildings; though it is a great advantage to have protection against N. and N. E. winds. In a small vineyard, this may be given by a ten foot fence; in a large one, by a double belt of evergreen trees, planted in a semi-circle. Whatever soil is used, it should be well ploughed to the depth of one foot before planting the vines.

Manures.

The requirements of the vine are few and simple. Stimulating manures, applied to the vines, produce a rampant growth of leaves and wood, but no fruit. It is the same with the strawberry. Use, in moderate quantities only, mineral manures and old, well-rotted compost. The best compost is made by mixing and heaping up grass sods, fresh manure, muck or leaves, with a little ashes and gypsum, adding bones, when they are to be had. Turn the heap over occasionally, and when it is reduced to a uniform, rich mould, it is in a fit state to nourish the vine. Cow manure will improve a sandy soil, and horse manure a strong, clay soil. In France and Germany, manure mixed with fresh earth is annually carried on the backs of laborers and placed around the vines; the old soil having been previously removed to the depth of six inches. They also dig in the prunings of the vine;—a rational and most excellent practice. Their soil has been exhausted by centuries of the same cultivation, while ours is virgin to the vine, and does not require such treatment. Mr. Bull recommends “ploughing the land to the depth of nine inches, and the first year apply thirty or forty loads of compost to the acre, to promote the formation of roots.” “After that, twenty bushels of bone dust, twenty of wood ashes and five of gypsum are a sufficient dressing for an acre, for three years.”

Planting.

The best time, in this State, is spring, just before the buds

begin to push, except in very dry and warm soils. Here it is better to plant in the fall, as soon as the leaves drop; then new roots shoot forth during warm days, and the vine makes a stronger growth in the ensuing year. Strong growing varieties, like Concord, Hartford Prolific and Diana, ought to be planted six feet apart in the rows, and the rows eight feet apart. The short-jointed varieties, like Delaware, six feet by six. Let the rows run north and south. The best plants, in my opinion, are well-rooted vines, one year old, raised from single eyes and well supplied with fibrous roots. They are not so liable to be injured in taking them up; they will make nearly or quite as good a growth the first season, and will come into bearing as soon as older vines. In quantities, they cost much less. Mr. Bull prefers vines two years old, grown from cuttings in the open air. Either will make good wines. Dig a hole wide enough to allow the roots to spread out to their full length, and six or eight inches deep; then make a conical heap of soil in the centre of the hole, sloping from four inches from the level surface of the ground to the full depth of the hole; let the stem rest on the centre of this little mound, and spread out the roots, in all directions, seeing that none of them touch each other. Then fill in with mellow earth, shaking the vine gently to settle the earth among the roots. Then fill up the hole and press the earth down gently with the foot. It is a good plan to water the vines well, after planting, if the soil is dry. Keep the vineyard free from grass and weeds, and the soil open and loose. Nothing should be allowed to grow in a vineyard except vines.

Pruning and Training.

There are several modes of pruning; but the principle at the foundation of them all is, to cut off the excess of the last year's wood, so that they will not overbear, and yet leave enough to secure the healthy expansion of the vine. Grapes are always produced on the young shoots of the current year. When set to poles, by the spur system. Take stout bean poles, (spruce or cedar are best,) clean the lower ends, or paint them with coal tar, and set them at least eighteen inches deep, one to each vine, leaving six feet out of the ground. Young vines usually have three buds or eyes; when they have grown ten or twelve inches, tie up the strongest shoot to the pole, with bass bark or straw, and pinch out the others at two leaves. Train the young shoot up perfectly strait; tying it to the pole every week. Laterals will grow from the axils of the leaves; and when they have made three leaves, pinch them off at two. In the first year thrifty vines will grow from six to ten feet. If they run up weakly and slender, pinch off the end of the main shoot, occasionally, to check the flow of the sap and make the vine stouter. The object is to get ripe and

strong wood, no matter how long it takes ; and, if possible, to get a brown, hard stem as high as the top of the stake at the end of the first year. In November, after the fall of the leaf, cut off all the laterals close to the main cane ; and, if that is slender or unripe, cut that back to three buds, and grow a single cane again the next year. If the cane is strong and ripe, cut it off at the top of the pole. Cut off all green wood at the Fall pruning, as it will winter-kill if you do not. In the winter, or late fall, cut the vines loose from the stakes and let them lie upon the ground, so that they can move with the wind and shake off rain and ice. In the spring, tie them up again, and rub out every other eye on the cane ; or, in other words, leave buds enough to get shoots alternately, right and left, about nine inches apart ;—the lowest one fifteen to eighteen inches from the ground ; the highest close to the top of the vine. These are spurs for the next year's crop. Keep them pinched in, so that they will not make over two feet each of ripe wood in the season, and cut off any fruit that may set, at once. Let the top shoot grow, without pinching, until September, when it may be broken off at the end. In November, of the second year, cut every other spur back to one bud, and the intervening ones to three buds ; these will fruit the third year, and the single buds will make spurs for next year's bearing. In the month of November, of the third year, cut the spurs which have fruited back to a single bud, and prune the others to three buds, for next year's bearing. The vines are now established, and must be pruned in the same way during their life. Always let the top spur grow as long as it will ; this will prevent the pushing of the next year's fruit buds during the current season ;—an accident which is liable to occur from close, summer pruning. Do not overtop the vines while they are young ; a practice which has injured many fine vineyards. When the grapes have set, go through the vineyard and cut out bravely one half of the bunches or even two thirds ; leaving only the largest and finest clusters. The crop will ripen earlier, weigh more and be much finer, if treated in this way.

The Renewal System, with horizontal arms, for training against fences and buildings and to trellises.—First year. Train the same as in the spur system. In November cut back to eighteen inches, or to the point where you wish to take the arms.—Second year. Let all the buds push, and train the two upper shoots to a pole, or to the trellis, pinching them occasionally to make them stout. Pinch all the other shoots, at two leaves, and keep them soft. This will promote the growth of the main cane, by arresting some of the sap, and thus prevent the vine from getting hide-bound. At the fall pruning, cut back the two canes to three or four feet, each, according to the strength of the vine ; leaving the

same length and the same number of buds to each. Then bend them down one to the right, and the other to the left, and tie them to the lower bar or wire of the trellis; so that the vine will be T shaped.—Third year. Train up three or four shoots from each arm to the top of the trellis, at equal distances from each other. If some grow stronger than others, pinch in the strong ones till the weak overtake them. In other matters treat the same as before. In November cut back every other cane to one bud, and the intervening ones to three or four feet, for bearing the next year.—Fourth year. In November cut back the canes, that have fruited, to one bud, and the others to four feet. The spur system is the best for vineyards; and the renewal, for houses and walls. In both systems, laterals must be pinched out at two leaves, and all suckers and shoots from dormant eyes on the old wood, must be rubbed off. Trellises can be made of cedar posts, set eight or ten feet apart, and telegraph wire or wooden slats run across, twelve or fifteen inches apart.

Propagation.

Cuttings are the cheapest means of extending an established vineyard. At the November pruning, save cuttings of well ripened wood, of the current year, twelve or fifteen inches long; bury them in dry soil or in sand, during the winter, and, in the spring, plant two of them in the place where you want a vine. Set them about two inches apart. In the spring of the second year, pull or dig up the weakest vine, and set vines, one year old, in the places where the cuttings failed to grow. The upper buds of the cuttings may be covered, one third of an inch deep, after they are planted in a slanting position. If preferred, they can be set in nursery beds, and transplanted, when one or two years old. If grown from cuttings in the vineyard, the roots are never disturbed, and, in dry soil, or stony hill-sides, they strike down deeper and make stronger plants. The earth should be mulched with cheap litter of some kind, and the soil kept loose around the young vines. Train them to a pole, till they are strong enough to be pruned according to a system. Layers can be obtained, by bending down shoots that grow near the ground and covering them with three or four inches of earth. Put them down in July or August, and cut the cane half through near the parent vine; by November they will be well rooted, and can be transplanted. The most rapid way of supplying the loss of an old vine is to take a long and strong shoot, from the nearest vine, and layer it, in the place of the old one; it will bear the first year and may be cut clean of its parent, in one or two years, according to its strength. The vines that produce the famous Burgundy wine of France, are renewed by layering every ten years: There are other modes of

propagation, more expensive and difficult to manage. For those who desire to learn them, and, also, the principles of Grape Culture, I would recommend the "Grape Culturist," by Andrew S. Fuller, Brooklyn, New York, 1864, and "Grape Culture and Wine Making," by John Phin, New York, 1862. Either of these books can be ordered of any bookseller, at a moderate price.

Grafting.

Grafting is done in the Fall, to the best advantage. Cut off the old stock squarely, six inches under ground; split it, for an inch or two, with a sharp knife; cut a scion long, wedge shaped, with two buds, and fit the inner bark of the scion and stock together; tie with bass and fill the earth up to the level of the upper bud. Then invert a flower pot over it, and bank up the earth, on the outside, to the level of the bottom of the pot; then cover that with six inches of straw, and bank earth over the whole. In this way the scion is protected from frost, and can be uncovered, in spring, without disturbing its union with the stock. This is Fuller's method. The scion starts early in spring and makes a strong growth; frequently setting some fruit, the first year. Grafts set in the spring often fail.

Varieties.

While there are some twenty or thirty varieties before the public, there are only three or four that have proved successful enough to warrant the recommendation of them for general vineyard culture, in this State. There are few grapes that combine the hardiness to resist our severe winters, the prolific fruitfulness to reward the cultivator, and the sweetness, richness and high flavor which command the admiration of all lovers of good grapes. The Concord^s is a fine, large, black grape, with a beautiful, blue bloom, and shouldered bunches often weighing a pound. Skin thin; flesh moderately juicy, buttery and sweet. Flavor good; in my opinion, equal to the Isabella. It is the most hardy and strong growing vine cultivated in this State. It is the most profitable grape to grow for the market; for the public taste demands something large, black and handsome, as well as sweet. The Hartford Prolific originated in the garden of Mr. Steele, in Hartford, Conn. It is smaller than the Concord, and about as good. It ripens a week or two earlier, but is apt to fall from the bunch as soon as ripe. Marketmen will not buy it on that account. The Creveling originated in Pennsylvania. It is much like the Hartford, but does not fall from the bunches. None of these grapes have a spicy flavor or very delicate perfume; those qualities do not belong to the *Vitis Labrusca*, in an eminent degree. The Diana is a lilac-colored grape, having a thick skin and somewhat tough pulp, with a delicious juice and musky perfume. It is

apt to rot in rainy weather. In this State, it ripens unevenly ; part of the bunches remaining hard and green until frost cuts them off. It is a little too late for vineyard culture here, but will give satisfaction, if trained to the south side of a house or fence. The Delaware is a beautiful, amber grape, with a tinge of rose color. It is sweet, juicy and melting, with a delicate flavor. The vine is hardy, and when fully established, prolific ; though there are many vines which produce more wood than fruit. In quality, it is not surpassed by any native. The medium or small size of its fruit is its only fault. It requires a richer soil and more generous feeding than any other grape. When trained low and well ripened, it has made wine in all respects superior to Catawba, grown in the same locality the same year ; both grapes being perfectly ripe. Grapes for the garden and south walls, to be grown only where they can have winter protection, are Allen's Hybrid, Rebecca, Union Village, Isabella, Diana ; New ones, on trial, Adirondac, Iona, Israella, Roger's Hybrids, Framingham Seedling, Winchester. The Clinton is said to make good red wine, (claret,) but its growth is so rampant that it cannot be managed with profit in a vineyard.

Diseases.

Mildew and rot are apt to attack vines when hot weather succeeds that which is cold and moist. Sudden and extreme changes of temperature seem to be the exciting cause. Wet and clay soils are more subject to these diseases than such as are dry, sandy and well drained. Mildew is a fungoid growth, which appears, first, on the under surface of the leaf, and rapidly creeps over it. It also attacks the berries, which then fail to ripen. The best remedy is sulphur, sprinkled on the leaves and earth among the vines. The rot attacks the berries in July ; they turn black or red in spots, and fall off. No remedy has been discovered for it.

Final Advice.

Plant the Concord to sell as a market fruit. If you wish to raise only one variety, take that ; for it will flourish in poorer soil than any other. If you desire several varieties, plant Creveling and Hartford Prolific in small proportion ; though their ability to endure our hard winters has not been so well proved as that of the Concord and Delaware. If you wish to make wine, take a rich soil on the S. or S. W. side of a hill, and plant the Delaware. Excellent wine has also been made from the Concord. Late in the fall, cut the vines clear of the stakes and let them lie upon the ground, or cover them with earth. The increased certainty of a crop will pay for the expense.

ON THE BREEDING AND ECONOMICAL MANAGEMENT OF DOMESTIC POULTRY.

BY E. A. SAMUELS.

It is now very generally admitted, both by experimenters and writers on the subject, that poultry husbandry, taking into account the amount of capital invested, and the labor required in its management, is one of the most profitable branches of farm industry. Constant experiment and careful observation, in various districts, have proved that at least one hundred per cent., usually one hundred and fifty, and, with judicious management, two hundred per cent. may be realized in it, as clear profit.

Unfortunately, the importance of the subject has been but little appreciated among farmers generally; and, although the annual production and consumption of poultry in the United States, "probably exceeds \$15,000,000," it is but recently that a regular system of management has been adopted, and the poultry yard allowed a respectable position with the cattle-house and sheepfold.

The question, from which the greatest profits accrue, the raising of poultry for market, or the sale of eggs, is still, I think, unsettled; both systems have their earnest advocates, and strong arguments have been advanced, together with results of many experiments; but I am inclined to think that a judicious union of the two branches can be made more profitable than a persistent adherence to either. Of course, circumstances in this, as in other callings, control results; and there are many considerations to be taken into account, before a decision can be arrived at; for instance, what is the character of the country where the fowls are to be kept; what are the facilities for transportation to market; what amount of attention can be bestowed upon the flock.

In an agricultural neighborhood, where food can be procured at producers' prices, (that is, if the poulterer does not raise his own food,) and where the fowls can have access to fields and pastures, at least twice a week; where railroad transportation is convenient of access, (and, certainly, no Massachusetts farmer can complain on this score,) and where constant attention and care can be rendered, the raising of poultry for market will probably be found the most profitable. But, in districts less agricultural in character, where food for the flock must be transported, often from considerable distances, and where only a limited amount of attention can be bestowed, the production of eggs will, undoubtedly, be the most remunerative. Generally, however, as before remarked, the judicious combination of both systems will ensure the greatest profit.

The labor required in poultry husbandry is not necessarily expensive, for inferior farm hands, such as boys or women, as in Great Britain, can be employed. Farmers, in the harvesting of strawberries, peas and other products, requiring light labor, do not hesitate to employ every available hand, and often at quite remunerative pay. Why cannot constant employment be given in the poultry yard to some of these lighter hands on the farm, at times when they are not needed in the field, where, if a judicious system is adopted, their labor may be very remunerative?

Poultry husbandry is undoubtedly profitable under almost all circumstances; the object of the farmer is, therefore, to make it remunerative in the highest degree. He must obtain a flock of the best fowls, whether for breeding or laying, or both, and adopt a system involving the least expense, both of labor and money.

At the time when the "Hen Fever" raged so terribly in this country, a few years since, a great variety of breeds was introduced, some of which were undoubtedly valuable, but the most of them nearly worthless for general use. Undoubtedly, the mixtures of these breeds have been of great benefit to the common stock of the country; but we are in the days of Jerseys, Ayrshires and Devons, and nothing but pure foreign breeds will do; for in cattle husbandry, the result of careful breeding and culture is that the Ayrshire and Jersey are best for the dairy, and the Devon and Durham for beef; so, in poultry husbandry, the most careful and accurate observation and experiment prove that the Black Spanish and Hamburg fowls are the best breeds for laying, and the Dorking, and, perhaps, the game fowls for breeding and the market. Of course, there are many other good breeds; for instance, the Polish Top-knots, Spangled Polish, Bolton Gray, Leghorn, Creeper and Dominique; but there are objections to all these breeds, in some cases, serious ones, far surpassing any peculiar to the others I have named. The different varieties of the Malay fowl—such as the Shanghai, Cochin China, Chittagong and Brahma Pootra, are almost worthless, except as a cross with the common barn-yard fowl; for they are generally poor layers, clumsy, although *persistent and indomitable sitters*, and their flesh is coarse and ill-flavored.

The farmer, has, therefore, but four breeds to select from, if he wishes to arrive at the maximum degree of profit. These breeds have well-marked and infallible characteristics, all different from each other to a certain extent, but uniting in the most desirable qualities.

The Black Spanish fowl is certainly the most desirable breed we have, where a good layer and table fowl is desired. The full-blooded bird is of a jet black plumage, with reflections of greenish blue, and both sexes have very large, high-colored wattles and

combs, and *white faces*. The males are courageous, but attentive and kind to the females, who are most excellent layers, but poor sitters, and inconstant nurses. The flesh of these fowls is extremely delicate, white, and juicy. The eggs are of good size and excellent flavor. Together with these desirable qualities, this breed is easily reared and fed, (the birds being but small eaters,) and they reach maturity at an early period. Care must be taken, in severely cold weather to protect them, as their large wattles and combs are easily frozen.

The Hamburg fowl is another excellent laying breed, often being called the "Everlasting Layers." There are five varieties:—the Black, Golden Spangled, Golden Pencilled, Silver Spangled, and Silver Pencilled. These are all desirable breeds for laying, but the eggs are rather small, and the birds not so large for the table as the Black Spanish, although of equally good flesh. The males are kind and attentive, and the females seldom desire to sit; this is the breed that Martin, in his Book on Poultry, wrote of as follows:—"The hen betrays no disposition to incubate, but continues to lay eggs, as if for no other purpose than to repay her keeper." This breed is not very hardy, but, in a warm house, will lay throughout the winter.

The Dorking fowl stands, unquestionably, at the head, where a breed for poultry is desired. Both sexes have usually a pure white plumage, sometimes gray or mottled; their hind toes are doubled. The males are peaceable, and attentive to the females. The hens are good layers and excellent sitters and constant mothers. These fowls are very heavy. Their flesh is delicate and juicy, yielding an abundance of what is called "white meat," in consequence of their great depth of breast. The eggs are large, and of delicious flavor. Perhaps, for general purposes, this breed is to be preferred, as in it are united the most desirable qualities.

The Game fowl is valuable as a stock fowl. The only great objection to it is its extreme pugnacity; on account of which the young are with difficulty reared, "sometimes a large part of the brood being killed or blinded" before they are half grown. The females are good layers and mothers; and their eggs, though small, are deliciously flavored. The flesh of this breed is extremely delicate and fine grained, and in great repute. A cross of the breed with the Dorking is valuable for general purposes.

Although poultry husbandry properly includes the management and breeding of several species of domesticated water fowl, together with the turkey, Guinea fowl and other species more nearly allied to those already considered, I do not propose, in the present paper, to treat of them, or their merits, but shall confine myself to those above mentioned.

Accurate observation and experiment have proved that the

maximum number of fowls in one flock should not exceed fifty. If more are kept, they should be divided into several flocks. The first necessary step, then, before selecting the poultry, is the preparation of houses and yards, each furnishing suitable accommodations for fifty fowls. In the preparation of these houses, economy, together with the best facilities for giving the fowls the greatest care with the least amount of labor, are objects always to be kept in view by the farmer. In selecting a site for a poultry house, a porous, sandy soil is the most suitable, and a south-east exposure should be chosen. If a brook or spring of pure water is accessible, and can be admitted into the yards, it will add not a little to the comfort and health of the fowls. The dimensions of the house need not exceed eighteen feet by ten, and the height eight feet at the back or north side of the house, and six feet at the south. This plan is most desirable, because the roof will be simple and sloping to the south, and there will be no waste of material or space. The material should be well-seasoned stock; the frame may be made of three inch joist and covered with one inch boards; the roof and back should be shingled; the rest of the joints should be battened. The sills of the building may be sunk two or three inches in the ground, but not more. I think that the experience of a majority of poulterers has been that a wall foundation for the poultry house, *unless it is thoroughly cemented*, is very undesirable; both on account of its harboring rats, weasels and other vermin, and its being less comfortable in winter. The floor should never be made of boards, but of earth, which can be renewed, more or less frequently, at will, and the droppings of the fowls rendering it the best of manure. Some recommend that a pile of saw-dust be kept near at hand, and a few shovelfuls thrown into the house daily. I think that loam and sods of green sward are better, because they not only absorb and retain the ammonia, but furnish amusement and acceptable picking for the fowls. There should be several large windows in the front of the building, which may be protected by laths. The entrance should be at one end. The interior should be divided into two apartments, one ten, the other eight feet in length, which may be separated by a partition of laths, with a door for passage through. These apartments are designed, the larger for roosting, and the other for laying places. The roosts are most conveniently placed in the form of a ladder, inclined to an angle of about forty-five degrees; the lowest should not be more than three feet from the ground, for valuable fowls are often injured, sometimes fatally, by flying up and down from high roosts.

There should be two tiers of nests in the laying apartment, one on each side of the passage to the roosting apartment; and, as secrecy is the great point the hens strive for in laying, the fol-

lowing is a very convenient plan for adjusting the nests. For entrances, between the two apartments have two small doors, sufficiently large for the passage of the fowls; one at each end of the lath partition. The nests should be placed in rows, above each other, and accessible by hen ladders; they should be boarded up on the side next the main passage-way of the building, and separated from each other by board partitions. Small baskets are most suitable for nests, being easily removed and cleaned, in case lice or other vermin have taken up their quarters in them, to the annoyance of the fowls. These baskets should have a liberal allowance of clean, *short* straw, or moss, and in each a "nest egg" of wood, turned into the shape of an egg, and painted white. The boards, behind each row of nests, should be hung on hinges, for greater convenience in changing or preparing the nests, and for the removal of the eggs, which should *always be soon after the fowls have gone to roost*, in the evening. The poultry house and the fence (which should be about twelve feet high, made of laths,) around the yard being built, the next step is the choice of fowls. The female should be not less than one year, nor more than three years old. She should be nervous and noisy; and, if intended for a breeder, of large body and wide wings. The male should be about two years old, of perfect health, full bodied, broad chested, nervous and courageous, yet kind and attentive to the females; he is too old if more than three years of age. If the flock is intended for breeding purposes, at least one male should be provided for every ten females; but, if eggs are desired more than chickens, perhaps two cocks for fifty hens will be enough; indeed, some poulterers affirm that they get more eggs from hens where no cock is kept, than otherwise. Be this as it may, few cocks should be kept with laying hens, as their presence rather induces or stimulates their sitting propensities.

The poultry house prepared and the flock selected, the farmer should see that they have proper care and food; that unhealthy fowls are restored or removed; that those hens which incline to sit are provided with eggs; and that the chickens when hatched are taken proper care of. Fowls in confinement require an abundance of pure water;—ashes, to dust themselves in, and nourishing food. Of grain, equal parts, each, of Indian corn and oats is very acceptable; at least three times a week, scraps of meat should be thrown in to them, and a supply of crushed oyster shells or clam shells should be accessible at all times. Green sods also thrown frequently into the fowl yard will be of great advantage. These few attentions are all that are necessary with laying hens.

With sitting fowls, care should be taken that they are really in sitting heat. They often manifest a desire to sit, remain on the

nest two or three days, and then abandon it altogether. This can be avoided by allowing them to sit several days, to test their constancy; if they prove really in heat, select *fresh laid* eggs of a sufficient number to be *well covered*—an odd number is best because the eggs will pack most regularly. In selecting these eggs, some persons believe that when the long, slim ones are taken, the chickens will be invariably males, and the thick, nearly round ones, females. This is a very uncertain plan to adopt in the choice of eggs and ought never to be relied upon. The surest method seems to be, to select those eggs, if pullets are wanted, which, when they are held between the eye and a lamp, discover the cavity at the great end of each egg to be at one side of the centre of it. If it is at the centre, the chick will be a male.

The sitting hen should have her nest where she cannot be troubled by other fowls. Give her a retired, quiet place, and she will seldom want to leave her nest; but if she is in the bustle of the poultry house, she will be nervous and restless, and oftentimes will abandon her nest. There should be convenient to her sitting place a box or pile of ashes, where she can dust and wash herself—plenty of food, and pure water. These are the only attentions she requires. The period of incubation is twenty-one days; during this time the hen should be left to her own inclinations, and the eggs should not be touched or moved; she carefully turns them that they may receive a uniform warmth, and any interference with her management only irritates her,—sometimes causing her to break the eggs, or leave them entirely. At the end of the twenty-first day, all the chickens should be hatched; some, however, in consequence of great thickness and toughness of the shell, are unable to break it; these may be assisted by carefully, with the point of a penknife, chipping away the shell where the little punctures are made by the chick. Great care, however, is necessary in doing this; and, as a general thing, it should be avoided. The chickens require no food for twenty-four hours after being hatched. They may be then fed on a dough made of Indian meal and water; this should not be too thin, as it is liable in that state to induce diarrhoea. If the weather is pleasant, the chickens may be put out in coops the second day after hatching. These coops are most conveniently made in the following manner: take pieces of boards four feet in length, and make a platform three feet in width; to the two sides of this platform nail other pieces of boards, which will meet together as a roof, over the middle of the bottom; at the ends nail laths, sufficiently wide apart to permit the chickens to pass through comfortably. This gives a dry, comfortable house, which with care may be made to last a number of years. These coops should not be placed very near each other, as the chickens are apt to wander into other houses than their own,

when the hen will often injure them seriously for the intrusion. To place a number of these coops of chickens in the kitchen garden, is one of the best methods of reducing those pests, the striped cucumber beetle, cut worm, and potato beetle.

Before closing this paper, it is but proper that some mention should be made of the diseases of poultry. The most common are the pip, roup, diarrhœa, and gapes. The pip is mostly confined to young fowls. The symptoms are "a thickening of the membrane of the tongue, especially towards the tip;" this soon becomes sufficiently great to obstruct the breathing of the fowl so far as to cause gasping, and the beak is held open to assist breathing; the chicken then soon pines away in solitude. This disease is caused by feeding upon hot food, and drinking impure water. Generally, if the end of the tongue is cut off, and a supply of pure water is kept by the fowl, a cure will be effected; in obstinate cases, the bird had better be killed. The symptoms of the roup are similar to the glanders in horses; "constant gaping, dimness of sight, lividity of the eyelids and the total loss of sight, a discharge from the nostrils, that gradually becomes purulent and fetid." For treatment, place the fowl in a warm apartment and bathe the mouth, eyes and nostrils with a weak solution of chloride of lime and acetate of lead. The diarrhœa is caused by dampness and improper food. In treatment of this disease, the fowl should be placed in a warm room, and some chalk and cayenne pepper be given in its food. The treatment for the gapes is similar to that for the pip, and the symptoms are nearly the same; it is caused by the presence of numerous parasitic worms in the windpipe. These may be removed with a stiff feather.



REPORT ON PROGRESSIVE HUSBANDRY.

The Committee on Progressive Husbandry visited the farm of Dr. Morton, for the purpose of seeing the improvements made during the past year. The Chairman having resigned, in consequence of illness, and the records of the last visit not being at hand, we cannot make so minute a comparison of this year's with last year's condition of the farm, as would be desirable.

The general appearance of the farm shows continued attention to its improvement. The cows, pigs, fowls, horses, implements and manure-heaps, show the same determination of the owner to reach his ideal standard of success. The crops of grain and rutabagas had a promising appearance. The grass had been mowed. The manufacture of manure on a liberal scale was carried on, as it had been for some years. The chief improvement was the con-

version of unproductive meadows and bogs into profitable grass fields, by draining and manuring. The land is well situated for these operations, and is of a quality that justifies a pretty large outlay.

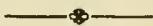
We noticed, also, that from several acres of swail and woodland, the rocks, bushes and hassocks had been removed; the wild grass killed out; part of the land plowed, and a foundation laid for a permanent and profitable hay crop. A considerable addition has been made to the productive land by clearing up and preparing for cultivation an old pasture.

Dr. Morton has laid before us a statement of his operations, and of the productions and expenses of the farm for the year. We cannot predict what will be the ultimate pecuniary results of his operations; but the improvements are real; the work is well done; it is done with a view to continued progress; and, considering the nature of the soil of a part of the farm, and the many and great difficulties to be overcome, we do not hesitate to express our satisfaction with Dr. Morton's methods and results.

For the Committee,

J. M. MERRICK, *Chairman.*

Walpole, Dec. 30, 1864.



REPORT ON MANURES.

The Committee of Experiments on Manures have again to regret the unwillingness of the farmers of the county to undertake to make experiments with manures, not realizing that when made, continued from year to year, and reported, they would not only benefit themselves, but enable others to profit by their experience. It would, no doubt, be as satisfactory to impart the knowledge thus obtained, as to gather an extra large crop.

The Committee herewith submit the report of the experiments with manures made by Mr. Aaron D. Weld of West Roxbury, the only applicant for the premium offered by the Society; this being the third year of his experiments made upon the same land, they appear to have been made with much care and exactness; we, therefore, award him the first premium of twenty-five dollars.

The statement of Mr. Weld, together with the second statement of Mr. Charles Breck, who is a competitor for the premium to be awarded in 1865, is herewith submitted.

For the Committee,

CHEEVER NEWHALL, *Chairman.*

Dorchester, Feb. 2, 1865.

STATEMENT OF AARON D. WELD.

CHEEVER NEWHALL, ESQ. :

DEAR SIR—Referring to my two previous reports for your second series of experiments with manures, I now beg to submit my third report.

The hay was cut June 24, 1864, and got in June 27th; quality good. The result was as follows:—

	Twenty rods.		One acre.
No. 1.	405 lbs.	Nett + 8	3240 lbs.
“ 2.	510 “	“ + 8	4080 “
“ 3.	430 “	“ + 8	3440 “
“ 4.	420 “	“ + 8	3760 “
“ 5.	330 “	“ + 8	2640 “

Synopsis of Weather.

	First third.	Second third.	Last third.
May,	Wet,	Wet,	Moist.
June,	Moist,	Dry,	Dry.
July,	Dry,	“	“
August,	Moist,	“	“
September,	Dry,	“	Moist.

Result per Acre for Three Years.

	1862.		1863.		1864.
Lots.	Shelled Corn.	Stover.	Cleaned Rye.	Straw.	Hay.
No. 1.	85.24-56 bush.	3. 136 tons.	10.40-56 bush.	1. 160 tons.	3240 lbs.
“ 2.	108.24-56	4. 464	16.40-56	1.1144	4080
“ 3.	88.40-56	3. 256	13.48-56	1. 664	3440
“ 4.	85.24-56	3.1360	11. 8-56	1. 256	3760
“ 5.	52.32-56	1. 576	6. 8-56	1. 56	2640

All of which is respectfully submitted,

AARON D. WELD.

Weld Farm, West Roxbury, Dec. 29, 1864.

STATEMENT OF CHARLES BRECK.

CHEEVER NEWHALL, ESQ. :

DEAR SIR—In continuing my experiment with manure, commenced in 1863, I have to report as follows. The land was planted with corn the same as last year, and the result was as follows:—

	Weight of corn on the cob.	Weight of fodder.	Total corn and fodder.	Bush. of corn per acre.	Weight of fod- der per acre.	Value of corn per acre.	Value of fodder per acre.	Total value per acre.
No. 1.	81 lbs.	82 lbs.	163 lbs.	41.5	3280 lbs.	\$83.00	\$26.24	\$109.24
" 2.	81	78	159	41.5	3120	83.00	24.96	107.96
" 3.	84	80	164	43.	3200	86.00	25.60	111.60
" 4.	96	86	182	45.3	3440	90.60	27.52	118.12
" 5.	80	75	155	41.	3000	82.00	24.00	106.
" 6.	110	105	215	56.4	4200	112.80	33.60	146.40

Synopsis of the Weather.

	First third.	Middle third.	Last third.	Average of thermometer.	Remarks.
May,	Moist,	Moist,	Moist,	57.83°	about 2° warmer than the average.
June,	Moist	Dry,	Dry,	66.34°	about 4° colder than the average.
July,	Dry,	Dry,	Dry,	71.67°	about the average.
August,	Dry,	Dry,	Dry,	72.98°	about 5° warmer than the average, and the warmest for many years.
Sept.	Dry,	Dry,	Dry,	59.66°	about 3° colder than the average.

By the above table it appears that No. 5, which has had no manure, produced within \$5.73 as much per acre as the average of those which had manure. And, also, that No. 4, which had the manure spread upon the surface last year, after planting, and produced the smallest crop, \$29.27 less than the average of the other three lots, has this year produced the largest crop, or at the rate per acre of \$8.52 more than the average of the other three lots. These results, so different from what we usually expect, I might have attributed to some mistake, had it not been that I husked and weighed it myself, and was very particular to put down the figures at the time.

No. 6, which I tried, for my own satisfaction, with double the quantity of manure, has this year produced at the rate per acre of \$34.82 more than the average of the four lots, which, added to the surplus of last year, after deducting the value of the manure, leaves a profit of about forty dollars, and something will, probably, be added to this the next year. The experiment with No. 7 was not continued this year.

Respectfully submitted,

CHARLES BRECK.

Milton, Mass.

REPORT ON UNDERDRAINING LAND.

The Committee on Underdraining Land are unfortunately again under the necessity of saying, that no calls have been made upon them, during the past year, to attend to any operations in the line of their duty. We are, therefore, wholly deficient in materials, in the shape of "facts and figures," upon which to base our report. But it has been hinted to us, that notwithstanding these unfavorable circumstances, a report of some kind will probably be expected; and we are fully convinced that the importance of the subject is sufficient to render it worthy of the attention of every Agricultural Society, and of all intelligent cultivators of the soil, especially if they are believers in progress. We are, therefore, unwilling to have it wholly ignored in making up the Transactions of our Society for the past year.

The weather during the past summer and autumn was uncommonly favorable for draining and performing other operations upon wet land, but the unusual scarcity and high cost of labor, owing to the unfortunate state of our country, probably prevented many improvements of our soil by underdraining and other means, which would otherwise have been made. But we now hope and trust that the time is not far distant when this accursed rebellion will be crushed, and the cause of it forever removed from every State in the Union, and from every individual in the land. Then labor will cease to be degrading,—we shall hear no more about "greasy mechanics,"—the epithet, "mud-sills," will no longer be applied to Yankee laborers,—honest and intelligent cultivators of the soil, will become Nature's noblemen, and be admitted into respectable company at the South as well as the North. When that time shall arrive, and we can again turn our individual attention to the peaceful pursuits of industry, there will probably be sufficient necessity that the productive resources of the soil should be developed to the fullest extent. Agriculture will still retain its all-important place as the *basis* of all other productive pursuits. The question will then arise, not how shall the requisite amount of labor be obtained, but how shall that labor be most judiciously and profitably expended and applied for the purpose of rendering the soil capable of producing the largest crops and those of the best quality.

In order to accomplish this important result, we are fully convinced, both from experience and observation, that so far as a great part of the soil is concerned, the first requisite will be to thoroughly underdrain all that portion of our improved land that is so situated as to retain stagnant water during any considerable part of the year. We view the matter of underdraining as no

longer an experiment. The benefits derived from it, by experiments heretofore made, are sufficient, in our opinion, to satisfy every intelligent farmer, that it is the *foundation* of all other improvements. Draining the water from the surface is not sufficient; it must be taken *out* of the soil, so as not to remain in a stagnant state within one foot of the surface, in order to obtain any lasting benefit from any other improvements which may be made upon it. We will illustrate our meaning by giving a short history of an improvement upon a piece of swale or swamp land, made some years since under our own observation.

The land was naturally neither meadow nor upland. The surface was very uneven, the soil thin and black, resting upon a bed of hard pan of the hardest kind. The annual crop (for it had been mown every year from time immemorial) consisted of brakes, briars, bushes of various kinds, blue-flag, buckthorn, a few cranberry vines, (but no berries,) and last and not least, some grass of the poorest quality; making, in the aggregate, less than half a ton per acre, and of a quality, when used for fodder, very well adapted to keep animals in a "starving condition." In fact, it was "bad for the eyes" of any person to look upon either the land or its products. But it was situated quite near the owner's buildings, and in the year 1854 he commenced an improvement upon it. The surface was made level by carting on gravel and loam, and a drain, or rather a ditch, was dug through it, of sufficient depth to prevent the water from standing upon any part of the surface. It was then treated with a generous dressing of compost manure, and seeded with grass. The first year it produced a fair crop of good quality. The second year it produced two large crops of the best quality, estimated at from three to four tons per acre. The owner was delighted with the result of his labor. The third year it produced a fair crop, but the quality was not so good as it had been, and some rushes began to appear, which somewhat surprised the owner, as he had never known any rushes to grow there before. He "guessed" it needed another dressing of compost. The succeeding autumn a good top dressing was accordingly applied. The fourth year it produced a heavy crop of grass, but the quality was not good, and the rushes had increased to such an extent as to render the hay unfit for market. The owner began to "suspect" that something besides "compost" was needed. He accordingly proceeded to make a drain of sufficient depth to keep the water at least one foot below the surface of the soil during nearly all the year, and, at the same time, was careful to secure a good *outlet*. This part of the improvement, which we think, and the owner now admits, should have been the first, was made in the autumn of 1858, and from that time to the present no rushes have been seen upon the prem-

ises. An occasional top dressing is all that has been necessary, to insure an annual crop of pure English grass, the quantity and quality of which has been such as to satisfy the desires of the owner.

The above is only one of many examples which have come under our observation, and which have convinced us that thorough *underdraining* lies at the *foundation* of all other improvements on all soils which retain water in a stagnant state.

The manner of constructing the drains, whether of stone or tile, the distance apart, the direction in which they should run, &c., are all questions which must be decided by circumstances, and although important in themselves, yet we care not so much how the work is done, provided it be *well done*, and in such a manner as to secure the result above indicated.

For the Committee,

S. W. RICHARDSON, *Chairman.*

Franklin, Dec. 5, 1864.



REPORT ON VEGETABLE AND ROOT CULTURE.

The Committee report twenty-two entries. The following premiums were awarded:—

First premium to John Sias, of Milton, for the best collection of vegetables, consisting of seventy-nine varieties, \$10.

Second to Charles E. C. Breck, of Milton, \$5.

Third to Francis Marsh, of Dedham, \$4.

Fourth to A. K. Howe, of Dover, \$3.

Fifth to W. S. Ware, of Needham, \$2.

Sixth to Cyrus G. Upham, of Needham, \$1.

First premium to John Sias, of Milton, for the largest and best collection of potatoes, \$3.

Second to A. B. Endicott, of Dedham, \$2.

To Owen Kennedy, of Dover, for collection of vegetables, a gratuity of \$1.

To Robert Porter, Jr., of Stoughton, for seven pumpkins, the produce of one vine, a gratuity of \$1.

Several other contributors deserve the thanks of the Society, especially Timothy Phelps, of Dedham, for a fine display of tomatoes.

A. T. MESERVE, *Chairman.*

West Roxbury, Sept. 30, 1864.

REPORT ON FRUITS.

Apples.

First premium, Harris's Treatise, to Frederic Clapp, of Dorchester.

Second premium, \$4, to A. D. Weld, West Roxbury.

Third premium, \$3, to E. Polleys, East Walpole.

Fourth premium, \$2, to Lucas Pond, Wrentham.

For the best single dish—First premium, \$2, to H. Bigelow, Dover, "Hubbardston Nonsuch."

Second premium, \$1, to Frederic Clapp, Dorchester, "Gravenstein."

Pears.

First premium, silver cup, to Samuel Gilbert, Jr., Dorchester.

Second premium, \$4, to Frederic Clapp, Dorchester.

Third premium, \$3, to Charles A. Hewins, West Roxbury.

Fourth premium, \$2, to A. D. Weld, West Roxbury.

For the best single dish—First premium, \$2, to R. S. Allen, Brookline, "Flemish Beauty."

Second premium, \$1, to Charles Marsh, Quincy, "Seckel."

Peaches.

First premium, \$3, to John York, West Roxbury.

Foreign Grapes.

First premium, \$4, to Royal W. Turner, Randolph.

Second premium, \$3, to Albert Crosby, West Roxbury.

Native Grapes.

First premium, \$3, to Charles A. Hewins, West Roxbury.

Second premium, \$2, to J. W. Talbot, South Dedham.

Third premium, \$1, to J. M. Merrick, Jr., Walpole.

Cranberries.

First premium, \$3, to N. Longfellow, Needham.

Second premium, \$2, to Hannah R. McIntosh, East Needham.

Third premium, \$1, to John W. Kingsbury, Franklin.

Hon. M. P. Wilder, the honored President of the Society, whose absence was the source of much regret, was represented by the rich contributions of his garden, he having on exhibition no less than 112 varieties of pears, which, in accordance with his usual custom and instructions, were not entered to compete for premiums.

There were fine displays of apples from E. Stone, Dedham; Wm. Lyon, Needham, and Mrs. McIntosh, Needham;—of pears, from G. W. Palmer, Fairmount; Charles Pierce and J. H. Adams, Milton; Lincoln Hutchins, Moses Boyd and Eliphalet Stone,

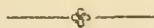
Dedham; and J. H. Billings, Charles G. Mackintosh, Albert Crosby, and J. W. Paige, West Roxbury.

Charles Prescott Fiske, of Natick, exhibited a single dish of Diana Grapes that were as fine as any the Committee had ever seen, and displays of native grapes, in varieties, were made by G. W. Palmer, Fairmount; Warren Cobb, Sharon; W. Sawin, Dover, and John H. Adams, Milton.

For the Committee,

C. A. HEWINS, *Chairman.*

West Roxbury, Sept. 30, 1864.



REPORT ON FLOWERS.

“How exquisitely sweet,
This rich display of flowers,—
This airy wild of fragrance,
So lovely to the eye,
And to the sense so sweet!”

The exhibition of flowers was fully up to the average of many years. No exotics were offered. The common garden and wild flowers, bouquets and dried flowers were shown in great abundance, indicating the taste and industry, in many cases, of our young ladies, for whom their culture is a most appropriate employment.

Our old favorites, the dahlias, were, as usual, superb, and attracted much and merited attention. We confess our attachment to these familiar friends, whose progress we have watched for many years.

But the pearl of the show was the unequalled collection of Gladioluses, in new and beautiful varieties, produced by the taste and skill of Mr. Craft. Their varied and delicate tints were truly wonderful; and we shall be much surprised if these fine sorts are not soon and widely diffused. There were, also, some excellent specimens of the Japan lily, a plant that deserves a more extended culture.

“Queen of the field, in milk-white mantle drest,
The lovely Lily waved her curling crest.”

No part of the Fair was so constantly thronged by admiring crowds, as the exhibition of flowers. If many of the visitors did not know why they were satisfied, it is enough that they were satisfied by this beautiful display of nature's loveliest works.

“Bright gems of earth, in each perchance we see
What Eden was, what Paradise may be.”

Even in infancy nothing is more noticeable than the love of flowers; and among children it is a ruling passion. Nor does its influence cease in manhood. It is indeed a manly thing to be pleased with Nature's simplest gifts. It shows a healthy, unperverted taste; and it shows wisdom no less.

Enjoyment and improvement often depend on little things, which turn our feelings in right directions. The humblest wild flower is, to the appreciative mind, a token of the Divine benevolence. Amid His greater works, the sublime manifestations of His power, God places this lovely emblem of His goodness and of His care for human happiness.

"Flowers, scattered unrestrained and free,
O'er hill and dale and woodland sod,
That man, where'er his walks, may see
In every step, the hand of God."

It appeals to our sense of the beautiful, and by quickening that, increases our satisfaction with life and renders it more desirable. Moreover the presence of cultivated flowers indicates a pure taste and a disposition to be gratified with cheap and natural pleasures. How attractive do flowers make home, especially in the winter, and at how small an expense may some of our best feelings be gratified! We hope that each succeeding year will develop a growing love for the culture of flowers in our gardens and families, and that the results of this culture will be exhibited at our Fair.

The Committee, after repeated comparisons of the flowers and bouquets offered for premium, make the following awards:—

Best collection of cut flowers, Marion and Lizzie Watt, West Roxbury, first premium, \$4.

George Craft, Brookline, second premium, \$3.

Macey Randall, Jr., Sharon, third premium, \$2.

George W. Palmer, Fairmount, fourth premium, \$1.

Bouquets—First premium not awarded.

Mrs. Hannah P. McIntosh, East Needham, second premium, \$3.

Macey Randall, Jr., Sharon, third premium, \$2.

William Dunbar, Canton, fourth premium, \$1.

Dahlias—Macey Randall, Jr., Sharon, best twenty named, first premium, \$3.

Second not awarded.

Macey Randall, Jr., Sharon, best single bloom, \$1.

Pot Plants—None on exhibition.

Seedling Verbenas—None on exhibition.

Gratuities—George Craft, Brookline, for a choice collection of seedling gladiolus, \$3, and the Society's diploma.

Mrs. William Lyon, Needham, for bouquets, \$1.

John H. Adams, Milton, cut flowers, \$2.

Diplomas—Mrs. George Vose, Milton, for cut flowers and dahlias, diploma.

Mrs. Hannah P. McIntosh, East Needham, for box of asters, diploma.

Wild Flowers—None on exhibition.

Amongst the many choice dahlias was one presented by Mrs. George Vose, of Milton, which we have never seen equalled. Two perfectly distinct flowers were found growing upon the same stock, of beautifully shaded tints, and of different hues—the one a dark crimson, the other a purple shaded white, and both of perfect form and brilliant color.

For the Committee,

ROBERT WATT, *Chairman*.

West Roxbury, Dec. 5, 1864.

The following article upon the *Gladiolus* was kindly prepared by that accomplished florist, Mr. George Craft, of Brookline, and is herewith subjoined as an appendix to the Report on Flowers.

ROBERT WATT, *Chairman*.

THE GLADIOLUS.

BY G. CRAFT.

To the Chairman of the Flower Committee:—

Valuable articles upon the history and cultivation of this plant, from the pens of eminent and experienced florists, both of this and foreign countries, have appeared within the past few years, chiefly in works devoted exclusively to horticulture and floriculture. These savans leave not a very tempting prospect to encourage one to follow and drag the loafer's rake. Few farmers wish to "thresh straw that has been twice threshed before."

I comply with your request that I should furnish something on the *Gladiolus*, partly, because I suppose that Committees have a right to require of those who exhibit animals, plants, or articles, some account of the management, or mode of culture which has been pursued, or any facts respecting them which the Committee may deem advisable, and, partly, because being a "species" of the "genus" farmer, I should rejoice if any thing herein contained, resulting from some ten years' experience, should contribute in any measure towards making any of that "order" better acquainted with "one of the grandest and most varied of autumnal flowers," whose ease of culture, diversity and beauty of color, and

comparative exemption from disease and the attack of insects, all conspire to make it one in a million.

It is true, that some of the new or scarce varieties, are, at present, costly. But many quite fine and showy ones, are now abundant and cheap; owing to their having been sometime in cultivation, or their quality of propagating with rapidity. Many kinds annually increase two, three or fourfold, producing quite a stock in a few years. Besides,

“Most can raise the flowers now,
For all can get the seed;
And some will be pretty enough,
And some will be poor indeed.”

Gladiolus is the Latin name for a dagger. It seems to have been so called from its sword-shaped, flag-like foliage. The popular synonyms, “sword-lily” and “corn-flag,” are also equally significant. The plant belongs to the Iris family. The different varieties of garden and wild Iris, the Crocus, Blue-eyed Grass, Blackberry Lily, and Tiger Flower, are likewise members of this order. The analogy between animals and plants seems to suggest that a brief *genealogical sketch* ought not to be omitted in this connection.

The beautiful hybrids now so popular, appear to be the descendants of several distinct species, and of their offspring; all natives of foreign countries. The first ancestors, it seems, were Gladiolus Natalensis, *alias* psittacinus, and cardinalis, G. blandus and floribundus. From these sprung Gaudavensis, ramosus, pudabundus and convillii. Three distinct races have resulted from the intermingling of the abovenamed plants, which races are typified by cardinalis, Gaudavensis and ramosus.

Though the Gladiolus will flourish in any good vegetable garden soil, that is not too cold and heavy, it prefers ground which is deep, rich and loose. We have had unvarying success, for five years past, in soil made deep by trenching, loose by mixing in sand, and kept rich by liquid manure. Urine, three or four weeks old, is applied in full strength from November to April. At other times, it is weakened by adding half to three-quarters water, and applied at night. Our grape borders, shrubbery, flower-plats, lawn trees, &c., are kept in a flourishing condition with no other fertilizer, except the soap-suds from the weekly washing, &c. Soap-suds causes the surface to crust over. This must be broken, or it will exclude water almost as effectually as the lips of a toper. Guano water is good; but a good urinary may be constructed at a small outlay, so as to constitute an economical, labor-saving, garden-enriching “institution!” Where stable manure is used, it should be horse or cow manure that is old and fine, spread on and spaded in before winter sets in.

The *Gladiolus* may be propagated by bulbs, or rather corms,* the little corms or offsets, and by seeds. Plant the corms in the open border about the 20th of May, or as soon as the ground becomes warm and friable. Eight to twelve inches apart is a good distance, and two to three inches deep, according to their size. Some may be put into pots, and forwarded in a cold frame or hot bed, and turned into the open border about the first of June. Some of these will bloom in July; while those planted in May, will, if the plants and varieties are numerous, furnish a succession of flowers from the middle of August, until destroyed by the frost.

When of sufficient height, neatly stake and tie the plants. It will take but little time, and will keep the plants looking neat and fresh, if the dead blossoms are removed, say once a day. Cutting off the flower stalks that have done blooming, is not only essential to neatness, but the corm is strengthened thereby. After the extremities of the leaves have begun to turn, or the frost has killed the flowers, the sooner the corms are out of the ground the better. If they remain till cold weather sets in, it is troublesome drying them. They should be housed before the close of October, and so arranged as to be readily removed to warmer quarters, in case of a sudden cold snap. Choose a dry day—take up the plants carefully, with a spading fork—let them lie spread, root and branch, in the sun a day or so. They may then remain, for two or three weeks, spread out in some airy loft, during which time the roots and tops may be removed at your leisure; after which the corms should be packed in paper bags or boxes, and kept in a cool, dry room or cellar, away from frost, until the time for planting arrives. It is well to examine them, occasionally, during the winter, and if found to be damp, spread and air them for awhile, some mild, sunny day.

Offsets are little hard buds or cormlets, which are found of various sizes and quantities, clustering, like eggs, around the lower part of the ripened parent corm. Propagation by these is very

* A Corm or solid bulb, as of *Gladiolus* and *Crocus*, is a sort of rounded tuber. . . . Bulbs are *scaly*, as in the lily, when the scales are narrow: or *coated*, as an onion, when the scales enwrap each other, and form coats.—*Gray*.

A bulb is a collection of fleshy scales formed under ground by certain kinds of plants, as the tulip, the onion, and the lily.—*Emerson*. *Flint*.

The *corm*, or solid *bulb*, though commonly considered a root, is merely a short and thick *rootstock*. . . . The *real roots* . . . branch out below them.—*Willson*.

Corms are only a solid mass of feculent matter, which modern botanists do not allow to be bulbs, but call underground stems.—*Loudon*.

Bulb.—A scaly body formed on a plant, . . . emitting roots from its base. . . . It is always formed of imbricated scales. A solid bulb has no existence.—*Lindley*.

precarious.* Two years ago, we got a fine lot of plants by sowing them in the open ground in May; while, in other seasons, both before and since, scarcely enough of the capricious little things have come up to pay for weeding. If the season is too wet, they rot; if very dry, they certainly will not start, and artificial watering has failed to remedy the difficulty. Planting in boxes in winter and forwarding in a frame, under glass, though attended with considerable care and trouble, is usually partially successful, at least, and will pay where the varieties are scarce and valuable. The boxes should be taken from the frame about the first of June, and set into the ground in some partially shaded spot; water occasionally in dry weather. A good size for the boxes, is, say thirty inches long and fifteen inches wide, outside, and about five inches deep inside.

The raising of seedlings of almost any plant, is a very attractive and pleasant pastime; albeit, success with most kinds is "gloriously uncertain," while, with others, failure is almost certain. Experiments in sowing *Gladiolus* seeds, however, seem to prove success to be the rule, and disappointment the exception.

The seeds resemble those of the parsnip; they should be sown pretty thickly, about the middle of May, in the open ground, and covered with about half an inch of fine loam. Do not be alarmed if the plants do not show themselves before July. They look so much like grass, and the weeds by this time will have so much the start of them, that if a thick skull be set to weeding them, all care and trouble concerning them will be pretty certain to end just at this period. Watering at night is advisable occasionally, if the weather be dry. Take up and preserve them according to the directions given for the named sorts.

From seeds sown May 18, 1862, and treated in this simple manner, we got several spikes of very beautiful—some were extra—flowers, in 1863, and most of the balance bloomed in 1864.

The sowing in 1863 was on May 19th. Owing partly to very dry weather, many of these did not come up till July. Yet several from this planting showed flowers in October, 1864. A few of these corns now measure 2 inches in diameter—many of them $1\frac{1}{2}$ inches—while the balance, owing to the extreme drought of the season, average about $\frac{3}{4}$ of an inch. Corns raised from seed sown in March, 1863, in boxes, and put into a cold frame,

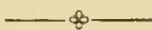
* The following is one among many exceedingly valuable hints contained in an article on the *Gladiolus*, which came to hand since the above was written. "Collect these [bulblets] carefully, bag and label them and lay them aside for eighteen months, then sow them in the open border in a prepared bed; they will come up in ten days, not one will fail, and form bulbs which will bloom the next summer."—*E. S. Rand, Jr., in The Horticulturist.*

under glass, in April, now measure, a few of them, $2\frac{3}{8}$ inches, and the remainder, from $\frac{5}{8}$ to $2\frac{1}{4}$ inches;—not enough better than the average product of the out-door method, to pay for the additional trouble and expense. In consequence of the severe and protracted drought of the present summer, the few seeds sown last May did not come up till the first of November. These, of course, were worthless.

In the opinion of Dr. Lindley, Professor of Botany at the Royal Institution, England, the following rules should be observed in determining the qualities of seedling Gladioli.

1. The habit and constitution should be vigorous, the stems strong and sturdy, and if branching from the base, so much the better. 2. The flower spike should be long and well furnished, the flowers all inclining to one side, so as to form one face. 3. The outline of the individual flowers should represent an obtuse-angled triangle, either erect or reversed, the lip-marking being confined, in the former case, to the one, and in the latter to the two lower petals, or, if continued on the sepals, then symmetrically disposed. 4. The colors should be clear and the markings distinct. 5. The surface and margins should be smooth, and the textures firm and stout or fleshy, so as to be enduring. The new varieties hereafter raised, may be considered superior, in the degree in which they approach the standard thus set up. Now seedlings are getting numerous, we hope censors will be firm in applying these rules, for though all Gladioli are handsome flowers, yet all are not worth naming and distributing.

Walnut Hills, Brookline, Nov., 1864.



REPORT ON BREAD.

Whole number of entries twenty-eight.

Wheat and Indian—First premium of \$3, to Miss Mary Longfellow, Needham.

Second, \$2, Miss E. S. Sewall, Medfield.

Unbolted Wheat—First premium of \$3, to Miss E. S. Sewall, Medfield.

Second, of \$2, to Mrs. Nathan Longfellow, Needham.

Rye and Indian—First premium of \$3, to Mrs. Wm. Harding, Dorchester.

Second, of \$2, to Miss Mary W. Pond, Foxboro'.

White—First premium of \$3, to Mrs. Mary H. Porter, Stoughton.

Second, of \$2, to Miss M. E. Southworth, Stoughton.

The Committee on Bread are happy to report that the quality

of the bread offered for competition this year is excellent—much better than in former years—making their decision very difficult. There was not a bad loaf offered. The Committee would recall to the recollection of future competitors the rules of the Society:—1st, That the bread must be made by some female member of the family, *not* by a domestic. 2d, That it shall contain *no saleratus* or other alkaline substance. 3d, That it must be made on Thursday, the first day of the Exhibition. Several excellent specimens were rejected for neglect of these rules. All which is respectfully submitted.

For the Committee,

EDMUND QUINCY, *Chairman.*

Dedham, Sept. 30, 1864.



REPORT ON THE DAIRY.

There were two samples of butter, not less than 20 lbs., offered for premium. The Committee award the first premium of \$10, to A. W. Cheever, of Wrentham.

The second premium, of \$8, to Nathan Longfellow, of Needham.

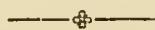
There were seven samples of butter, of not less than 12 lbs. each, offered for premium. The Committee award the first premium, of \$5, to Capt. William Pierce, of Needham. The second, \$3, to Althea A. Ware, of Needham. The third premium—"Flint's Treatise on Dairy Farming,"—to Mrs. H. Caldwell, of Wellesley.

Cheese—First premium, of \$5, to Mrs. Henry Bird, of Stoughton. Second premium, of \$3, to Reuel Ware, of Needham.

For the Committee,

MILTON M. FISHER.

Medway, Sept. 30, 1864.



REPORT ON NATIVE WINES, JELLIES, PRESERVES, &c.

Whole number of contributors, five.

For two bottles white grape wine, first premium to Mr. N. B. Wilmarth, of South Walpole, \$2.

For six bottles grape wine, second premium to Mr. W. P. Homer, of Dedham, \$1.

For one bottle grape wine, of excellent quality, the Society's diploma, to Mr. Henry Goulding, of Dover.

For the Committee,

GEORGE VOSE, *Chairman.*

Milton, Sept. 30, 1864.

REPORT ON HONEY.

First premium of \$2, to Nathan Longfellow, of Needham.

Second, of \$1, to Elijah Farrington, of Stoughton.

For the Committee,

EDMUND QUINCY, *Chairman*.

Dedham, Sept. 30, 1864.



REPORT ON HORSES.

The Committees on the several Classes of Horses entered upon the duties devolving upon them, for the two days of the Annual Exhibition of this Society, under serious embarrassments. No apology is needed to the public on account of the rainy weather,—that being beyond our control,—yet it seriously interfered with the arrangements of this department, and prevented their being carried through to a successful and satisfactory issue. Every arrangement had been made that could be, by the several Committees, to secure the attendance of a large number of the various classes of horses used in the county, and the books show a larger number of horses entered than appeared for exhibition. Many withdrew—not appearing on the second day, on account of the unfavorable state of the weather. More remained than the Committee had any reason to expect—and they would take this opportunity to thank the persevering ones for the interest they manifested in the success of the Society, and for the future influence of their example.

Under Class A, there were twenty-nine entries.

Stallions, one entry—and that the celebrated pair of trained stallions formerly owned by Messrs. Rockwell & Hurlburt, of New York, and now owned by Ezra C. Dudley, Esq., of Needham. They were driven about the track without bit or rein, harnessed to a top-buggy, guided solely by the motion of the whip, and under better control than any that were driven by rein, giving great satisfaction to the large crowd of lookers-on.

The first premium of \$10 was awarded them; also, the Society's diploma.

Brood Mares, three entries—First premium of \$7, for the best brood mare, with a foal by her side, to Willard H. Humphreys, of Brookline.

Second premium of \$5, for the second best do., do., to F. B. Ray, of Frankln.

Colts and Fillies, four entries—First premium of \$3, to Jos. H. Beegan, of Brookline, for his brown filly, 16 months old.

Second premium of \$2, to E. R. Andrews, of West Roxbury, for his Messenger colt, 14 months old.

Diploma to H. Coldwell, of Wellesley, for his bay Morgan horse, 15 months old.

Pairs in Harness, four entries—First premium of \$10, to Francis B. Ray, of Franklin, for his pair of English and Morgan horses.

The Society's diploma to Thomas Hall, of Natick, for his pair of fine greys, on exhibition.

Albert Tirrell, of Weymouth, entered a nice pair of bays, but withdrew them.

John M. Gay, of Stoughton, entered a pair of horses—one having taken the first premium at a previous exhibition, the other not having been owned in the county the necessary time to entitle him to one. (Award, a diploma.)

Harness Horses, seventeen entries—First premium of \$7, was awarded to Henry Jones, of Stoughton, for his Canada grey.

Second premium of \$5, to Chas. Reckard, of Weymouth, for his sorrel Messenger, "Charlie."

Third premium of \$3, to J. B. Dinsmore, of Roxbury, for his bay Logan.

Fourth premium of \$2, to J. E. Young, of Randolph, for his Hiram Drew.

C. D. Monroe, of Wrentham, had a very fine horse, but being unused to the track and crowd, did not show to advantage.

HENRY S. CLARK, *Chairman, Class A.*

CLASS B.

John Adams, of Dover, for brood mare, first premium, \$7.

F. B. Ray, of Franklin, second premium, \$5.

Oliver Dean, of Canton, for two years old colt, first prem. \$5.

A. K. Howe, of Dover, second premium, \$3.

Oliver Richards and Seth R. Boyden were awarded diplomas.

CHARLES C. SUMNER, *Chairman, Class B.*

CLASS C.

Your Committee on this class of horses have attended to the duties assigned them, and report as follows:—

For the best brood mare and colt, 4 months old, (Ethan Allen,) to Patrick McForman, of Foxboro', second premium, \$5.

Colts and Fillies—For the best 3 years old, Messenger, first premium, \$5, to J. Pritchard, of West Roxbury. Second best do., Native, second premium, \$3, to B. C. Vose, of Hyde Park.

For the best 2 years old, Messenger colt, first premium, \$3, to J. Pritchard, of West Roxbury. Second best do., Morgan, second premium, \$2, to N. Lunt, of Walpole.

Carriage Horses—For the best pair Morgan and Morrill, first premium, \$10, to F. B. Ray, of Franklin. Second best do., second premium, \$7, to Luther Eaton, of Dedham.

Buggy and Chaise Horses—For the best family horse, Messenger breed, first prem. to Edwin H. Pierce, of Wrentham, \$8. Second best do., to John Lawless, of Stoughton, \$6.

I would here remark—there were ten entries, all good horses, and the number of premiums at the disposal of the Committee, two, \$8 and \$6. Some of the horses came twenty miles. Your Committee think it a very small amount offered for this class of horses—the most important of all—a safe family horse that you can trust your wife and children with, is one the value of which can hardly be estimated. We doubt not there were horses on the list that would outsell either of the premium horses. Mr. Joseph Fisher, of Dedham, had a beautiful roan mare, which in the opinion of your Committee should have ranked with the roadsters. It was the strongest going horse on the ground—to him we would recommend a diploma. Also, to Mr. Dixon, of Jamaica Plain, for his dark bay horse, fine action and style, a diploma; and to J. R. Duff, J. McLane, each of Dedham; E. L. Ward, of Medfield, a very nice 5 years old; H. W. Wood, of Dedham, gratuitous exhibition, Black Hawk, good action; C. A. Bigelow, of Dover, gray, 4 years old, very promising.

Saddle Horses—For the best saddle horse, Morgan, Daniel Tucker, of Dorchester, \$6. Second best do., Hiram Gay, of Stoughton, \$4.

Diploma to Edwin N. Capen, of Dorchester, for his stylish and well-broke chestnut Morgan stallion.

Diploma to V. J. Messinger, of Canton.

In fact they were all so good it was hard to decide what horses were the most deserving of a premium. Very likely a good day would have changed the decisions. We hope for better days, and a better place to exhibit in.

Ponies—For the best pair, to Charles Kingsbury, of Medway, first premium, \$6.

Your Committee have done the best they could, and I believe acted, in their opinion, for the best interests of the Society.

ALFRED BARNARD, *Chairman, Class C.*

CLASS D—DRAFT HORSES.

The Committee award the following premiums:—

Wm. S. Ware, of Needham, best pair of draft horses, first premium, \$7.

Luther Eaton, of Dedham, second premium, \$5.
 Wm. F. Lynch, of Dedham, third premium, diploma.

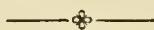
SILAS G. WILLIAMS,
 E. B. PARKER,
 S. E. HARTSHORN,
 E. W. TOLMAN,

Committee on Draft Horses.

All of which is respectfully submitted,

WILLIAM R. MANN, *Chairman.*

Sharon, Sept. 30, 1864.



REPORT ON BULLS.

Whole number of entries, eleven.

Jersey—Diploma to Allen Brothers, of Medfield, for best Jersey bull, he having received the first premium last year.

First premium to W. T. G. Morton, of Needham, \$5.

Devon—First premium to James P. Clark & Son, of Medway, \$5.

Ayrshire—First premium to Henry Goulding, of Dover, \$5.

Second premium to Daniel Lynch, of Dedham, \$3.

Native—First premium to Ebenezer Drake, of Stoughton, \$5.

Best Bull Calf—First premium to John Cawley, of Dedham, for Jersey, \$3.

A. S. DRAKE, *Chairman.*

Sharon, Sept. 30, 1864.



REPORT ON COWS.

The following premiums were awarded :—

Milch Cows—Eliphalet Stone, of Dedham, for his cow “Dairy Maid,” a diploma, she having taken the first premium two years ago.

John Bullard, of Dedham, for his superior Durham cow, not eligible for premium, she having been brought into the county within six months, a diploma.

Second prem. to E. Stone, of Dedham, for his cow “Ruby,” \$6.

Fourth premium to Francis Marsh, of Dedham, \$2.

Herd—For best herd, first premium to W. T. G. Morton, of Needham, \$12.

Jersey—First premium to W. T. G. Morton, of Needham, \$5.
Second premium, \$4.

Ayrshire—Second premium to P. O'Neil, of West Roxbury, \$4.

Jamestown—First premium to John Cawley, of Dedham, \$5.

Second premium to W. H. Fales, of Dedham, \$4.

Grade—First premium to H. O. Hildreth, of Dedham, \$5.

Second premium to H. W. Jones, of Dover, \$4.

Third premium to Francis Alden, of Dedham, \$3.

Native—Second premium to John Cawley, \$4.

Third premium to Charles Blackman, of Needham, \$3.

Heifers in Milk—First premium to W. T. G. Morton, of Needham, \$6.

Second premium to Ebenezer Drake, of Stoughton, \$4. Third premium, \$2.

John Cawley, of Dedham, entered a very superior animal, which had not been owned in the county for a sufficient time to entitle her to a premium.

ELISHA P. CHAPMAN, *Chairman*.

Franklin, Sept. 30, 1864.



REPORT ON HEIFERS.

Whole number of contributors, seventeen.

Jersey two years old and under three—First premium to John S. Eldridge, of Canton, \$3.

Second premium to W. T. G. Morton, of Needham, \$2.

Third premium to John S. Eldridge, of Canton, \$1.

Devon, two years old and under three—First premium to Wm. S. Allen, of Medfield, \$3.

Third premium to J. P. Clark & Son, of Medway, \$1.

Grade, two years old and under three—First premium to H. O. Hildreth, of Dedham, \$3.

There being no premium offered for Native, the Committee would recommend a gratuity of \$2, to Elijah Piper, of East Needham, for his splendid Native.

For one year and under two—First premium to John S. Eldridge, of Canton, \$2.

Second premium to Isaac Ellis, of Walpole, \$1.

There being but two premiums offered for this class, the Committee would recommend a gratuity of \$1 to J. W. Gay, of Dedham, for his Grade. Also a gratuity of \$1 to P. O'Neil, of West Roxbury, for his Ayrshire.

EPHRAIM WILSON, *Chairman*.

Dover, Sept. 30, 1864.

REPORT ON STEERS.

Whole number of entries, two.

Cyrus Bullard, of Medway, first premium of \$3, for Devon steers, and second premium of \$2, for grade steers, both of which were raised and broken by himself.

HIRAM W. JONES, *Chairman.*

Dover, Sept. 30, 1864.



REPORT ON SHEEP.

The Committee on Sheep respectfully report that there were thirty sheep entered for premium and exhibition. Twenty by E. R. Andrews, of West Roxbury, six by Patrick McTarnen, of Foxboro', two by W. T. G. Morton, of West Needham, two by A. K. Howe, of Dover (the last two for exhibition only). The Committee were unanimous in awarding the first premium of eight dollars, to E. R. Andrews, for the best Cotswold sheep, and second premium of six dollars, to E. R. Andrews, for same grade. For the best Cotswold ram, to E. R. Andrews, first premium of five dollars. Second best, three dollars, to E. R. Andrews. The first premium, five dollars, on six lambs, to Patrick McTarnen, of Foxboro', breed half South Down, half native. Second premium of three dollars, on six lambs, to E. R. Andrews, of West Roxbury. To W. T. G. Morton, for a beautiful full blood South Down ram, a diploma. This ram was a good specimen of the South Down; healthy, with a good fleece, but rather under size, although, no doubt, of good blood. On the whole, the exhibition of sheep was as good, or better, this year than for a number of years past, but owing mostly to E. R. Andrews, of West Roxbury, who furnished four pens, say two-thirds of the number offered, for which the Committee give him their thanks.

The Committee regret that so little interest is manifested in the raising of sheep in Norfolk County. The climate is as good for sheep as in any part of the globe, and 42° north latitude is said to be as good a climate for sheep to be kept the year round, as any other. In some parts of Europe, where the summer is warmer than ours, the farmer sends his sheep north, or to the mountains to pasture, and brings them back in the fall to winter in a warmer climate, and by doing so keeps the sheep healthy and the wool fine. Fine wool cannot be raised where the weather is warm the year round. The Chairman has manufactured fine wool, raised in New Hampshire, from sheep owned by Capt. John Smith of Bristol, who owns a farm on the Connecticut River, and he likewise

owned a plantation on the Island of Cuba. His sheep were Merinoes, and fine; I worked his wool a number of years into fine broadcloth. He took a large lot of his fine wool sheep to Cuba to keep, and sent me his wool sheared from the same fine sheep. After keeping them in Cuba the year round, I was surprised at its appearance; the wool was very coarse and hairy, and not nearly as fine as our native wool raised here. The Committee are satisfied that sheep will pay the farmer much better profits in Norfolk County than any other stock, and with much less labor, if they will select the right kind of sheep. It appears to the Committee that there need be no mistake in obtaining the right kind. The question is, what kind pays best. The Committee will say, that in Norfolk County, where mutton and lambs are in such good demand, and at such high prices, that good breeders and nursers of a medium grade of wool, are most profitable.

Hon. James D'Wolf, of Bristol, R. I., imported in 1813 and 14, Merinoes into Bristol, of the Pauler breed. This breed is remarkable for its hardihood and weight of fleece, in which respects it exceeds all other varieties of the Merino, although its wool is not so fine as the Nigrette breed. From Mr. D'Wolf's flock in Bristol, it mixed with other grades,—say mostly with South Down and the large Native or English varieties,—and at this day the most of the sheep at Bristol, Newport and Middletown, are of that stock. In 1813 George Hazard sheared from a Pauler ram, sixteen and a half pounds, for which he got thirty-two dollars (the Chairman of this Committee worked the wool and found it was fine). The sheep husbandry has been kept up better in the above named towns than any others in New England, and the Committee think it is owing to their keeping the right grade of sheep. Massachusetts went early into the fine Nigrette Merino, and fine Saxony, which wool was very fine, but the sheep were poor breeders and feeble, and had about as much as they could do to take care of themselves, and we have often known them to disown their own lambs, and did not much blame them. In the judgment of the Committee, the introduction of those feeble sheep was the cause of the decline of sheep husbandry in Massachusetts. It appears from a report of George B. Loring, Chairman on Sheep, from Essex County, that the decline of sheep in Massachusetts in twenty years, from 1840 to 1860, was more than 250,000, which left in the State but 100,000. Of the 22,000,000 lbs. of wool worked in Massachusetts, but about 600,000 of it was raised in the Commonwealth in 1850, since which time more has been consumed every year, and in 1864 we have no doubt that more than double the amount is consumed in this State than was in 1860, and less wool raised. The Committee think it safe to raise such stock as will command a ready

market and high prices, and such, they think, is the South Down crossed with the Leicester of the Bakewell stock or the Pauler Merino, which has been proved, by experience, to make the best breeders and best mutton, and their wool is just what is wanted by the manufacturers, being of a medium quality, and shears from four to six lbs. of clear wash wool, and brings about as high a price as the finer wool.

In Newport, Middletown, Portsmouth and on Rhode Island, the butchers engage the sheep in April and May for the season, and take them in July, August and September, as their customers want them, at fixed prices. The Chairman of the Committee spends some time every year at Newport and Portsmouth, and always takes great pleasure in viewing their flocks, and he finds that for the last year they have increased their flocks largely and made large profits. He will here state, what he had from good authority; a farmer that has had much experience in farming, and had been very observing in his experiments,—he has a small farm of about seventy acres. When he keeps all neat cattle, he has eight cows, one heavy yoke of oxen and a horse. If he keeps sheep in part, he keeps four cows, one yoke of oxen, horse, and forty to forty-five sheep, and he says he gets more profit from his sheep than from all the other stock, and with much less labor. The present year he has kept four cows, oxen and horse, and forty-two ewe sheep; he has raised from his forty-two sheep, fifty-eight lambs, and sold his poorest lambs to the butchers at five dollars a head, reserving his best ewes for breeders. A neighbor, whose farm joins his, keeps more cows and less sheep; he has the present year twenty-two ewes, and they had forty-four lambs, and I think he raised them all; twenty of his sheep had twins, one had one, and the other, to make up even number, had three; he sold his lambs at six dollars per head to the butcher; his fleeces weighed clean five lbs. each. The sheep were a cross from South Down, the Bakewell or Pauler Merinoes, and such are the most of the sheep kept on Rhode Island.

Thomas Hazard, Esq., of Portsmouth, R. I., has been long engaged in sheep husbandry, and kept a memorandum book of his stock, especially of sheep, and has had more experience in farming than any other man that I am acquainted with. He says at this time, after his large experience in farming, he considers sheep much the most profitable stock kept, and would recommend the large Pauler Merino to be crossed with the South Down. Mr. Hazard, as Chairman of the Committee on Sheep, at Middletown, has written a very able report on sheep, and goes into the origin of all grades that have been imported.

The Committee submit the following statement from Thomas Motley, Esq., of West Roxbury, who says,—“I send you a

statement of the result of my experiment in sheep husbandry. In October, 1863, I purchased a small flock of sheep, consisting of one hundred and nine ewes, the grade being Leicester and South Down, one full blood ram, Leicester, three years old, one South Down ram, two years old. October 19th, put the rams with the ewes—the Leicester ram with the grade Leicester, and South Down ram with grade South Down. They were kept at pasture until December 7th, having no other feed, but brought to the yard every night. After taking up for the winter they were fed on hay until they began to lamb. Then I gave them rowen and turnips, and a small quantity of linseed meal. They commenced to drop their lambs March 9th, 1864—103 ewes giving 135 lambs—lost, 27; saved, 108. They were turned to pasture April 26. I am obliged to keep a shepherd with my flock to protect them from the dogs, which are allowed to run over every field in town with perfect liberty. This added to my expense, say 20 per cent. on the keeping of the whole flock. The hay I have charged at \$20 per ton; the amount fed per day about 3 lbs. to each sheep. The prices obtained for lambs and wool were not fancy prices, but rather under the market prices; for example, the wool when clipped, June 1st, was sent to the manufacturers, who paid me 78 cents per lb., discounting 25 per cent. for being unwashed; the fleeces averaged 5 1-2 lbs. each. When the lambs became large enough for the butcher he took them, and allowed me his own price. I adopted the course to give the experiment a fair trial, and that no one could say that fancy prices were obtained. In footing up Mr. Motley's account, I find the sheep and keeping one year was, in gross, \$1,328.87. At the close, his sheep, lambs and wool, with what he sold and had left at first cost, was worth \$1,800.08, leaving a balance of profit of \$471.21, or about 60 per cent. upon the original cost.

Mr. Motley has one of the best, (if not the very best) stock farms in the county. He has kept the best Jersey cows for dairy, and has always got the highest price for his milk and butter, it being of a very superior quality. If Mr. Motley can make more money by keeping sheep than on such cows as he has kept, and with such advantage for selling milk, is it not very certain that those living further from the milk market would do much better to keep sheep than cows, or any other stock?

The Chairman received a letter from Mr. E. R. Andrews of West Roxbury, stating that his Cotswold Sheep are strong, healthy, and hardy, and that the ewes are prolific breeders, and good nurses, very frequently dropping and raising twins. If raised, they come quickly to maturity, attain great size, and yield when turned to the butcher, a large carcass of mutton of a superior

quality. They yield, moreover, a heavier fleece of wool than any other breed, and its wool for combing is in great demand, and brings a higher price than any other wool in the market.

Mr. Andrews says, "I trust, Mr. Chairman, you will in your report urge upon the farmers of Norfolk County the importance of keeping sheep. Aside from other considerations, my experience convinces me that they will pay better than any other stock; I say this, after keeping for several years a fine herd of cows, with greater advantages for selling milk than most men in the County enjoy. And I know that the farmer's hay, grain, and roots, when fed to sheep, will bring him in two hundred dollars to one hundred dollars when fed to cows." Mr. Andrews gave the Chairman items of expense of his sheep, and the amount received in return, which is sufficient proof that his statement is correct.

For fear I should make this report too lengthy, I will close by a very few remarks. I think it has been proved that sheep pay better than any other stock, and the labor is much less than on cows. Every farmer that can keep eight cows would do well, and can keep four cows and forty sheep with the same feed as the eight cows would eat, and with less labor, and in that proportion, i. e., ten sheep instead of one cow, allowing one half of the stock to be cows. But if you keep all sheep, eight sheep will want about as much feed as one cow. The reason is, when cows and sheep feed together, the sheep will eat what the cows leave, and cows what the sheep leave. Sheep will consume the briars and weeds, and if your pasture is covered over with brush (as many pastures are in Norfolk County) cut your brush and briars, and the sheep will help keep down the brush and briars, and much improve your pastures. After a careful investigation, the Chairman has come to the conclusion that sheep husbandry may be made the most pleasant and profitable of any department of stock raising in Norfolk County, and that the most profitable grades are the South Down, crossed with the Leicester or Bakewell stock, or the Pauler Merino, which make hardy, large and good breeders, and nurses, and the very best mutton and lambs, and a heavy and medium fine fleece of wool, which is, and will for a long time to come be, in good demand for cloth and yarn. The Cotswold, I presume, are worthy of all that has been said in their favor in this report; their wool being of the very best quality for combing, but not suitable for cloths or yarn, being too long to card well or to give a good nap on cloth.

TRUMAN CLARKE, *Chairman.*

Walpole, Dec. 1, 1864.

REPORT ON SWINE.

Boars—First premium to H. O. Hildreth, of Dedham, for a boar of the Suffolk breed, \$6.

Second premium to H. Coldwell, agent for Samuel R. Payson, of Wellesley, \$4.

Sows—First premium to H. Coldwell, agent for Samuel R. Payson, of Wellesley, \$6.

Second premium to W. T. G. Morton, of Wellesley, for a sow, \$4.

Weaned Pigs—First premium to S. Knapp & Sons, of Wellesley, for seven pigs, half Chester County breed, \$6.

Second premium to E. W. Clap, of Walpole, for a litter of pigs, Suffolk breed, \$4.

Gratuity of \$2 to W. T. G. Morton, of Wellesley, for weaned pigs, Chester County and Suffolk breed.

Also a gratuity of \$2 to S. Knapp & Sons, of Wellesley, for a boar.

For the best experiment in feeding swine, first premium to A. W. Cheever, of Wrentham, \$6.

The following is the statement of Mr. Cheever:—

To the Committee on Swine:—

I herewith submit my final report on the lot of swine entered for the Society's premium on feeding.

I bought the six pigs on the 16th day of March last, and they were seven weeks old, having been dropped January 25th; paid \$30. May 26th sold one of them alive at \$14.75, weight 118 lbs. October 1st slaughtered the smallest two, weight 200 lbs. and 207 lbs., sold at 16 cts. Nov. 15th slaughtered the largest two, weight 300 lbs. and 331½ lbs., sold at 18 cts. Dec. 2d slaughtered the last one, weight 286 lbs., price 18 cts. The first two were 8 months and 26 days old; the next two were 9 months and 20 days old; the last one was 10 months and 7 days old.

During the time of feeding, they consumed, of corn meal, 1562 lbs., at about 3 cents per lb., or \$46.62; of fine feed 1703 lbs., at 2½ cents per lb., or \$43.11. Also the skimmed milk from a dairy of six cows and heifers, together with windfall apples, enough, probably, to have made two or three barrels of eider, if they could have been all gathered at once. I generally had enough milk with which to wet the meal and feed. Fed regularly three times per day—all they would eat up clean. My aim is to have hogs enough to consume all the food on the farm that would otherwise be lost; and, also, to feed in such a manner as to change a pig to a hog in as short a time as is possible.

My swine account stands as follows :—

DR.	
To 6 pigs at \$5.00,	\$30.00
“ 1562 lbs. of meal,	46.63
“ 1703 lbs. of feed,	43.11
	\$119.74
CR.	
By 1 live pig,	\$14.75
“ 5 hogs, weight 1,324½ lbs.	228.27
	\$243.02
	119.74
	\$123.28
Profit,	\$123.28

I have either made my pork cost this year 9 cents per lb., or I have sold the swill that would otherwise have been wasted, for \$123.28.

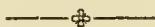
Respectfully submitted,

A. W. CHEEVER.

Sheldonville, Dec. 31, 1864.

JOEL H. ROBINSON, *Chairman.*

Wrentham, Sept. 30, 1864.



REPORT ON LIVE FOWLS.

Whole number of entries, thirty-three.

Seabright Bantams—First premium to James Cartwright, of West Needham, \$2.

Black Spanish—First prem. to James Calder, of Dedham, \$2.
Second premium to E. M. Ward, of Dedham, \$1.

White Shanghai—First premium to James Farrington, of Dedham, \$2.

Speckled Dorkings—First premium to Eben Wight, of Dedham, \$2.

Leghorn and Chittagong—Second premium to Anna M. Smith, of Dedham, \$1.

Wild Geese—Second premium to W. T. G. Morton, of Wellesley, \$2.

White China Geese—First premium to W. T. G. Morton, of Wellesley, \$3.

Aylesbury Ducks—First premium to W. T. G. Morton, of Wellesley, \$3.

Turkeys—W. T. G. Morton, of Wellesley, \$3.

A lot of Middlesex White Fowls—First premium to George H. Hardy, of Needham, \$2.

Ruffle Neck Pigeons—First prem. to A. Dean, of Dedham, \$2.

Seabright Bantams—Second premium to A. Dean, of Dedham, \$1.

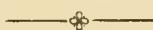
White Shanghai and White Dorking—First premium to D. Tyler, of Dedham, \$2.

Mixed Breed Fowls—First premium to H. Coldwell, agent for S. R. Payson, \$2.

Muscovy Ducks—First premium to H. Coldwell, agent for S. R. Payson, \$2.

FRANCIS ALDEN, *Chairman.*

Dedham, Sept. 30, 1864.



REPORT ON PLOWING.

DOUBLE OX TEAMS.

First premium of \$10 to Luther Eaton, of Dedham, with Michigan plow, No. 85, Ames's Plow Co. manufacture, he being the only competitor with that kind of plow, and did the work well.

First premium of \$10, with any other plow, to Smith and Sullivan, of Dover, with Whittemore & Belcher plow, No. 30.

Second premium of \$8, to Jesse Farrington, of Dedham, with Ames & Son's Eagle, No. 75.

Third premium of \$6, to Wm. Fales, of Dedham, with Ames & Son's Eagle, No. 20.

Your Committee would say that there were five competitors with plows other than a sod or subsoil plow, and all did their work well, and in a still and orderly manner.

JAMES P. CLARK, *for the Committee.*

Medway, Sept. 30, 1864.

DOUBLE HORSE TEAMS.

The Committee on Double Horse Teams, present, were Henry Goulding, Lemuel Gay, Jeremiah M. Shepard and Josiah H. Carter.

There were four teams entered of this class, and after a careful examination of the plows, and the work done with them, the Committee award to L. Eaton, of Dedham, with his Universal Iron Beam Plow, No. 99, first premium, (time 42 minutes) \$10.

H. & A. Blackman, of Needham, with the Doc plow, the second premium, (time 40 minutes) \$8.

Wm. F. Lynch, of Dedham, with No. 50 Eagle plow, the third premium, (time 36 minutes) \$6.

SOD AND SUBSOIL PLOWING.

Bigelow & Sawin, with Ames's Deep Tiller, the first premium, (time 30 minutes) \$10.

We only regret that it was not in our power to give Messrs. Bigelow & Sawin a larger premium, for it would do a farmer's heart good to see the ease and speed with which they turned the sward and brought the subsoil to the top, and left it in a suitable state to receive the finest of seed.

It gives your Committee pleasure to announce, that no whips were used by any of these teams, nor was there any loud talking.

For the Committee,

JOSIAH H. CARTER, *Chairman.*

Dorchester, Sept. 30, 1864.

SINGLE HORSE TEAMS.

The Committee report seven entries, of which two were ruled out, as not complying with the rules of the Society.

Wm. S. Ware, of Needham, first premium, (Eagle plow, No. 50) \$6.

Wm. Harding, of Dorchester, (Nourse's Universal Iron Beam Plow, No. 97) second premium, \$4.

Patrick Mack, of Dover, (Whittemore & Belcher's Plow) third premium, \$2.

The Committee recommend to the consideration of the Society, to award a premium of \$6 to Henry Goulding, of Dover, for the best work with the Michigan Subsoil Plow. The work is worthy of the first premium, but this plow should not compete with other plows, and there is no separate premium offered for this plow with single teams.

For the Committee,

A. T. MESERVE, *Chairman.*

West Roxbury, Sept. 30, 1864.

REPORT ON WORKING OXEN.

The Committee on working oxen report as follows:—

There were six competitors for Drawing, and we award the first premium of \$6, to Luther Eaton, of Dedham.

Second premium of \$4, to J. P. & W. P. Clark, of Medway.

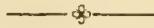
Third premium of \$2, to Jesse Farrington, of Dedham.

There were present of the Committee, J. P. Clark, of Medway, Wm. Pierce, of Needham, and Jeremiah W. Gay, of Dedham.

For the Committee,

JAMES P. CLARK, *Chairman.*

Medway, Sept. 30, 1864.



REPORT ON SPADING.

Whole number of entries, five.

First premium to Timothy Murphy, of Dorchester, \$5.

Second premium to Dennis Doody, of Dorchester, \$4.

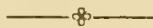
Third premium to Francis Rooney, of Dedham, \$3.

Fourth premium to Morris Maronay, of Dorchester, \$2.

Fifth premium to Patrick Donahoe, of Dedham, \$1.

ROBERT WATT, *Chairman.*

West Roxbury, Sept. 30, 1864.



REPORT ON AGRICULTURAL IMPLEMENTS AND NEW INVENTIONS.

The Committee on Agricultural Implements and New Inventions, found but few articles exhibited, and those of standard varieties.

Messrs. Whittemore, Belcher & Co., of Boston, exhibited Hay and Vegetable Cutters, Ox Yokes, the "Doe Plow," &c. Also an improved Harrow, "Share's Patent," which your Committee would recommend to the farmers of Norfolk as being an excellent article, one of them having been used during the past season by one of the Committee to his entire satisfaction.

J. Nourse of Boston, exhibited a Horse Hoe Cultivator, of new construction, also his new "Universal Iron Beam Plow," three sizes, two of which, a two and four horse, were used in the Plowing Match, and performed good work.

An improved Scythe Nib by A. J. White, of Foxboro', seems worthy of commendation. Being adjustable, it can be set to suit heavy or light grass, and as near as your Committee could judge without actual trial in the field, will make the labor of mowing much easier.

George Coolidge, of Boston, exhibited Bailey's Patent Spring Roll, Cog Wheel, Washing and Wringing Machine, which will commend itself to every housewife as a great labor saver, not injuring or wearing the clothes, and making the severe labor of wringing out heavy pieces easy and pleasant. The machine is very durable, and should be in every family.

Your Committee would recommend diplomas to Messrs. Whittemore, Belcher & Co., of Boston, for Agricultural Implements.

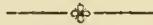
A. J. White, of Foxboro, for Improved Scythe Nib.

George Coolidge, of Boston, for Bailey's Patent Spring Roll, Cog Wheel, Washing and Wringing Machine.

Respectfully submitted for the Committee,

CHARLES E. C. BRECK, *Chairman.*

Milton, Sept. 30, 1864.



REPORT ON LEATHER, AND ARTICLES MANUFACTURED THEREFROM.

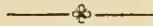
To John Mann, of South Walpole, for the best specimen of kip boots, a premium of \$2, and the Society's diploma.

To E. G. Capen, of Stoughton, for the best specimen of calf boots, the Society's diploma.

For the Committee,

JOSEPH DAY, *Chairman.*

Dedham, Sept. 30, 1864.



REPORT ON STRAW WORK.

To Mrs. Betsey Baker, of West Dedham, for family register done in straw, the Society's diploma.

To Mrs. Joseph Crane, of West Dedham, for the best specimen of straw braid, the Society's diploma.

For the Committee,

WALTER JANES, *Chairman.*

Medfield, Sept. 30, 1864.

REPORT ON MANUFACTURES OF WOOD.

Henry W. Wood, of Dedham, first premium of \$2, for inlaid table.

Richard W. Bates, of Dedham, diploma for very handsome specimens of wood carving.

JOHN S. HUBBARD,
EDWARD MARSHALL, } *Committee.*
CHARLES SMITH,

Dedham, Sept. 30, 1864.



REPORT ON CARRIAGES, WAGONS, &c.

For best Carryall, Sidney E. Morse, of South Dedham \$4.

For best Express Wagon, Sidney E. Morse, of South Dedham, \$2.

EDMUND POLLEYS, Walpole, }
JOSEPH CRANE, Dedham, } *Committee.*
C. L. COPELAND Milton,

Dedham, Sept. 30, 1864.



REPORT ON SEEDS.

Whole number of contributors to this department, 9.

For the best specimen of seed corn, not less than forty ears, to Wm. Crozier, of Milton, a premium of \$1.

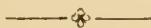
For an excellent specimen of seed corn, to E. Stone of Dedham, the Society's diploma.

John Sias, of Milton, exhibited fine specimens of three varieties of seed corn, which were worthy of mention.

For the Committee,

GEORGE VOSE, *Chairman.*

Milton, Sept. 30, 1864.



REPORT ON LADIES' WORK.

The Committee report sixty-two entries, and award the following premiums:—

Mrs. L. T. Kingman, of Dedham, silk bed-quilt, \$1.

Mrs. John Cox, Jr., of Dedham, bed-quilt, very neatly made, \$1.

Miss Mary M. Tucker, of Stoughton, knit bed-quilt, \$1.

Miss Martha Goulding of Dover, woollen bed-quilt, \$1.

Miss Jane Mills, of Mattapan, crocheted quilt, 50 cents.

Miss Emma P. Cushing, of South Braintree, very handsome knit shawl, \$1.

Miss A. L. Bowker, of Dorchester, three crocheted shawls, 75 cents.

Miss Fannie Howard, of Dedham, three crocheted mats, 50 cts.

Miss Josie Hartshorn, of Walpole, wrought ottoman cover, 50 cents.

Mrs. Lambert, of West Roxbury, floor-mat, very neatly made of 700 pieces, 50 cents.

Mrs. H. M. Roberts, of Medfield, skirt neatly made of tatting, \$1.

Mrs. Catherine Smith, of Dedham, 76 years old, embroidered skirt, 75 cents.

Mrs. O'Neil, of West Roxbury, very handsome embroidered skirt and blanket, \$1.50.

Miss Emma Brackett, of Roxbury, wrought skirt, 50 cents.

Miss L. Slade, of Dedham, embroidered yoke, 50 cents.

Miss Urry, of Dedham, crocheted articles, very fine and neatly made, \$1.

Mrs. E. H. Tyler, of Rockville, pair of nicely knit thread hose and wrought yoke, 75 cents.

Miss E. Finnevan, of Rockville, very fine and beautifully wrought muslin collars and yoke, \$1.

Miss Adna Adams, of Dover, 11 years old, crocheted tidy, 40 cents.

Miss Hattie Curtis, of Dedham, crocheted tidy, 40 cents.

Miss Elsie Curtis, of Dedham, crocheted tidy, 50 cents.

Mrs. George Baxter, of Quincy, netted tidy, 50 cents.

Mrs. James Farrington, of Dedham, knit woollen hose, and broadcloth gloves, 75 cents.

Miss Teresa Herter, of Dedham, 11 years old, crocheted edging, 40 cents.

Miss Mary Bridge, of Dedham, very fine crocheted scarf and tidy, 50 cents.

Mrs. George Alden, of Dedham, beautiful knit shawl. \$1.

Mrs. L. H. Brown, of Medfield, embroidered bead-mat and watch-case, 50 cents.

Willard Babbitt, of South Dedham, briar-wood pipe, napkin rings, and other articles of bone and horn, neatly made with a knife and file, \$1.

George E. Brown, of Dedham, case of stuffed birds, \$1.

Miss Mary V. Jordan, of East Randolph, elegant wreath of hair-work, \$1.50.

Miss J. E. Read, of Dedham, beautiful shell frame, and wreath of hair-work, \$1.50.

Miss Flora Dickson, of Jamaica Plain, case of skeleton leaves, 25 cents.

Mrs. Sophronia Adams, of Dedham, butternut bracket 25 cents.

Miss Lizzie Endicott, of Dedham, specimen of darning, 25 cents.

Miss Mary White, of Dedham, contributed two frames, ingeniously made of fret-work by wounded soldiers in Finlay Hospital, Washington.

Mrs. Shorey, of Dedham, moss vase, and bouquet of grasses, tastefully arranged, 50 cents.

Katie Hill, a blind girl, of Roxbury, bead cup, saucer and spoon, 25 cents.

Mrs. Herter, of Dedham, cushion for making German thread lace, \$1.

Miss Hannah Brigham, of Needham, oriental painting, 40 cents.

Miss Phillips, of East Medway, patchwork quilt, 50 cents.

Mrs. Betsey Baker, of Dedham, 78 years old, beautiful specimen of straw work, \$1.

Mrs. George Baxter of Quincy, knit table cover, 40 cents.

Mrs. N. Willey, of Dedham, crocheted tidy, 40 cents.

Miss Emma Brown, of Dedham, contributed a bouquet of neatly made worsted flowers, and Miss Anna E. Field, of Dedham, a pretty needle-book of red, white and blue.

We were pleased to see more useful articles than have been contributed on some former years, and that nearly all were thoroughly and neatly made. The ornamental articles also exhibited taste and skill in their arrangement and execution, and had it been in their power, the Committee would gladly have awarded premiums to all.

For the Committee,

LUCY A. CALDER.

Dedham, October 3, 1864.

RECAPITULATION OF PREMIUMS

AWARDED BY THE

NORFOLK AGRICULTURAL SOCIETY,

FOR 1864.

ESSAYS.		BREAD.	
William E. Rice,	\$10.00	Miss E. S. Sewall,	\$5.00
E. A. Samuels,	10.00	Miss Mary Longfellow,	3.00
EXPERIMENTS ON MANURES.		Mrs. William Harding,	3.00
Aaron D. Weld,	\$25.00	Mrs. Mary H. Porter,	3.00
VEGETABLES.		Mrs. Nathan Longfellow,	2.00
John Sias,	\$13.00	Miss Mary W. Pond,	2.00
Charles E. C. Breck,	5.00	Miss M. E. Southworth,	2.00
Francis Marsh,	4.00	DAIRY.	
A. K. Howe,	3.00	A. W. Cheever,	\$10.00
W. S. Ware,	2.00	Nathan Longfellow,	8.00
A. B. Endicott,	2.00	William Pierce,	5.00
C. G. Upham,	1.00	Mrs. Henry Bird,	5.00
Owen Kennedy,	1.00	Althea A. Ware,	3.00
Robert Porter, Jr.,	1.00	Renel Ware,	3.00
FRUIT.		HONEY.	
Samuel Gilbert, Jr.,	\$12.00	N. Longfellow,	\$2.00
Aaron D. Weld,	6.00	E. Farrington,	1.00
Charles A. Hewins,	6.00	WINES, JELLIES, &c.	
Frederic Clapp,	5.00	N. B. Wilmarth,	\$2.00
Royal W. Turner,	4.00	W. P. Homer,	1.00
Edmund Polleys,	3.00	HORSES.	
John York,	3.00	F. B. Ray,	\$30.00
Albert Crosby,	3.00	Luther Eaton,	12.00
N. Longfellow,	3.00	Ezra C. Dudley,	10.00
Lucas Pond,	2.00	J. Pritchard,	8.00
H. Bigelow,	2.00	Edwin H. Pierce,	8.00
R. S. Allen,	2.00	W. H. Humpbreys,	7.00
J. W. Talbot,	2.00	Henry Jones,	7.00
Hannah P. Mackintosh,	2.00	John Adams,	7.00
Charles Marsh,	1.00	William S. Ware,	7.00
J. M. Merrick, Jr.,	1.00	John Lawless,	6.00
John W. Kingsbury,	1.00	Daniel Tucker,	6.00
FLOWERS.		Charles Kingsbury,	6.00
Macey Randall, Jr.,	\$8.00	Charles Reckard,	5.00
George Craft,	6.00	Oliver Dean,	5.00
Marion and Lizzie Watt,	4.00	Patrick McForman,	5.00
Hannah P. Mackintosh,	3.00	Hiram Gay,	4.00
John H. Adams,	2.00	Jos. H. Beegan,	3.00
George W. Palmer,	1.00	J. B. Dinsmore,	3.00
William Dunbar,	1.00	A. K. Howe,	3.00
Mrs. William Lyon,	1.00	B. C. Vose,	3.00

E. R. Andrews,	2.00		
J. E. Young,	2.00		
N. Lunt,	2.00		
			POULTRY.
		W. T. G. Morton,	\$11.00
		S. R. Payson,	4.00
		A. Dean,	3.00
		James Cartwright,	2.00
		James Calder,	2.00
		James Farrington,	2.00
		Eben Wight,	2.00
		George H. Hardy,	2.00
		D. Tyler,	2.00
		E. M. Ward,	1.00
		Anna M. Smith,	1.00
			PLOWING.
		Luther Eaton,	\$20.00
		Smith & Sullivan,	10.00
		Bigelow & Sawin,	10.00
		Jesse Farrington,	8.00
		H. & A. Blackman,	8.00
		William Fales,	6.00
		William F. Lynch,	6.00
		William S. Ware,	6.00
		William Harding,	4.00
		Patrick Maek,	2.00
			WORKING OXEN.
		Luther Eaton,	\$6.00
		J. P. & W. P. Clarke,	4.00
		Jesse Farrington,	2.00
			SPADING.
		Timothy Murphy,	\$5.00
		Dennis Doody,	4.00
		Francis Rooney,	3.00
		Morris Maroney,	2.00
		Patrick Donahoe,	1.00
			SEEDS.
		William Crozier,	\$1.00
			LEATHER.
		John Mann,	\$2.00
			WOOD.
		Henry W. Wood,	\$2.00
			CARRIAGES.
		Sidney E. Morse,	\$6.00
			LADIES' WORK.
		See pp. 53, 54, 55,	\$30.00
			<hr/>
			\$740.00

BULLS.

James P. Clarke & Son, \$5.00
W. T. G. Morton, 5.00
Henry Goulding, 5.00
Ebenezer Drake, 5.00
Daniel Lynch, 3.00
John Cawley, 3.00

COWS.

W. T. G. Morton, \$27.00
John Cawley, 9.00
Eliphalet Stone, 6.00
Ebenezer Drake, 6.00
H. O. Hildreth, 5.00
P. O'Neill, 4.00
W. H. Fales, 4.00
H. W. Jones, 4.00
Francis Alden, 3.00
Charles Blackman, 3.00
Francis Marsh, 2.00

HEIFERS.

John S. Eldridge, \$6.00
William S. Allen, 3.00
H. O. Hildreth, 3.00
W. T. G. Morton, 2.00
Elijah Piper, 2.00
J. P. Clarke & Son, 1.00
Isaac Ellis, 1.00
J. W. Gay, 1.00
P. O'Neill, 1.00

STEERS.

Cyrus Bullard, \$5.00

SHEEP.

E. R. Andrews, \$25.00
P. McForman, 5.00

SWINE.

H. Coldwell, agent for S. R. Payson, \$10.00
S. Knapp & Son, 8.00
H. O. Hildreth, 6.00
W. T. G. Morton, 6.00
E. W. Clap, 4.00

TREASURER'S REPORT.



C. C. CHURCHILL, *Treasurer, in account with Norfolk Agricultural Society.*

		DR.
Balance in Treasury, Nov. 30, 1864,	.	\$191.94
Cash received from new members,	. . .	54.00
“ “ from Commonwealth,	. . .	600.00
“ “ from net proceeds of Exhibition, 1864,	. . .	317.25
“ “ from rent,	. . .	70.00
		\$1,233.19



		CONTRA.	CR.
Cash paid incidental expenses,	. . .		\$202.07
“ premiums,	. . .		594.20
“ salary of Recording Secretary,			50.00
“ “ “ Treasurer,	. . .		25.00
“ interest,	. . .		326.67
Cash in Treasury,	. . .		35.25
			\$1,233.19

C. C. CHURCHILL, *Treasurer.*

Dedham, Nov. 30, 1864.

PROCEEDINGS

ON THE OCCASION OF THE

SIXTEENTH ANNIVERSARY

OF THE

NORFOLK AGRICULTURAL SOCIETY,

Thursday and Friday, September 29 & 30, 1864.

The Sixteenth Annual Exhibition of the Norfolk Agricultural Society took place in Dedham, on Thursday and Friday, September 29th and 30th. Contrary to the usual "custom," the weather on both of the days of exhibition was very unfavorable, heavy showers falling during both days. Yet though thousands were thereby kept away, the number in attendance was large, and the result of the exhibition highly gratifying to all who took part in its proceedings.

But for the rain the show of Horses would probably have been the largest ever made by the Society, and, as it was, many very fine animals were exhibited. The Stock pens were well filled, though many were kept back, owing to the unwillingness of their owners to expose them to the pelting storm.

In the Hall the display, though not large in extent, was excellent in quality. The Ladies' Department was well supplied with useful and ornamental articles, and the show of Fruits and Flowers was very fine. The display of Vegetables was the best that has been made for several years.

Thursday, the first day, was mainly devoted to the entering and examination of articles. At 2 o'clock, P. M., the Plowing Match took place on a lot of land belonging to Mr. Thomas Barrows, and situated on the turnpike, about half a mile from the Phoenix House. There were eighteen competitors, the largest number ever entered at any Exhibition of the Society, and all

the plowing was of superior quality. For the Drawing Match, which took place immediately after, there were ten entries, and the work was well done. An exhibition of horses upon the track, closed the exercises of Thursday.

Friday morning came with lowering skies, and by eight o'clock gave promise of a stormy day. All the out-door operations were sadly interfered with. The Spading Match was carried on in the midst of a driving rain, but the five contestants worked with a will, and showed good training. The Exhibition of Horses on the track was proceeded with under great disadvantages, and most of the spectators were driven to the Hall for protection against the rain. Here, in addition to the attractions before mentioned, were fine displays of Bread and of Dairy products, which attracted much attention.

At 12½ o'clock, Col. John W. Thomas, sheriff of the County, and chief marshal of the day, assisted by his aids, Messrs. C. G. Mackintosh, of West Roxbury, and J. E. Gay, Hiram Gay, Bradford Kinsley, and R. L. Warren, of Stoughton, formed a procession, and, preceded by the Medfield Cornet Band, which furnished excellent music during the day, passed into the upper hall, when, after a blessing had been invoked by Rev. Dr. James Freeman Clarke, chaplain of the day, the company partook of an excellent collation, which had been provided under the direction of the Committee of Arrangements.

At the conclusion of the dinner, John Gardner, Esq., first Vice President of the Society, called the meeting to order, and after a few appropriate remarks, in which he alluded to the enforced absence of the President, introduced Hon. Henry F. French, of Cambridge, as the orator of the occasion.

Judge French, one of the Trustees of the State Agricultural College, announced that that institution would be the subject of his address, and proceeded to give an interesting statement of the origin, condition, purposes and general relations of the scheme of founding the College. He explained the necessary expense of the experiment, and drew an outline of the general idea of the place and organization of the College. Its government would be such as to harmonize with the true principles of the republican theory of equal rights. After explaining at considerable length, why we

could expect to find no model in England for such an institution, he passed on to a consideration of the branches which should properly be taught in the College, and the uses to which a thorough scientific education may be put in connection with agriculture.

At the conclusion of the Address, Mr. Gardner read the following sentiment, which was responded to by the Band playing "Hail to the Chief: "

OUR ABSENT PRESIDENT—His name is imperishable in the history of Horticulture and Agriculture. His memory will be ever green in the hearts of his friends. We tender him our cordial sympathy and regards.

The second sentiment was as follows :

THE COMMONWEALTH—Distinguished by all that adorns and dignifies the State, and by all that exalts and ennobles the citizen.

In the absence of the Governor, this toast was responded to by E. L. Pierce, Esq., of Milton, in an eloquent speech, in which the duty of the citizen to the country was vigorously enforced.

Hon. George S. Boutwell was next introduced and was received with applause. He spoke at some length on National affairs, expressing his confidence in the speedy return of peace, union and prosperity on a sound basis of justice. He believed that freedom would be perpetually progressive and aggressive until every vestige of despotism is destroyed throughout the land, and that then we should have a lasting peace. He spoke especially of the soil and climate of the south, and anticipated the time when northern men should occupy it and establish free institutions and education on a basis of complete equality. The fact that slavery converts every slave-holder into a petty tyrant was the cause of our troubles, and peace must be founded on the right of every man to be the equal of any other man.

A sentiment complimentary to the State Board of Agriculture was responded to by Dr. Hartwell, of Southbridge, the representative of the State Board, and Dr. Clarke and Rev. Mr. Mumford, of Dorchester, who were called upon, excused themselves from making speeches on account of the lateness of the hour. At 3 o'clock the exercises closed, and the company adjourned to the track, when the exhibition of the famous pair of trained horses.

belonging to E. C. Dudley, of Needham, closed the exercises of the day.

In briefly reviewing the proceedings of the two days, it is but just to say that in many respects it was one of the most successful exhibitions ever held by the Society. Notwithstanding the severe rain which fell most of the time during the exhibition, in many respects the show was equal to that of any previous year. In the very important departments of Plowing and Drawing there were more entries than were ever made on any previous year, and the work was never so well performed. The show of Stock was pronounced by competent judges as equal to that of any former year. The dinner, for which the Society are much indebted to Col. Eliphalet Stone, Chairman of the Committee of Arrangements, was excellent, and for the first time since the organization of the Society, it paid for itself!

In a pecuniary point of view the exhibition was a decided success, the receipts being less than one hundred dollars behind those of two years since. Had the weather been pleasant, the receipts would very nearly have reached the sum of twenty-five hundred dollars, the largest amount ever received being about seventeen hundred dollars. This year the receipts were about thirteen hundred dollars. The result has proved that those who, in the early part of the season, were anxious that the exhibition should be postponed, underrated the energy and public spirit of the men of this County, who, even in troublous times like the present, abate not one jot of hope and courage. May the next year's Exhibition witness the return of peace to the country, and the restoration to health of the honored President of the Society, whose absence has been the source of deep and lasting regret.

Officers of the Society.

1864.

—
President,

MARSHALL P. WILDER, *of Dorchester.*

—
Vice Presidents,

JOHN GARDNER, *of Dedham,*
JOSEPH H. BILLINGS, *of West Roxbury,*
OTIS CARY, *of Foxboro',*
JOHN H. ROBINSON, *of Dorchester,*
STEPHEN W. RICHARDSON, *of Franklin,*
ELIJAH TUCKER, *of Milton.*

—
Corresponding Secretary,

CHARLES C. SEWALL, *of Medfield.*

—
Recording Secretary,

HENRY O. HILDRETH, *of Dedham.*

—
Treasurer,

CHAUNCY C. CHURCHILL, *of Dedham.*

—
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AARON D. WELD, *of West Roxbury,*
H. HOLLIS HUNNEWELL, *of Needham,*
TRUMAN CLARKE, *of Walpole,*
AMOS A. LAWRENCE, *of Brookline,*
DANIEL DENNY, *of Dorchester.*

Finance Committee and Auditors,
 MARTIN B. INCHES, of *Dedham*,
 LEWIS H. KINGSBURY, of *Dedham*,
 CHARLES HAMANT, of *Medfield*.

—
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CHAUNCY G. FULLER.

THE
SIXTEENTH ANNUAL
CATTLE SHOW AND FAIR

OF THE
Norfolk Agricultural Society

WILL BE HOLDEN

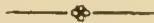
AT DEDHAM,

ON

Thursday and Friday, Sept. 29 & 30, 1864.



☞ The Trustees invite the Agriculturists, Mechanics, Manufacturers, Horticulturists, and Ladies of the County, to join their endeavors to render it worthy of the patronage of the Commonwealth, and creditable to themselves.



BOSTON:
J. M. HEWES, PRINTER, 81 CORNHILL.
1864.



Norfolk Agricultural Society.

[SUCCESSFUL COMPETITORS MAY RECEIVE THEIR PREMIUMS IN PLATE
OR MONEY, AT THEIR OPTION.]

LIST OF PREMIUMS FOR THE YEAR 1864.

FARMS.

EXPERIMENTS AND IMPROVEMENTS THEREON.

PROGRESSIVE HUSBANDRY.

For the best conducted and most improved Farm during five consecutive years, commencing in the year 1861,—of which the occupant shall present annually to the Trustees a satisfactory account of the whole management of the Farm,—of the crops produced, of the improvement made and of the stock kept,—a premium of *One Hundred Dollars*, to be paid in 1866.

NOTE. Whenever any farm shall be entered for this premium, the Secretary of the Society shall give notice thereof to the Committee on Progressive Husbandry annually in September, who will be required to examine the farm, and certify the general management of it.

MANAGEMENT AND IMPROVEMENT OF FARMS.

For the best managed Farm, taking into view the condition of the buildings, fences and orchards, the cultivation of the lands, the care and management of the stock, the quantity, quality and preservation of the crops, the expenses incurred and the improvements made during the year, with a detailed statement of the whole to be rendered on or before November 15th, \$25; second best, \$20.

Competitors must give notice of their intention to the Secretary, on or before June 15th. Farms entered for premium will be viewed by the Supervisory Committee, as they shall deem expedient, between June 20th and September 20th. Any farm offered for inspection, without being entered for a premium, will be viewed and reported by the Committee, if seasonable application be made to the Chairman.

IMPROVING MEADOW AND SWAMP LANDS.

For the best experiment in reclaiming wet meadow or swamp lands, by drainage or otherwise, on not less than one-half acre,

with statement, in detail, of the previous condition and produce of the land, the method and expense of the experiment, and the produce at the present time, \$8; second best, \$4.

UNDER-DRAINING LAND.

For the best experiment in under-draining land, not less than forty square rods, regard being had to the character of the soil and subsoil, the method, extent, expense and result of the experiment, \$15; second best \$10.

OLD PASTURE AND UNIMPROVED LANDS.

For the best conducted experiment in renovating and improving old pasture lands and lands hitherto lying waste, on not less than one acre, with or without plowing, with a statement of the previous condition of the land, and of the method, expense and result of the experiment, \$10; second best, \$6.

TURNING IN CROPS AS MANURE.

For the most satisfactory experiment of turning in crops as a manure, either *green or dry*, on not less than *one-half acre of land*, a detailed account of the whole process, expense and result to be given in writing, \$6.

EXPERIMENTS IN SUBSOIL PLOWING.

For the best experiment, on not less than one acre of land, of the effect of subsoil plowing, to be determined by the difference in the value of crops, raised on equal portions of equally manured land, of like quality, one half of which having been subsoil plowed, the other half plowed in the usual manner,—statements of the depth of plowing, in each instance, together with all the particulars of culture, required, \$8; second best, \$6.

COMPARATIVE VALUE OF CROPS AS FOOD FOR CATTLE.

For the best experiment upon a stock of cattle, not less than four in number, to ascertain the relative value of the different kinds of fodder used, with a statement in detail of the quantity and value of the same, as compared with English hay, the experiment to be made in the three winter months, \$15; second best, \$10.

FATTENING CATTLE.

For the best experiment in *feeding* cattle, with a statement in detail of the process, expense and result, \$8; second best, \$4.

FATTENING SWINE.

For the best experiment in *feeding* swine, with a statement in detail of the process and result, \$6 ; second best, \$4.

FEEDING OF MILCH COWS.

For the best experiment in the feeding of milch cows by soiling, stall feeding or pasturing, with a detailed statement of the comparative advantages of either method, regard being had to the saving of manure, comfort of the animals and produce of the dairy, \$15 ; second best, \$10.

HAY.

For the largest quantity and best quality of English hay per acre, produced on any farm in the County, regard being had to the character of the soil, the mode and cost of cultivation and making, \$5 ; second best, "Flint's Treatise on Grasses."

CRANBERRY VINES.

For the best experiment in transplanting Cranberry Vines, or in growing them from seed, on not less than one-eighth of an acre which shall be in the most flourishing and productive state, on the 10th September, 1864, \$8 ; second best, \$4.

Competitors will be required to give an exact statement of the process, expense, and result of the experiment.



GRAIN AND ROOT CROPS.

GRAIN CROPS.

For the best experiment in raising *Wheat*, Harris' Treatise on Insects ; second best, \$3.

For the best experiment in raising *Rye*, *Oats*, or *Barley*, each, \$4 ; second best, each, \$2.

For the best experiment in raising *Indian Corn*, Harris' Treatise on Insects ; second best, \$4 ; third best, \$2.

For the best experiment in raising *White Beans*, *Millet* or *Buckwheat*, each, \$3.

An addition of 20 per cent. to the above premiums, if the successful competitor be a youth, under 16 years of age.

Samples of each kind of Grain, not less than a half-bushel, and properly labelled, must be exhibited at the Show. The quantity of the crop to be ascertained by weight, as follows:—Corn and Rye, 56 pounds each to the bushel ; Barley and Buckwheat, 48 pounds each ; Oats, 32 pounds ; Wheat, 60 pounds.

ROOT CROPS.

For the best experiment in raising *Potatoes*, \$5; 2d best, \$3.

For the best experiment in raising *Sugar Beets*, *Carrots*, *Parsnips*, *Mangold-Wurtzel*, or *Ruta Baga*, each \$5; 2d best, \$3.

For the best experiment in raising *Onions*, \$5; 2d best, \$3.

For the best experiment in raising *Flat Turnips*, \$4; 2d best, \$2.

Samples of Roots, not less than one bushel, and properly labelled, must be exhibited at the Show. The quantity of the crops, which must be on not less than one quarter of an acre, shall be ascertained by the weight of the Roots—freed from dirt and without tops—as follows:—Potatoes, Sugar Beets, Mangold-Wurtzel and Ruta Bagas, 60 pounds; Carrots, 55 pounds; Onions and Flat Turnips, 50 pounds; Parsnips, 45 pounds to the bushel.

Entries must be made with the Secretary, *ten days previous to the commencement* of any experiment. Experiments will be viewed by the Committee between July 1st and September 20th.

Claimants for premiums must render to the Chairman of the Committee, on or before November 15th, a written statement of the character and previous condition of the land, its present value, and the taxes upon it; the kind, quantity and value of manure used; the quantity and cost of seed sown; the labor and expense of cultivating and harvesting the crop, and the quantity, quality and value of the crop. In awarding premiums, regard will be had to all these circumstances, and to the area of the ground in cultivation.

VEGETABLES.

For the best experiment in raising *Squashes*—one half dozen of each variety to be exhibited at the Show—\$3; second best, \$2.

For the best experiment in raising *Cabbages*—not less than six heads to be exhibited at the Show—\$3; second best, \$2.

MIXED CROPS.

For the best experiment in cultivating mixed crops of Grain and Vegetables, in alternate portions, or of different roots, in alternate rows, Harris' Treatise on Insects; second best, \$4; 3d best, \$2. The experiment must be made on not less than half an acre of land, and a detailed statement of the mode of culture, expense and product must be rendered on or before November 15th.

PLOWING MATCH.

DOUBLE OX TEAMS. *With Sod and Subsoil Plow.* For best performance in plowing sward land, at least one-eighth of an acre, eight inches in depth, within an hour, \$10; second best, \$8; third best, \$6.

With any other Plow. Same conditions. Best, \$10; second best, \$8; third best, \$6.

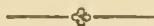
DOUBLE HORSE TEAMS. *With Sod and Subsoil Plow.* Same conditions. Best, \$10; second best, \$8; third best, \$6.

With any other Plow. Same conditions. Best, \$10; second best, \$8; third best, \$6.

SINGLE OX TEAMS. *With any Plow.* For the best performance in plowing sward land, at least one-eighth of an acre, six inches in depth, within an hour, \$6; second best, \$4; third best, \$2.

SINGLE HORSE TEAMS. Same conditions. Best, \$6; second best, \$4; third best, \$2.

NOTE. A DOUBLE TEAM will consist of two yokes of oxen, with or without a driver; or a team of one yoke of oxen and a horse, with or without a driver. SINGLE TEAM, one yoke of oxen or one pair horses, without a driver. Competitors must own their teams and plows, and enter the same in their own names. Plows must be held and teams driven by their owners, or by persons stately in their employ. Notice to compete must be given to the Secretary on or before the Saturday previous to the Exhibition. In awarding premiums, one hour will be allowed for the performance of the work, regard being had to the width and depth of the furrow slice, and the evenness, ease and quiet with which the work is performed.



SPADING.

For the best performance in spading, not less than ten inches in depth, on a piece of not less than one hundred square feet of sward land; the time allowed for the performance to be thirty minutes; due regard being had to the thoroughness of the pulverization of the soil, and the state in which it is left for the reception of seed, \$5; second best, \$4; third best, \$3; fourth best, \$2; fifth best, \$1.



ARBORICULTURE.

FRUIT TREES.

APPLE ORCHARD. For the best Apple Orchard, of not less than *fifty trees*, which shall have been set out at least five years, and which shall be in the best and most thriving condition in 1864, \$10; second best, \$5.

PEAR TREES. For the best engrafted or budded standard Pear Trees, set out at least five years, and which shall be in the

most thriving condition in the autumn of 1864, not less than *twenty-five trees*, \$10 ; second best, \$5.

For best engrafted or budded Pear Trees on Quince roots, with same conditions, and not less than *fifty trees*, \$10 ; 2d best, \$5.

PEACH ORCHARDS. For the best Peach Orchard, of not less than *fifty trees*, and which shall be in the most thrifty bearing condition in the autumn of 1864, \$10 ; second best, \$5.

For the Peach Orchard, of not less than *fifty trees*, grown from pits planted since 1858, on the spot where the trees stand, which shall be in the best condition in 1864, \$10 ; second best, \$5.

SEEDLING APPLES OR PEARS. For the best variety of *new Seedling Apples or Pears*, of decidedly superior quality, *one dozen specimens* to be exhibited, together with a history of the origin of the tree, a description of the growth, and its bearing character, \$10 ; second best, \$5.

SEEDLING PEACHES. For the best variety of *Seedling Peaches* of decidedly superior quality, and worthy of general cultivation—*one dozen specimens* to be exhibited two years in succession—together with a history of its origin, a description of its growth, and the bearing character of the tree, \$5 ; second best, \$3.

FOREST TREES.

For the best plantation of Forest Trees, of either of the following varieties, viz. : White Oak, Yellow Oak, Locust, Birch, White Ash, or Walnut, Scotch Larch, Norway Spruce, Pitch Pine and White Pine, or other varieties, not less than three years old, and not less than one thousand trees,—entries to be made to the Society previous to June 10th,—a premium, to be awarded in 1864, of \$15.

For the best plantation, containing not less than five hundred trees, a premium of \$6.

ORNAMENTAL PLANTING. To any city or town of Norfolk County, for the largest number and best growth of ornamental trees, not less than one hundred, which shall have been planted in a public square, or on the roadside at least two years—first premium, \$15 ; second do., \$10.

To any individual or society, regard being had to the number of persons associated, for the largest number and best growth of ornamental trees, not less than fifty, which shall have been planted in a public square or on the roadside at least two years—first premium, \$10 ; second do., \$5.

These premiums to be awarded in the autumn of 1864, and if awarded to a city or town, to be graduated by the population, according to the census of 1860.

HORTICULTURE.

FLOWERS.

For the best collection of cut flowers, \$4 ; for second best, \$3 ; third best, \$2 ; fourth best, \$1. For the best bouquets, or tastefully arranged basket of flowers, not less than four, \$4 ; second best, \$3 ; third best, \$2 ; fourth best, \$1. For the best collection of twenty named dahlias, regard being had to *colors* and symmetry of flower, \$3 ; second best, \$2. For the best single bloom, \$1. For the best collection of twelve pot plants, regard being had to new and rare varieties and well grown specimens, \$3 ; second best, \$2. For the best single specimen, \$1. For the best collection of new seedling verbenas, with foliage, \$2. For the best new seedling, \$1. For the largest and best collection of wild flowers, \$2 ; second best, \$1. Any person presenting flowers for premium or exhibition, is requested to furnish a statement in writing of the sorts contributed, and of the contributor's name.

Gratuities, in publications or otherwise, to the amount of \$10, may be awarded at the discretion of the Committee.

FRUITS.

For the best collection of the most approved standard *Apples*, not less than twelve specimens of each variety—first premium, Harris' Treatise on Insects; second do., \$4 ; third do., \$3 ; fourth do., \$2.

For the best collection of the best twelve varieties of *Pears*, not less than twelve specimens of each variety, first premium a silver cup of the value of twelve dollars ; second do., \$4 ; third do., \$3 ; fourth do., \$2.

For the best collection of the most approved standard *Peaches*, not less than twelve specimens of each variety—first premium, \$3 ; second do., \$2 ; third do., \$1.

For the best collection of the most approved varieties of *Plums*, not less than twelve specimens of each variety—first premium, \$3 ; second do., \$2.

For the best *dish* of *Pears*, not less than one dozen specimens, a premium of \$2 ; second do., \$1.

For the best *dish* of *Apples*, not less than one dozen specimens, a premium of \$2 ; second do., \$1.

For the best basket of assorted Fruits, of different kinds, \$4 ; second best, \$3 ; third best, \$2.

For the best exhibition of *Quinces*, not less than a peck, \$2.

GRAPES. For the best exhibition of *Foreign Grapes*,—first premium, \$4 ; second do., \$3, or \$3 in publications, at discretion of Committee.

For the best collection of *Native Grapes*, by the ordinary mode of cultivation, and without ringing, \$3; second do., \$2; third do., \$1.

For a new variety of *Native* or *Seedling Grape*, equal or superior to the *Isabella*, ripening in this County in the open air, by the *middle of September*, prolific and suitable for the table, first premium, \$20; second do., \$10.

CRANBERRIES. For the best collection of Cranberries, not less than four quarts, \$3; second best, \$2; third best, \$1.

Gratuities, in publications or otherwise, to the amount of \$20, may be awarded at the discretion of the Committee.

GARDEN.

For the best VEGETABLE GARDEN, regard being had to the variety, excellence and quantity of the products thereof, and the mode and expense of cultivation, \$5; second best, \$3.

Entries must be made before the 10th of June, and an exact statement rendered before the 1st of November.

GARDEN VEGETABLES.

For the best collection and variety of GARDEN VEGETABLES, regard being had to the quantity as well as quality exhibited, \$10; second best, \$5; third do., \$4; fourth do., \$3; fifth do., \$2; sixth do., \$1. \$20 in agricultural publications, or otherwise, may also be awarded, at the discretion of the Committee.

POTATOES. For the best new variety of *Seedling Potatoes*, superior to any kind now in cultivation, a premium of \$10.

For the largest and best collection of *Potatoes*, not less than a peck of each variety, a premium of \$3; second best, \$2.

SEEDS.

For the best sample of ears of Seed Corn, not less than forty in number, \$1.

For the best collection of Onion, Carrot, Beet, Parsnip, and Ruta Baga Seeds, first premium, \$3; second do., \$2.

For the best 10 pounds of Timothy, Red Top, and Clover Seed, \$1.

For the best sample, one peck each, of Wheat, Rye, Barley and Oats, \$1.

HEDGES.

For the best *Live Hedge Fence*, not less than five hundred feet in length, \$5; second best, \$3.

ANIMALS.

All animals are to be entered in the name of the owner, who must have had them in his possession, at least six months before the exhibition.

All animals, entered in accordance with the rules and regulations, will be fed, during the Exhibition, at the expense of the Society.

No animal, entered in one class, will be allowed to compete for a premium in another, under a different entry, except working oxen and draught horses.

For any animal, worthy of the first premium, and having received a similar one at any previous Exhibition, a diploma, certifying the rank of such animal at the present Exhibition, shall be awarded instead of a premium.

A diploma may also be awarded, at the discretion of the several Committees, for any animal, worthy of exhibition, from without the limits of the Society.

CATTLE.

For the best BULL, one year old and upwards, of either Jersey, Durham, Devon, Ayrshire, Hereford, Kerry, or other foreign stock—in each class, \$5; second best, \$3.

For the best Grade BULL, \$3; second best, \$2.

For the best BULL CALF, under one year old, foreign stock, \$3; second best, \$2.

COWS. For the best Cow, three years old, or upwards, foreign stock, of either class, each \$5; second best, \$4; third best, \$3.

Grade, \$5; second best, \$4; third best, \$3.

HEIFERS. For the best Heifer, two years old and under three, foreign stock, of either class, each \$3; second best, \$2; third best, \$1.

Grade, \$3; second best, \$2; third do., \$1.

For the best Heifer, one year old, of any stock, \$2; second best, \$1.

MILCH COWS. Three years old and upwards. For the best Milch Cow, without regard to breed, each, \$8; second best, \$6; third do., 4; fourth do., \$2.

For the best Milch Heifer, not over three years old; without regard to breed, each, \$6; second best, \$4; third do., \$2.

A written statement of the quantity and quality of Milk, and of the manner of feeding the animals in the last two classes shall be required. Also a written statement of the butter made from milk, during two periods, of ten days each, with an interval of three

months, and previous to the Annual Exhibition. If no butter is made, the statement must give the quantity and weight of the milk, the character of the last calf, and the time when it was dropped.

HERDS OF MILCH COWS. For the largest and best herd of Milch Cows—not less than six—kept on any farm in the County, and exhibited at the Show, regard being had to their breed, age, and milking properties, with written statement thereof, first premium, \$12; second do., \$8; third do., 6.

WORKING OXEN. For the best yoke, four years old and upwards, \$6; second best, 4; third best, \$2.

STEERS. For the best yoke, well broken, three years old and under four, \$4; second best, \$3; third best, \$2.

For the best yoke, well broken, two years old and under three, \$3; second best, \$2.

NOTE. For Oxen or Steers, and also for Herds of Milch Cows, bred and raised by the exhibitor, twenty per cent. additional. In testing the strength, docility and training of Working Oxen, the load shall not be less than 3000 pounds for oxen five years old and upwards; and not less than 2500 pounds for oxen under five years old. In testing the character of Steers, as the Committee may direct, special regard will be paid to their docility and proper training.

TOWN TEAMS. For the largest and best team, of not less than ten yokes of Oxen or Steers, from any city or town in the County, first premium, \$12; second do., \$8.

FAT CATTLE. For the best beef animal fattened by the exhibitor, within the County, regard being had to the manner and expense of feeding—of which a written statement will be required, first premium, \$8; second do., \$6.

SWINE.

BOARS. For the best Boar, not less than six months old, \$6; second best, \$4.

SOWS. For the best Sow, not less than six months old, \$6; second best, \$4.

WEANED PIGS. For the best litter, not less than four in number, and not more than six months old, \$6; second best, \$4.

FAT HOGS. For the best Fat Hog, regard being had to breed, age and feeding, \$6; second best, \$4.

SHEEP.

For the best lot of Sheep, not less than six, \$8; second best, \$6.

For the best lot of Lambs, not less than six—bred by the exhibitor, \$5; second best, \$3.

For the best Ram—Cotswold, Leicester, Oxford Down, or South Down—one year old or over, \$5; second best, \$3.

POULTRY.

For the best collection of not less than three, either Shanghai, Black Spanish, Dorking, Poland, Bolton Gray, Guinea, or Bantam Fowls, each, \$2; second best, \$1.

TURKEYS. For the best collection, \$3; second best, \$2.

GEESE. For the best collection, \$3; second best, \$2.

DUCKS. For the best collection, \$3; second best, \$2.

PIGEONS. For the best collection, \$2; second best, \$1.

NOTE. Poultry must be entered before 12 o'clock, on the first day of the Exhibition, to be entitled to a premium.



HORSES.

In awarding the premiums on Roadsters, the general good qualities—such as style, action, constitution and enduring properties—as well as speed of the animals, will receive special consideration.

In testing the speed of horses, each animal—four years old and over—will be required to draw a carriage weighing, with driver included, not less than 350 pounds.

It is understood that horses which have heretofore been classed under the head of “Thorough-bred and part Thorough-bred,” may compete as Roadsters, or in any other class.

Colts and Fillies will compete in separate classes, as heretofore, the premiums being the same for either sex.

No stallion will be entitled to a premium without a guaranty of his remaining for service in the County six months.

In testing the strength, docility and training of Draught or Team Horses, the load shall not be less than 2500 pounds for a single horse, and 3500 pounds for a pair of horses.

Every entry for premium must be made before 12 o'clock of the first day of the Exhibition, and the Stock must be present the second day, on or before 9 o'clock, A. M.

It must be distinctly understood that premiums will not be awarded to any animal that does not, in the opinion of the Committee, possess decided merit and a sound constitution.

CLASS A.

ROADSTERS.

1st Division.

Stallions.

For the best Stallion, 4 years old and upwards, a prem. of \$10.

“ 2d best “ “ “ “ 7.

2d Div. *Brood Mares.*

For the best Brood Mare, with a Foal at her side, a prem. of \$7.
 " 2d best " " " " 5.

3d Div. *Colts and Fillies.*

For the best 3 years old, a premium of \$5.
 " 2d best " " " 3.
 For the best 2 years old, " 3.
 " 2d best " " 2.
 For the best 1 year old, " 3.
 " 2d best " " 2.

4th Div. *Pairs in Harness.*

For the best pair of Roadsters, a premium of \$10.
 " 2d best " " 7.

5th Div. *Harness Horses.*

For the best Gelding or Mare, a premium of \$7.
 " 2d best " " " 5.
 " 3d best " " " 3.
 " 4th best " " " 2.

CLASS B.

HORSES OF ALL WORK.

1st Div. *Stallions.*

For the best Stallion, 4 years old and upwards, a prem. of \$10.
 " 2d best " " " " 7.

2d Div. *Brood Mares.*

For the best Brood Mare, with a Foal at her side, a prem. of \$7.
 " 2d best " " " " 5.

3d Div. *Colts and Fillies.*

For the best 3 years old, a premium of \$5.
 " 2d best " " " 3.
 For the best 2 years old, " 5.
 " 2d best " " 3.
 For the best 1 year old, " 5.
 " 2d best " " 3.

CLASS C.

FAMILY HORSES.

1st Div. *Stallions.*

For the best Stallion, 4 years old and upwards, a premium of \$10.

“ 2d best “ “ “ “ “ 7.

2d Div. *Brood Mares.*

For the best Brood Mare, with a Foal at her side, “ \$7.

“ 2d best “ “ “ “ “ 5.

3d Div. *Colts and Fillies.*

For the best 3 years old, a premium of \$5.

“ 2d best “ “ “ 3.

For the best 2 years old, “ 3.

“ 2d best “ “ “ 2.

For the best 1 year old, “ 3.

“ 2d best “ “ “ 2.

4th Div. *Carriage Horses 15 to 16 Hands High.*

For the best pair of Carriage Horses, a premium of \$10.

“ 2d best “ “ “ 7.

5th Div. *Buggy or Chaise Horses.*

For the best Buggy or Chaise Horse, a premium of \$8.

“ 2d best “ “ “ “ 6.

6th Div. *Saddle Horses.*

For the best Saddle Horse, a premium of \$6.

“ 2d best “ “ “ 4.

7th Div. *Ponies.*

For the best matched Ponies, a premium of \$6.

“ 2d best “ “ “ “ 4.

“ best single Pony, “ “ 3.

“ 2d best “ “ “ “ 2.

CLASS D.

DRAUGHT OR TEAM HORSES.

1st Div. *Single Draught or Team Horses.*

For the best Draught Horse, a premium of \$7.

“ 2d best “ “ “ “ 5.

2d Div. *Pairs of Draught or Team Horses.*

For the best pair of Draught or Team Horses, a premium of \$7.

“ 2d best “ “ “ “ 5.

DAIRY.

BUTTER.

For the best produce of BUTTER, on any farm within the County, for four months, from the 20th of May to the 20th of September,—a sample of not less than twenty pounds to be exhibited,—*quantity* as well as *quality* to be taken into view, with a statement of the number of cows, and a full account of the manner of *feeding* them, and the general management of the milk and butter, first premium, \$10 ; second do., \$8 ; third do., \$5 ; fourth do., \$4.

NOTE. It will be seen that these premiums are offered for the best produce on the Farms, and not simply for the best specimens exhibited. Competitors will therefore be required to keep an account, and render a statement of the entire produce within the time mentioned. Each lot must be numbered, but not marked ; any public, or known mark, must be completely concealed, nor must the competitors be present at the examination.

For the best box of Butter, of not less quantity than 12 pounds, first premium, \$5 ; second do., \$3 ; third do., “ Flint’s Treatise on Dairy Farming.”

NOTE. Butter to be presented before 9 o’clock on the morning of the second day.

CHEESE. For the best lot of Cheese,—not less than 40 pounds to be exhibited,—a written statement of the whole process of making which will be required, first premium, \$5 ; second do., \$3 ; third do., “ Flint’s Treatise on Dairy Farming.”



BREAD.

For the best loaf of Wheat and Indian, of two to four pounds weight, first premium, \$3 ; second do., \$2.

For the best loaf made of Unbolted Wheat, which has been grown in the County, of two to four pounds weight, first premium, \$3 ; second do., \$2.

For the best loaf of Rye and Indian, of four to six pounds weight, first premium, \$3 ; second do., 2.

For the best loaf of Wheat Bread, of two to four pounds weight, first premium, \$3 ; second do., \$2.

For the best specimens of each or any of the aforementioned kinds of Bread, made by young women under eighteen years of age, an additional premium of twenty-five per cent

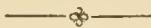
The bread presented for premium must be made on the first day of the Exhibition, by some female member of a family, (exclusive of hired persons,) in whose names the entries shall be made, and to whom the premiums shall be awarded. The bread shall

be made without the use of saleratus or other alkaline substance, and baked in the oven commonly used by the family in which it shall be made, and must be presented on the second day of the Exhibition, before 9 o'clock in the morning. A written statement of the process of making the bread shall accompany each entry, but no name or mark shall be put on the loaves, except the number of the entry in the Committee's book.

Committees shall be appointed to judge of the several descriptions of bread, to whom the names of contributors shall not be known, and no person shall serve on said Committees if any member of his family shall be a competitor.

HONEY.

For the best specimen of Honey in the comb, not less than six pounds, \$2; second best, \$1.



MANUFACTURES.

AGRICULTURAL IMPLEMENTS.

For the best collection manufactured within the County, and exhibited by the manufacturer, \$6; second best, \$4.

For any new or improved Plow, which on trial shall be found best adapted for the thorough pulverization of old plowed land, a premium of \$6.

NEW INVENTIONS. For any new invention of decided superiority and usefulness to the farmer, a premium or gratuity, at the discretion of the Committee.

DOMESTIC MANUFACTURES.

FANCY ARTICLES—including Needlework, Crochetwork, Shellwork, Millinery, Drawings, Paintings, &c.

For such articles in this department as may be deemed worthy, a sum, not exceeding fifty dollars, shall be appropriated, to be paid in premiums or gratuities, proportioned to the cost and value of the article, at the discretion of the Committee.

NOTE. It should be understood that, in this department of Ladies' work—while other things will receive due consideration—the premiums are intended SOLELY FOR NEWLY MADE articles which are really useful or particularly beautiful. For well made garments of any kind; for stocking knitting of wool, cotton or silk; or bonnet and cap making; for all articles for children's wear well made or tastefully embroidered; for neat and thorough mending, patching, and darning; for drawing, designing, or painting in oil or water colors; for models in plaster, wood, or marble, &c.

Any article well and tastefully wrought, offered by children under twelve years of age, will receive particular attention.

MANUFACTURES OF STRAW. For the finest collection and best manufactured *Plain Braid* Bonnets, not less than twelve in number, \$5 and diploma; second do., \$3.

For the finest collection and best manufactured *Fancy Bonnets*, whether of Straw, Hair, or other material, not less than twelve in number, \$5 and diploma; second do., \$3.

For the best specimen of *Straw Bonnets*, wholly of domestic manufacture, \$4 and diploma; second do., \$2.

For the best specimen of *Straw Braid*, of domestic straw, not less than 100 yards, \$2 and diploma; second do., \$1.

For the best specimen of *Sewing Bonnets*, made of Straw, Hair, or other material, exhibited unfinished, with blocks upon which they are made, and not less than three from each sewer, \$3 and diploma; second do., \$2.

MANUFACTURES OF CLOTH, FLANNELS, HOSIERY, &c. *Cotton Cloth*. For the best specimen of Cotton Cloth, of any description, not less than twenty-eight yards in quantity, a premium or gratuity, at the discretion of the Committee.

Woollen Cloth. For the best specimen of Woollen Cloth, of any description, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

Cotton and Woollen Mixed. For the best specimen of Cotton and Woollen Cloth of any description, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

Flannels. For the best specimen of Flannel, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

For the best specimen of Cotton Flannel, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

For the best pair of Woollen Blankets, a premium or gratuity, at the discretion of the Committee.

Hosiery, &c. For the best specimen of Silk Hose, a premium of \$1.50.

For the best specimen of Silk Half Hose, a premium of \$1.

For the best specimen of Woollen Hose, a premium of \$1.

For the best specimen of Woollen Half Hose, a premium of 50 cents.

For the best specimen of Cotton Hose, a premium of 50 cents.

For the best specimen of Cotton Half Hose, a premium of 25 cents.

For the best specimen of Worsted Hose, a premium of \$1.

For the best specimen of Worsted Half Hose, a premium of 50 cents.

For the best specimen of Sewing Silk, not less than one pound, a premium of \$2.

For the best specimen of Knitting Yarn, not less than one pound, a premium of \$1.

For the best specimen of Spool Thread, not less than one pound, a premium of \$1.

For the best Fleece of Wool, a premium of \$1.

For the best dozen Grain Bags, a premium of \$1.

For the best specimen of neat and thorough mending, patching, or darning of garments, hose, &c., a premium of \$1.

COUNTERPANES. For the best Counterpane—regard being had to quality and expense of materials—first premium, \$3; second do., \$2.

CARPETING, RUGS AND FLOOR CLOTH.

For the best "Common" Ingrain 2-ply Carpeting;

do. do. "Fine" do. do. do.

do. do. "Superfine" do. do. do.

do. do. "Common," "Fine," or "Superfine" Ingrain 3-ply Carpeting;

do. do. Brussels Floor Carpeting;

do. do. Tapestry do. do.

do. do. Velvet Carpeting;

For each of these descriptions of Carpeting, a premium or the Society's diploma, at the discretion of the Committee.

NOTE. Ingrain 2-ply Carpeting will be judged by the comparative merits of pieces of similar weight; or, disregarding weight, by the quality of color, the taste of shading, and evenness in spinning and weaving.

For the best piece of Stair Carpeting, the Society's diploma.

For the best Hearth Rug, the Society's diploma.

For the best specimen of painted Floor Cloth, a premium or the Society's diploma, at the discretion of the Committee.

NOTE. Any articles in either of the foregoing departments, which shall have been manufactured in the family of the person presenting it, will receive the particular consideration of the Committee, and, if worthy, a suitable premium.

GLASS, EARTHEN, STONE AND WOODEN WARE. For the finest collections and best specimens of articles in each of these departments, a premium or gratuity, at the discretion of the Committee.

BRASS, COPPER, TIN, IRON AND BRITANNIA WARE. For the finest collection and best specimens of articles in each of these departments, a premium or gratuity, at the discretion of the Committee.

CABINET WORK. For the best specimen of Cabinet Work, a premium or the Society's diploma.

IRON FENCING, GATES AND POSTS. For the best specimens of each—regard being had to cost and utility, as well as ornament—a premium or gratuity, at the discretion of the Committee.

STOVES. For the best Farmer's Cauldron Stove ;

do.	do.	Cooking	do.
do.	do.	Parlor	do.

—a premium of \$2.

HORSE AND OX SHOES. For the best specimens of Horse and Ox Shoes, a premium of \$1.

For the best specimens of Horse Shoes *for meadow lands*, a premium of \$1.

INDIA RUBBER GOODS. For the finest collection and best specimens of India Rubber goods, a premium or gratuity, at the discretion of the Committee.

BRUSHES, COMBS, HATS, CAPS AND GLOVES. For the finest collection and best specimens of each of these articles, a premium or gratuity, at the discretion of the Committee. .

LEATHER, AND ARTICLES MANUFACTURED THEREFROM.

For the best specimen of Thick Boots, a premium of \$2.

do.	do.	Calfskin,	do.	3.
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do.	do.	Thin Boots, other		
		than Calfskin,	do.	2.

do.	do.	Kipskin,	do.	2.
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do.	do.	Thick Brogans,	do.	1.
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do.	do.	Fine Brogans,	do.	1.
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do.	do.	Ladies' Boots,	do.	1.
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For the best specimen of Upper or Sole Leather, or Morocco, a premium or gratuity, each, at the discretion of the Committee.

For the best single Carriage Harness ;

do.	do.	double	do.
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do. do. Cart Harness—a premium or gratuity, each, at the discretion of the Committee.

For the best Riding Bridle, a premium of \$1.

do.	do.	do.	Saddle,	do.	2.
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do.	do.	Carriage or Cart Whip,	a premium of	1.
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CARRIAGES, WAGONS, CARTS, &c.

For the best specimen of Family Carriages, for one horse or for two horses ;

For the best Covered Wagon ;

do.	do.	Open	do.
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do.	do.	Farm	do.
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do.	do.	do.	Cart ;
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do. do. Farm Wheelbarrow—a premium or gratuity, each, at the discretion of the Committee.

JELLIES, PRESERVES, PICKLES, AND KETCHUPS. For the finest collection and best specimen of each, made of articles of domestic growth, a premium or gratuity, at the discretion of the Committee.

NATIVE WINES, CORDIALS, &c.

For the best specimen of Wines from cultivated or wild grapes, not less than two bottles to be exhibited, \$2; second best, \$1.

For the best specimen of Wine or Cordial from currants, blackberries, raspberries, or elderberries, not less than two bottles to be exhibited, each, \$1.

NOTE. It is to be understood that all articles presented for premium, in each of the foregoing departments, shall have been manufactured or produced within the County, and by the person presenting them. Also, that in every case, the Examining Committee shall have the right to substitute the Society's diploma for a premium or gratuity, or to give it where no premium or gratuity has been offered, at their discretion.

All discretionary premiums or gratuities shall be proportioned to the actual value and utility of the articles.

Articles in either of the above departments, contributed to the Exhibition by persons not resident in the County, shall receive suitable attention from the Committee, and, if worthy, be awarded the Society's diploma.

**MISCELLANEOUS.****AGRICULTURAL LABORERS.**

For a certificate—signed by his employer, and countersigned by any two of the Trustees residing nearest to the applicant—of the superior qualification of any man or youth, in the employment of any member of the Society for a period next preceding, of not less than two years, attesting the industry, integrity, respectful demeanor and general good habits, during the time, of the bearer of such certificate, a premium of Membership of the Society and a diploma.

CABINET OF INSECTS.

For the largest and best Collection of Insects found within the County, beneficial or injurious to vegetation, properly arranged and classified, to be exhibited on the Society's tables, at the next Annual Fair, one copy of Harris' Treatise on Insects.

AGRICULTURAL ESSAYS.

For the best Essay on the relative importance and value, as sources of profit, of the various grasses, or cereal, fruit or vegetable crops, a premium of \$10.

For the best Essay on the relative importance and value, as sources of profit, of the breeding and raising of the different classes of farm stock, a premium of \$10.

For the best Essay on the fattening of cattle, swine or sheep, detailing the process and expense of the same, a premium of \$10.

FOREST TREES. For the best Essay on the raising and cultivation of Forest Trees, a premium of \$10.

INSECTS. For the best Essay on the destruction of Insects injurious to vegetation, such as *Curculio*, *Borer*, *Canker-Worm*, *Catterpillar*, *Cut-Worm*, *Squash-Bug*, *Striped-Bug*, *Rose-Bug*, &c., &c., a premium of \$10.

PRESERVATION OF WINTER FRUIT. For the best Essay on the preservation of Apples and other Winter Fruits, \$10.

PRESERVATION OF VEGETABLES. For the best Essay on the preservation of Vegetables, a premium of \$10.

AGRICULTURAL EDUCATION. For the best Essay on Agricultural Education, a premium of \$10.

FARM ACCOUNTS. For the best Essay on a system of Farm Accounts, a premium of \$10.

For the best Essay on Domestic Poultry, \$10.

For the best Essay on Fences for Farms, uniting economy, strength and appearance, a premium of \$10.

For the best Essay on the extermination of Weeds and Plants, destructive to crops, a premium of \$10.

For the best Essay on the preservation and application of Liquid Manure, a premium of \$10.

For the best Essay on the introduction of new Fruits and new articles of Field Culture, a premium of \$10.

For the best Essay on the value and application of Phosphate of Lime, or any fertilizer of the soil, a premium of \$10.

For the best Essay on Bees and Structure of Hives, with particular reference to feeding Bees, and guarding against the spoliations of the Bee Moth, a premium of \$10.

For the best plan for a Barn and Barn Yard, with regard to the keeping of the Hay, the comfort of the Cattle, the ease and convenience of tending them, and the making and preserving the Manure, a premium of \$10.

These premiums will not be awarded unless the Essays offered shall, in the judgment of the Committee appointed to decide upon them, be deemed worthy of an award, without reference to their comparative merit.

FARM BUILDINGS.

For the best planned house and out-buildings—regard being had to the cost and economy of labor—the house to be warm, well lighted and ventilated, with a cellar protected from frost and vermin, and the whole not to cost over \$1,800;—to be examined by the Committee on Farms—a premium to be adjudged by said Committee.

FORM FOR STATEMENT OF CROPS.

[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.]

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 ?

What was the crop of 1863 ?

What manure was used, and how much ?

What is the nature of the soil ?

When, and how many times plowed, and how deep ?

What other preparation for the seed ?

Cost of plowing and other preparation ?

Amount of manure, in loads of thirty bushels, and how applied ?

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 personal observation, we hereby certify that the above answers are true.

From actual measurement, I hereby certify that the land which the above crop of _____ covered contained _____ rods, and no more.

I hereby certify that the weight of the above crop, as ascertained by me, on the _____ day of _____, was _____ pounds.

Committee.

In ascertaining the amount 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; or the whole crop may be measured in any vessel, and the weight of its contents once, multiplied by the number of times it is filled by the crop; and the Committee, in their certificate, or their report, shall state which method was employed.

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 Wurtzel, Ruta		
Bagas, White Beans, and Pease,	60 lbs. to the bushel.	
Corn, Rye,	56 "	"
Oats,	32 "	"
Barley, Buckwheat,	48 "	"
Cracked Corn, Corn and Rye and other meal, except		
Oat, and English Turnips,	50 "	"
Parsnips,	45 "	"
Carrots,	55 "	"
Onions,	52 "	"

RULES AND GENERAL REMARKS.

It is understood that all premiums will be restricted to articles of the growth and manufacture of the County, unless otherwise specified in the premium list. Essays and Agricultural Implements being excepted from this rule, are open to general competition.

Committees are particularly requested not to award gratuities other than diplomas, or such as are specified in the premium list.

Any gentleman, not a member of the Society, entitled to a premium of five dollars or upwards, and any lady, not a member of the Society, entitled to a premium of two dollars or upwards, shall receive the amount exceeding the sum of five dollars and two dollars, respectively, and shall thereafter become a member.

The stock and articles intended for exhibition and premium—bread and butter excepted—must be on the ground at or before 12 o'clock on Thursday, the first day of the Exhibition, to be entitled to any premium. Animals will not be allowed to be removed from the pens before 3 o'clock on Friday, the second day, and all other articles not until 5 o'clock, without the permission of the Committee having them in charge.

In order to extend liberal encouragements to citizens of the County living remote from the Society's grounds in Dedham, a sum—not exceeding fifty dollars—will be appropriated for compensation of travel to the owners of all such neat cattle, swine and sheep, as have been brought or driven more than five miles—reckoning the distance from whence they came to the place of exhibition—and receive no premium. Only one travel will be allowed to the same person. Payment will be made at the rate of ten cents per mile, for a yoke of oxen or steers; eight cents per mile, for each bull, cow, heifer, or yearling; ten cents per mile, for each boar, sow or litter of weaned pigs; and eight cents for each flock of sheep. But no such payment shall be made for any animal, or animals, which, in the judgment of the Committee appointed to examine them, are not of a superior character and

worthy of exhibition, or have not been entered in accordance with the rules and regulations of the Society.

The animals, while on the ground, will be fed at the expense of the Society.

No person serving on any of the Committees shall have a vote in any case, when he shall be personally interested as a competitor.

All other Entries for premiums must be made in writing, and shall be placed in the hands of the Recording Secretary, on or before the 15th of November.

Premiums awarded, and not called for on or before the last Wednesday in March following, will be considered as given to the Society, in aid of its funds.

After the objects for Exhibition are arranged, they will be under the care of the Committees, and cannot be removed without their consent.

No object or article will be entitled to a premium, unless it possesses points of superiority ; and the Committees have the discretionary power of withholding premiums, if, in their opinion, the articles or objects are not deemed worthy to receive the same.

The Trustees have carefully revised and approved of the foregoing proposals for *Premiums*. The respective Committees, appointed to award the same, are required to enforce a strict conformity to all the rules in relation to Entries and Certificates.

In the appointment of *Committees*, the Trustees will seek for the most judicious and skilful individuals in the various towns in the County, to award the *Premiums* ; but should they fail to secure the aid of the ablest and most experienced men in the above capacity, they will rely upon the forbearance which, they believe, will be generously extended towards sincere and unwearyed efforts.

As it will become the duty of the Society to make to the Legislature an exact report of its doings, the Trustees deem it of the highest importance that earnest and persevering efforts should be made by the citizens of every town in the County, to bring out the results of their skill and industry.

MARSHALL P. WILDER, *President*.

HENRY O. HILDRETH, *Secretary*.

TRANSACTIONS

OF THE

NORFOLK

AGRICULTURAL SOCIETY,

FOR

1865.

PUBLISHED BY THE SOCIETY.

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ADDRESS,

BY REV. JAMES FREEMAN CLARKE, D. D., OF WEST ROXBURY.



I do not intend, to-day, to teach Farmers anything about farming. I am not so presumptuous. All that I could say about agriculture, its uses, history, methods ; all that I could tell you about fertilizers, rotation of crops, mowers and reapers, breeding of cattle, and the like, you know already better than I can tell you. I am no farmer, though I own a farm, and a somewhat famous one in this county. Perhaps it is to this circumstance that I owe the honor of being invited to address you to-day—for I cannot tell to what else I owe it. It is true that I succeed every year in raising a few strawberries and Lima beans, a few grapes and pears ; but when I think of Dr. Loring's farm, at Salem, and Marshall P. Wilder's fruit-trees, in Dorchester, I feel ashamed to speak to such a company as this. I am rather ashamed of myself for not knowing more about farming, for I lived, when a boy, on a farm in Newton, belonging to Dr. Freeman, who was very curious in the matter of early vegetables ; and who may be said to have introduced the tomato into New England ; whose sweet corn enjoyed a certain local celebrity ; and who published, in 1805, in the magazine of the Agricultural Society, an account of experiments, showing the importance of selecting the first ripe seeds, by which he shortened the time of ripening the caseknife bean from one hundred and twelve days to eighty-five, making it come one month earlier—an experiment still sometimes referred to.

I am the owner of Brook Farm—and though I have never personally cultivated it, and have never gathered from it anything but a tax bill, some hay, and an occasional crop of metaphors for my

sermon ; yet I feel proud of belonging to a farm which has produced at least two remarkable crops—the Associationists and the Second Massachusetts Regiment. I believe that the Brook Farm Association were not remarkable for their vegetables, but they themselves were certainly a remarkable crop of men. One of them, Mr. Ripley, has been one of the editors of a great New York paper ; another, Mr. Dana, has been Assistant Secretary of War during the last four years ; another, Mr. Geo. William Curtis, is well known as a distinguished writer, orator and politician ; and another, Mr. Hawthorn, has taken the first rank among American novelists.

And then, early in 1861, the Second Massachusetts Regiment was recruited and drilled on Brook Farm, under Colonel Gordon, now General Gordon. What a record has theirs been ! It has seen long marches, disastrous retreats, great defeats, and great victories. It has been through so many battles that every private in the ranks has seen more of war than the Field Marshals of Europe. We used to speak of a regiment being “decimated,” to express a great loss ; but what word shall we invent to express the sacrifice of life in regiments which, like the Second and Twentieth Massachusetts, instead of losing one in ten, lose eight or nine. Wherever the Second Massachusetts went, whether in Banks’s retreat, the Peninsula campaign, the battle of Gettysburg, or on Sherman’s march through Georgia, it was one of the regiments which, on account of its perfect discipline and unflinching courage, always had the post of danger and honor. General Slocum, to whose army corps it was long attached, said to a friend of mine, that when he wanted to strike a blow he always had to take the Second Massachusetts “for the edge of his axe.”

But to come from this digression to the business before us. This is a meeting of farmers, their wives, daughters and sons, who come together in harvest time, to compare notes about farming, and to show each other specimens of their work during the year. It is a meeting of neighbors, who bring their biggest apples and longest ears of corn, and talk together about the best kind of plows and phosphates. It is a good thing, especially for farmers, to meet in this way. Farming, with all its advantages, has this danger, that it tends to routine and the want of enterprise. A man

finds so much to do from morning till night on his own land, that he has not time nor strength to do much more than his own work. When his work is through he goes to bed and sleeps the sleep of the just. Reading books and magazines about Agriculture is not enough. He must see the results with his own eyes in order to be convinced. Experiments which he reads about, tried in a different part of the State, do not suit his land. The phosphates and guanoes which the books advise him to buy, he gets cheated in. But at these fairs he meets his neighbors, who show him what they have done and how they did it—he follows their example and succeeds. I remember when I was a boy, that the town of Newton, where I lived, was full of old-fashioned farmers, who lived a half-starved life, they and their farms growing poorer every year. They did not believe in theory—not they. The old way was good enough for them. Their cattle could hardly bear their own weight—their plows skimmed the top of the ground—the wet land was not drained. But a young farmer came to the town, married the daughter of one of the citizens, and persuaded his father-in-law to lay out a large sum of money in improved implements and manures. The neighbors said the old man was crazy and would ruin himself. But the more he laid out the more money he made. He and his land grew rich together. The neighbors began to follow his example; and when I went back, ten years after, I did not know the town, for all the old yellow, mossy pastures had turned into rich, green fields.

Let a farmer only keep his eyes and ears open, talk with his neighbors, read agricultural papers, come to these fairs, and cultivate his mind, and what life can be happier, more innocent, more useful than his. He is always in contact with Nature, and there is something in her touch which pacifies and purifies the heart. I recollect that a man of quick, passionate temper once told me how much he enjoyed taking care of plants—“for,” said he with a sigh, “they never quarrel with me, nor I with them.” What a blessing for little children to be brought up in the country, where they make an early acquaintance with the wild flowers in the fields, pick the berries by the wayside as they go to school, learn to know the different trees in the wood, learn to swim in the pond or river; and instead of oaths and dirty streets, hear

the wind among the pines and see the glories of morn and evening. All nature is friendly to the child. The brook is his play-fellow, and he spends hours by its side, paddling in its water or sailing his little boat on its rippled surface. The great elm in the field bends down its mighty, benevolent arms to protect him—the old elm, whose flickering shadows have fallen for a hundred years on the venerable head of the old grandfather in his chair, and the grandchildren rolling in the grass at his feet. These little children may one day leave the ancestral home and wander far away; but, on the distant prairies of the West, on the coast of California, in foreign cities, or amid the thunders of battle; visions of the old farm will come to them, of the old elm with its floating branches, the old oaken bucket which hung in the well, and which they drew up in the hot day dripping with its icy luxury,—and these images will soothe and strengthen the heart in the midst of temptation or peril.

For calm and patient, Nature keeps
 Her ancient promise well,
 Though o'er her bloom and greenness sweep
 The battle-breath of Hell.

And still she walks in golden bowers
 Through harvest-happy farms,
 And still she wears her fruits and flowers
 Like jewels on her arms.

Still in the cannon's pause we hear
 Her sweet thanksgiving psalm;
 Too near to God for doubt or fear
 She shares the eternal calm.

The farmer has all these beauties of Nature around him, to make a genuine home for himself and children. The song says, "There's no place like Home." John Howard Payne once told me that he owed his escape from the hands of some Georgia banditti to that song. As they were dragging him along, one of them began to hum this song; and Payne said, "Do you know who wrote that song?" The man said, "Yes; John Howard Payne wrote it." Then Payne took out one of his cards and handed it to the man, who stared as if he saw a ghost, and called

out, "Hallo, fellows! here's the man that wrote 'There's no place like Home.'" But it seems to me there is *no home*, in the full sense of the word, except in the country. What comfort in your tall four-story houses, where people scēm living on a ladder, compared with a low-studded, old-fashioned, rambling farm-house. What are Brussels carpets to that great carpet, a thousand miles long, which God has spread over meadow and hill, for every creature to walk on,—which mends its holes itself; which does not need to be swept, since it absorbs the dust and turns it into carpet too,—an edible carpet for cattle to eat; which the sun does not fade, nor grease soil; whose figures are living flowers, in patterns invented by the angels. And what are the pictures on the walls of city houses, compared with the pictures we see through our windows in the country? not poor copies of a landscape, but the landscape itself,—a movable picture, with drifting clouds and waving trees; a picture changing its tone and colors every hour, and every month,—touched by the pencil of God with rosy tints of morning, and gorgeous hues of sunset, changing from green to gold and scarlet in October, and putting on its bridal dress of snowy white in winter.

The farmer's education comes to him in a very natural way. His work opens to him many spheres of knowledge. If he only is wide-awake, he is led to study almost every science. His cattle lead him to study Animal Physiology, and the laws of race. The weather calls on him to become acquainted with Meteorology, with the laws of storms, heat and cold, &c. To do justice to the question of manures, he must have something of Chemistry. To get the best farming implements, it is good to be acquainted with Mechanics. And when he comes to decide what crops to raise, and how to sell them, then he must not only understand the laws of trade and business, but he comes in contact with Political Economy. All these sciences are connected with his occupation, and lie grouped around it. So that a farmer can hardly help gaining knowledge and improving his mind, year by year, if he is only willing to learn what belongs to his own business.

Then what wonders and mysteries are around him every day! Take, for instance, the subject of Seeds. The farmer has a great deal to do with seeds, and, on the whole, there is nothing more

wonderful than a seed. Among the grasses which waved in the sunny valleys where the children of Adam roamed, some produced little seeds, which were parched, ground and eaten. Thereupon, these grasses were promoted to be the commissaries and providers for the human race. Men have lived on these seeds for six thousand years, and all the races of men are pledged to see that whatever else may be lost by drought or insect, these grasses shall always be preserved; and as long as the world lasts, they will last. We call these seeds, wheat, barley, rye, oats, rice, maize, chocolate, coffee, peas and beans. Go to Illinois, and you will see great prairies, a hundred miles long, rolling into great waves of wheat, like the ocean; then, in harvest, come the reaping machines, and sail like ships across these fields, and then long trains of cars carry the wheat to Chicago, where it is poured into immense warehouses, where the steam elevators pump it up to the top, from which it rushes down through a trough into vessels, which carry it to all parts of the world. Twenty-five millions of bushels of grain go from this one market of Chicago every year,—25,000,000 of bushels of seeds.

Then consider Nature's contrivances for scattering her seeds, so that they shall go to a distance. Some have wings, and fly through the air; some sail on the water; some have hooks and crawl along the ground; some have burrs, and stick to the sheep and cattle who go by; some have stalks which become elastic when the seed is ripe, and spring back when pushed aside, and so shoot out the seeds as from a bow. And, finally, some are surrounded with delicious fruit, so that they may be carried to a distance for the sake of that. When you eat a peach or pear, you may consider it the price which Nature pays her expresses for bringing the seeds or stone where she wants them to go.

Then *the farmer* may observe how the seed is packed up, to be kept through the winter; so nicely packed, that no cold, no wet, no air, no light can reach it; packed so well, that seeds of wheat from an Egyptian mummy 3000 years old, have germinated when planted; and seeds of a raspberry taken from the stomach of a man buried in the time of the Emperor Adrian, have also grown up and borne fruit. So the seeds are packed, and so the buds on the branches, till the Spring comes and touches them with its

warm fingers, and then they peep out of their winter coverings, and say, "It is Spring, let us come out and look about us."

The intelligent farmer sees God in Nature. He walks every day in God's great Temple, compared with which Royal Solomon's stupendous fane was a mere hovel. Every thing in Nature is full of charming religious lessons to those who take pains to learn how to read her book. Look at that great tree in the midst of the meadow, and the cattle ruminating in its shadow. Just think how much God has done in making that shadow. We put up an awning, a tent, a blind, a curtain, to keep out the sun; but what are these to the shadow of a tree! No art of man can rival that. The flickering leaves let every breath of air pass through, but keep out the sun. They let in a green, soft light, but keep out the heat. They do not become heated themselves, like a roof or tent, but absorb in their succulent texture and living surface the hottest of rays, keeping always cool. They even let little golden threads of sunlight pass through, emptied of all their heat in the process; and they open and close, giving visions of the blue deep sky, and the white snowy cloud masses travelling across the depths of heaven. Thus it happens that a *shadow*,—that is, something which is nothing, the negation of light,—becomes by God's wisdom the medium of comfort and emblem of peace.

If "the undevout astronomer is mad," the undevout farmer is at least stupid. If the one ought to go to Worcester, the other should be sent to Dr. Howe, at South Boston, to be put either into his Idiot Asylum or his Blind Asylum. There was a hunter in Plymouth who had killed over 150 deer with the same rifle, who died this summer. Last year in the drought, there was talk of holding a prayer meeting in the woods, to pray for rain. One of those bar-room philosophers who do not think there is any thing in heaven or earth not dreamt of in their philosophy, and so are wiser than Shakspeare,—said, "All the prayer meetings in the world would not make it rain, if the time had not come according to the laws of nature." The hunter looked at him and said, "Perhaps down here in Plymouth town, you can do without God. I don't know. But I tell you, up in the woods, a man would feel mighty lonesome, if he could not talk with God about things." So I think the farmer on his fields must feel mighty lonesome, if

he does not see God bringing the great clouds above him, the watering pots of heaven, to empty on his parched fields,—God, in the Spring, unbinding the sod, stirring the seeds and buds with pulsations of life, blind movements of the year. The farmer may not be religious according to this, or that creed, and yet be very religious if he feels the Providence in every thing; and then he will say,

All as God wills, who wisely heeds
To give or to withhold,
And knoweth more of all my needs
Than all my prayers have told.

The farm and farmer's life, next of all go to make *character*. The lonely, steady work of the farm gives prudence, perseverance, self-denial, self-reliance, and all the manly virtues. City life, with its talk, and bustle, and noise, makes us superficially smart and bright, quick and ready. The farmer's boy, slow in his mental movements, coarse in his dress, and clumsy in his muscles, may perhaps envy his city brother, who comes to spend a week in the summer, in the country, and who is so well dressed and so knowing that he captivates the hearts of the village belles. Nevertheless, it is from the country boys, and not the city boys, that come our great merchants, lawyers, statesmen, generals; our Jacksons, Clays, and Lincolns. When Abraham Lincoln was clearing his father's farm in Indiana, he was getting that strong, rugged, manly intellect, that faithful, quiet, unpretending force of character that has made his enemies honor him, the whole land love him, and even an English poet say—

“ We, also, have been with him all the while,
We knew his worth and honor long ago;
Rejoice, that, in the compass of our isle
There is no room at last for Lincoln's foe.”

Yes—when Nature made Abraham Lincoln, she made him carefully, and built up his character on a farm, in a log-cabin.

“ For him, her old world mould aside she threw—
And choosing sweet clay from the breast of the unexhausted West,
With stuff untainted, shaped a hero new,
Wise, steadfast in the strength of God, and true.”

And now, in this great war which has just come to a glorious close, whence came the strength and power to carry it on? I will do all justice to the brave and noble boys who went from our schools and colleges, from the bar and counting-room—*they* also were manly, heroic, and true as steel. But the great multitude of the army of the North came from the farm—came from among the lonely forests of Maine; the green hills of Vermont; the rugged fields of Massachusetts; the wide-sweeping valleys of the Susquehannah and Tennessee; the great fields of Ohio and Indiana; the prairies of Michigan, Illinois, Minnesota. The farmers sent out their sons to save the country. The farmers' boys beat the plowshare into a sabre, and for the hoe took the rifle, till the land should be safe, and the flag of Freedom and Union float again from Richmond to Texas. The 6th Massachusetts from the farms of Middlesex County led the way, and stained with their blood the streets of Baltimore, saving the capitol of the country. When Sumter fell and the telegram came to Boston, calling for soldiers, Gov. Andrew sent to the farms of central Massachusetts. Then was seen something unparalleled in history. Sumter surrendered on Sunday, the 14th; and on the 15th, at Washington, Monday morning, the order was issued calling 75,000 men. The same afternoon, the order went from Boston State House to the country. All that night men rode to and fro, collecting the soldiers, and on Tuesday morning they were on Boston Common, on their way to Washington. The farms of the country have produced that persistent force of character which has saved the nation. The farms, schools and churches of the North—these three. It needed all to do it. It needed the force and manliness which the farm gives—the intelligence which the school gives—and the direction of that intelligence, according to conscience, which Christianity gives. These three have saved the country.

So the farmers' boys went out with the city boys, and they did such a piece of farming as the world never saw done before. They plowed the ground all the way through Georgia and Carolina, under Farmer Sherman—plowed a field fifty miles wide, turning under the old soil of slavery, turning up the sods for the planting of freedom. Meantime Farmer Grant plowed his way through Virginia, doing also a little *harrowing* to the feelings of

the first families of Virginia at seeing their sacred soil thus cultivated by Yankee laborers. Then Farmer Lincoln, at Washington, determined that Uncle Sam's great farm needed a change of crops; and determined to introduce the modern system of rotation. "The South," said he, "has produced a crop of slaves till it is worn out; it is time to give it another crop, of freemen." And now the Yankees have gone down to try new fertilizers on that exhausted soil; they are teaching the South an agricultural chemistry they never heard of before—planting freedom and enriching the soil with Yankee schools. We think we shall get a good crop of loyal minds and hearts by-and-by. We have four million colored people there, who are loyal; who love the Union which has freed them; who have shown themselves patient, orderly and brave; who have fought in our armies; who have died for the country which had neglected them all these years. These four million men are to be made into loyal voters, to help keep the Union and freedom safe, which has been rescued by all the sacred blood and costly treasure. Unless we are more foolish than the cattle in our fields, we shall make use of this loyal element to save the nation. I do not think that having conquered the rebels, we are going now to give them back the power to destroy the country. They must be held, yet longer, by military power, till the foundations of Union and Freedom have been so firmly laid that they are safe. The colored freedmen of the South must vote. I do not care what the prejudices against color are, the logic of events will overcome them. For if the colored people do not vote, then these things follow:—First, that every white rebel in the slave States has as much political power as two or three loyal white men in the old free States, and there is no equality. Second, we shall do the mean and absurd thing of letting the rebel soldiers vote, and the Union soldiers not vote. Third, we shall put a power in Congress which will try its best to repudiate the national debt. Fourth, we shall bring on insurrection, civil war and massacre at the South. The blacks must protect themselves, either by ballots or bullets—give them ballots and they will not need bullets. The freedmen are often armed, they know their rights, they will not allow themselves to be trampled down again; and if we do not give them suffrage, we

shall have St. Domingo over again. What were the horrors of St. Domingo, and what did they come from? They consisted in a war of races, brought about, first, by the whites refusing citizenship to the free colored people of St. Domingo; second, trying to re-enslave the blacks after they had been free. If we do not insist, in the next Congress, on the clause of the Constitution guaranteeing Republican Institutions to the States, and insist that Republican Institutions require that no class shall be excluded from suffrage on account of race or color, we shall probably see torrents of blood in the South, and the colored people at last becoming masters of the Gulf States; and yet I do not think we shall be so foolish. It takes us a long time to learn to be just, but we shall learn it by-and-by.

Farmers of Massachusetts! we have reason to be proud of what Massachusetts has done in this war. The Old Bay State has vindicated her honor. Nevermore shall any one speak of leaving *her* out in the cold. And let us also thank the good God, whose Providence alone has carried us through this awful struggle, that Massachusetts, in her hour of trial, had at her head a man so sagacious; so honest, so simple, with so much brain, and so much heart—a man who never thinks of how a thing is to affect his own personal interests, but only how it is to affect the public interests—who never hesitates, acts at once, acts openly, acts bravely—whose temper is perfect, who cannot be made angry except when the rights of others are infringed—a man whom I have known intimately for nearly twenty-five years, and have never yet known him otherwise than wise, true, generous and pure. His doubtful acts, when the time comes to explain them, will be fully vindicated, and history will say, that no man ever sat in the executive chair of Massachusetts, who has shown more heart, conscience, judgment and character, than John Albion Andrew.

And, in closing these remarks, imperfect and inadequate as I know them to be, I would borrow from the magnificent Ode of Lowell, delivered at the commemoration of dead heroes, at Cambridge, the lines in which he describes the power and majesty of our country in this its solemn hour of victory over rebellion and treason. If any of you have not seen these lines before, you

will thank me for calling your attention to the poem, which to me seems the noblest and loftiest of the present time :

Not in anger, not in pride,
 Pure from passion's mixture rude
 Ever to base earth allied.
 But with far-heard gratitude,
 Still with heart and voice renewed,
 To heroes living and dear martyrs dead,
 The strain should close that consecrates our brave.
 Lift the heart and lift the head !
 Lofty be its mood and grave.

Boom, cannon, boom to all the winds and waves !
 Clash out, glad bells, from every rocking steeple !
 Banners, advance with triumph, bend your staves !
 And from every mountain peak
 Let beacon-fire to answering beacon speak,
 Katahdin tell Monadnock, Whiteface he,
 And so leap on in light from sea to sea,
 Till the glad news be sent
 Across a kindling continent,
 Making earth feel more firm and air breathe braver :—
 “ Be proud ! for she is saved, and all have helped to save her !
 She that lifts up the manhood of the poor,
 She of the open soul and open door,
 With room about her hearth for all mankind !
 The helm from her bold front she doth unbind,
 Sends all her handmaid armics back to spin,
 And bids her navies hold their thunders in :
 No challenge sends she to the elder world,
 That looked askance and hated ; a light scorn
 Plays on her mouth, as round her mighty knees
 She calls her children back, and waits the morn
 Of nobler day, enthroned between her subject seas.”

Bow down, dear Land, for thou hast found release !
 Thy God, in these distempered days,
 Hath taught thee the sure wisdom of His ways,
 And through thine enemies hath wrought thy peace !
 Bow down in prayer and praise !
 O Beautiful ! my Country ! ours once more !
 Smoothing thy gold of war dishevelled hair
 O'er such sweet brows as never other wore,

And letting thy set lips,
Freed from wrath's pale eclipse,
The rosy edges of their smile lay bare,
What words divine of lover or of poet
Could tell our love and make thee know it,
Among the Nations bright beyond compare?
What were our lives without thee?
What all our lives to save thee?
We reckon not what we gave thee;
We will not dare to doubt thee,
But ask whatever else, and we will dare!

REPORT OF THE PRESIDENT AND SECRETARY.

TO THE SECRETARY OF THE STATE BOARD OF AGRICULTURE :

SIR,—We herewith submit the following Report of the Transactions of the NORFOLK AGRICULTURAL SOCIETY for the year 1865.

The operations of the Society for the year were attended with gratifying success. Although some crops were seriously affected by the protracted drought, yet, on the whole, the season was highly favorable to the interests of the farmers of the county.

The Annual Exhibition was very successful, the receipts being larger, by several hundred dollars, than on any previous year.

For a more specific statement of the operations of the Society for the past year, we refer to the Report of the Supervisory Committee, which, together with the Reports of the several Committees of the Society, is herewith subjoined.

MARSHALL P. WILDER, *President.*

HENRY O. HILDRETH, *Recording Secretary.*

REPORT OF THE SUPERVISORY COMMITTEE.

It will be remembered that, at the last Annual Meeting, when the appointment of this Committee was made, it was suggested that it would be useful for us to visit certain towns where agricultural improvements were progressing, and more than ordinary interest and zeal in good husbandry were manifest. We, accordingly, addressed circulars to the Trustees in several towns, advising them of our readiness to comply with any invitation extended to us, and requesting that, if it were deemed expedient, they would select certain farms for our inspection, and inform us of the time when our presence would be most convenient and desirable. We, also, enclosed a series of questions, answers to some, at least, of which would be exceedingly desirable, to enable us to judge more accurately of the condition of any farm we might visit, and to place before the Society more useful information respecting any methods and results of successful farming in various parts of the county. We have to say, with regret, that no replies to these circulars were received, and that only two applications were made to the Committee, after a general call upon the Society, through one of the county newspapers. Our report, therefore, respecting the inspection of particular farms, and observation of any special methods and results of farming in the county, will be very brief.

Before proceeding to the main purpose in hand, we would express our apprehension that the appointment of so numerous a Committee is, in many cases, a hindrance to the accomplishment of the object in view. The attendance of the whole Board may not be expected at any given time or place. Yet, the fact that they are to be notified of every meeting, and may, if they choose, attend, may deter some farmers from soliciting the service of the Committee, on account of the inconvenience of providing for so large a number of visitors. There may be instances where the attendance of a large number of gentlemen interested in agricultural pursuits, may be particularly desirable to the person whose farm is to be viewed. There may be an advantage in having a multitude of counsellors, when advice is sought for in respect to any contemplated improvement, or in determining the utility of any particular method of cultivation. Greater benefit may result from the discussion of some agricultural topics, if a public meeting were to be held, for the purpose, in conjunction with the visits of the Committee. But, if the main object be to obtain a report of the present condition of agriculture in the county, of improvements made by individual farmers, or of the special methods and

results of their cultivation, then we conceive that a much smaller number of persons would be sufficient. Invitations to visit and inspect farms in various parts of the county would be more freely given and promptly complied with. If, for special reasons, the presence of a large number of visitors is desired, the selection of individuals to accompany the Committee may be most properly left to the person whose farm is to be viewed, or to the Committee themselves. We recommend, therefore, that the number of this Committee be hereafter reduced and limited.

Much good might result, we conceive, from the practice of holding a public meeting, after the Committee have viewed any farms in the place, for discussion of prominent points in their observations, or of topics suggested by the desire of information on the part of any farmers present. We recommend the adoption of such a practice in conjunction with the future visits of the Committee, whenever practicable. In places where farmers' clubs already exist, it would be easy to carry out the plan, and thus to render the services of the Committee more widely useful.

The novelty and proximity of other Agricultural Societies, recently organized upon our borders, present attractions, which threaten to diminish our strength and the interest hitherto manifested in our Annual Exhibitions. The times have given birth to an increasing spirit of emulation and progress in agricultural improvement, which forcibly suggests the importance of revived and enlarged activity amongst ourselves. We do not transcend the duties of our office, therefore, if we urge upon the Society the adoption of every suitable measure for the preservation of its strength and advancement of its interests. The zeal in the cause, apparent in any given town, may serve to awaken a kindred spirit in other towns. The life and vigor of a neighboring society, exhibited in its endeavors after improvement, may naturally provoke like endeavors in other societies, in order to diminish or do away the contrast now apparent between them. Every newly organized society naturally invites attention from abroad. It is the part of wisdom, then, in one of longer existence and of good reputation, to beware lest it be outstripped in the race, by more zealous and active spirits.

A larger division of labor, by the introduction and use of new processes of cultivation, the results of which have elsewhere proved satisfactory; or the breeding of any particular class of animals not very common here, which have elsewhere acquired an established reputation; or undivided attention to some specialty, in any department of culture, may do much to advance the prosperity of individuals, whilst it creates fresh interest in, and gives higher reputation to the society, of which they are members. The inquiry may not be without use, whether the mixed system

of farming so general in this Society, might not well give place, in many instances, to some specialty, some one or two branches of farm labor, to which chief or entire attention should be devoted. Such a change would seem to be commended and sustained by facts in the experience of others. The culture of tobacco and broom-corn, in the valley of the Connecticut; the dairy products in Worcester County; the sheep-husbandry in various parts of New England; the cheese-factories, and milk-condensing establishments in New York, and elsewhere; and the remarkable examples of fruit-culture—of the pear, the grape, the cranberry—within our own territory, afford abundant proof of the advantage to be gained by specific, in distinction from general or mixed farming, where attention is divided between many different objects, and the farmer's labor is scattered over a wide surface.

Let each farmer ascertain to what sort of produce his soil is best adapted, and resolve to devote himself mainly to that one thing. Let it be some variety of fruit, vegetable, or grain; the sheep-husbandry, or the dairy. Would he not be likely to arrive at a more intelligent and successful mode of obtaining that product, giving it a higher value, and to himself a wider reputation and better returns for his capital and labor? Suppose that any considerable number of the members of this Society were to pursue this course, would not the probable result be to enlarge their own income, and to win increased attendance at our Annual Exhibitions, where the superiority of their products might be seen?

It is a very common remark, that our farmers attempt the cultivation of too many acres, and, therefore, cultivate the whole but imperfectly. Do they not attempt the cultivation of too many things at once; and, therefore, reap smaller and less valuable crops of each? Let the farmer's range of information be as extensive as possible, but let his practical thought and labor be concentrated upon a few, specific objects. Nor is the danger great that these objects will be the same in too many cases. The different varieties of soil; the advantage of proximity to a good market; the facility of obtaining proper manures; the habits and tastes of cultivators, and other circumstances, would practically obviate this danger. A. might find his soil adapted to the growth of a certain sort of vegetables—it may be the potato. Let him, then, cultivate the potato; of which there is little likelihood of any growth, of superior excellence, beyond the demand. He might procure certain varieties of it, and, by experiment, arrive at such a method of culture as to enhance the value of the product, and enlarge the crop to an extent beyond his highest expectations. B., though he occupy premises in near proximity, might find his soil best adapted to fruit growing, to grain, or to grass. Or, if he have a similar soil, may be led, by his own taste and habits, or by

other circumstances, into some different specialty, and, by applying his skill and labor mainly to that, may arrive at similar results.

We hear of the surprising excellence of certain agricultural exhibitions abroad—of their pre-eminence in various classes of animals, or in different sorts of vegetable or cereal products. And we attribute this superiority to the more minute division of the objects of pursuit, and the close attention bestowed upon some specific branch of culture. With like limited pursuits, and like concentration of skill and labor, on the part of its members, we do not see why the exhibitions of this Society might not acquire equal distinction, and, with reason, attract equal attention from abroad.

Unity of purpose and harmony of feeling are essential to the prosperity of any association, and to none more than our own. The varying demands of the times, the different dispositions and habits of the community, under different circumstances, will require occasional changes in the mode of conducting agricultural exhibitions. They cannot now be regarded solely as opportunities for the instruction of the community in the best management of a farm, and best methods of cultivation. They are the farmer's gala days. They are among the few best holidays in our usages, for the recreation of large classes of the people. Some provision, therefore, for the amusement of the people, may very reasonably be made. And, while nothing is allowable or admitted, which will necessarily tend to injure public morals, or to endanger the reputation and general prosperity of the Society, individual opinion should yield to the general feeling; personal distaste or dislike to the common good. Whatever plan is adopted with good intent, and after deliberate consideration, by the major part of the Society, or their agents, ought to be upheld and carried out heartily by the whole.

The exhibition and trial of horses, famed and valued for their speed, which has become an almost universal practice in our own and other States, is objected to by many of the most candid judges and sincere well-wishers to our Society and to the cause of agricultural improvement. They regard it as a dangerous innovation upon the original purpose of agricultural exhibitions. They believe it attracts chief attention at these exhibitions, and prevents the due notice of other objects of much greater general importance. They fear that the practice is injurious to the public morals, and to the continuance and usefulness of agricultural societies. Horse racing, and the breeding and training of horses for that purpose, is something, they say, entirely aside from the legitimate object of these societies, and ought never to be encouraged by them.

We confess to a strong sympathy with this class of objectors.

And yet, when we look abroad, we cannot avoid seeing how public sentiment justifies the practice, and requires that more attention be given to the breeding and training of horses. The possession of a remarkably fleet and well-trained horse is not a necessity, and cannot be of use, to a farmer, about his farm. But, to other classes of men, it is often a matter of great importance. Nor do we know from what source, beyond our agricultural districts, as a general thing, the demand for such animals can find its supply. The exhibition and trial of the best horses at our fairs, tend to encourage the breeding and training of such animals; which, it must be admitted, is a perfectly legitimate and often an exceedingly remunerative part of a farmer's business. If injury result to the public morals, it does not come of necessity, but only as injury results from other exhibitions and practices, innocent in themselves, perverted to immoral ends by base and immoral men. And this is an evil which will best be prevented by the united and determined efforts of better men to control and regulate these exhibitions, and to raise them to a higher standard of utility and propriety. If this is insufficient; if the exhibition and trial of horses cannot be controlled, so as to be justified by their propriety and utility, then, though ever so strongly countenanced and upheld by popular sentiment, and however much the practice tends to enlarge our annual receipts, let it be abolished. But whatever course is adopted, after mature consideration, let it be carried out with unanimity of feeling, if not with unity of opinion; and let it be the care of all, that no injury to the public morals, and no dishonor to the Society result from the continuance of the practice, if that be agreed upon.

To the exhibition of all horses which are of generally useful character, whether to the farmer, the trader, or the traveller, and to the fairest and fullest display of their qualities, there can be no objection. Indeed there are the strongest reasons for desiring it. Any thing beyond this may readily be separated from the general object of the show, by the appointment of an additional day for it.

Much discouragement and ill success amongst farmers, at this time, may be traced, we apprehend, to the striking change going on in the character and the cost of farm labor; a change affecting our own section of the country more perhaps than any other. We know that it is matter of pride and rejoicing with some persons, that the earnings of the laborer are so largely increased; that, as it has been stated, the earnings of a single laborer in this Commonwealth are equal to those of five men in one of the Southern States. Did the products of that single man's labor bear any thing like a similar proportion, or were the personal improvement and well-being of the man and his family increased in like mea-

sure, the feeling of pride and joy at the fact might very properly become universal.

We think it safe to say that the average increase of farm laborers' wages, within the last fifteen or twenty years, has been at least one hundred per cent. ; with no small diminution of the hours of labor, and little, if any, general increase of farm products. And the question presses heavily upon many farmers—causing, in some cases, the abandonment of their farms,—“ How can this change be borne by those whose income is to be derived entirely from the soil ?” In the vicinity of large markets, where supplies for them are mainly produced, the hardship complained of may not be felt. But, in remoter rural districts, it is obviously a very different matter ; and all the worse, because in those districts the price of labor and the hours of employment are graduated by the general practice in these more fortunate localities. It is said, on the other hand, that the cost of the laborer's living is greatly increased, and that the value of the products of his labor is, in many cases, doubled. We admit that the cost of living is very much greater to the employed as well as the employer. But this increase is, in most cases, to be met by the farmer himself who must board the laborer. And we have yet to learn that the prices of farm products in general bear any proportion to the advancement in the cost of living and labor. It should be remembered, too, that the laborer seldom, if ever, has any large tax to pay ; while the farmer is taxed, for real and personal estate, in many cases, six or eight hundred per cent. more than he was taxed twenty years ago.

This aspect of the heavy pressure upon many farmers renders the subject worthy of consideration by agricultural societies, if haply, some remedy or alleviation of the evil may be found. We shall not pretend to propose any remedy or alleviation, but deem it proper to offer these suggestions, in order that other minds may be induced to give the subject attention ; and with the hope that they may devise some plan by which the employer and employed will be placed in more equitable relations, and the disheartening circumstances under which many, if not most farmers are now laboring, may be removed.

The question, whether the time of a day's labor shall be reduced by law to eight hours, is now before the public, and elicits ardent support from many among the laboring classes. One of the arguments in favor of this reduction, which we have seen reported, is, that on the establishment of the present system of ten hours as a day's labor, the wages of labor were raised twenty per cent. ; and that a reduction of two hours now must necessarily be attended with a like proportionate increase of wages.

Are hired laborers upon the farm overworked now, or any

more so than their employers, who must work more hours, and diligently, too, in order to procure the means of paying their wages? And can any farmer in the county, in ordinary circumstances, support an additional increase of wages with a further reduction also of the hours of labor? We cannot but regard the very agitation of this question as productive of injury both to the farmer and farm-laborer. One of the evils likely to result from the change, if it be made, is foreshown in the fact, that, even under the present system, the farmer does not have the full benefit of the laborers' ability, at any wages, unless the laborer reside with the farmer. For, as it has been said, the laborer will work for hours at home, before he begins his labor abroad, and then often give to his employer the remnant only of jaded powers and half exhausted strength, for his daily wages.

Another consequence of the change must necessarily be the use of mechanical labor to such an extent as to do away, in a great measure, with any necessity for manual labor, or the abandonment of their occupation by many farmers.

We proceed now to speak of farms which have been visited by a portion of the Committee.

Our first visit was on the 21st of August, to the farm cultivated by Mr. A. W. Cheever, of West Wrentham. This farm, in the name and under the management of Mr. Cheever's father, had received the Society's premium in 1859. It has since been managed by himself, and is now entered for a premium in his own name.

We regard this as a perfectly legitimate entry. The interval which has elapsed since the former entry, and the change in the control and conducting of the farm render the present application a perfectly proper one.

Accordingly the farm was visited on two several occasions:— August 21st and October 12th. The operations begun by the father, of draining a very wet soil, parts of which could never be travelled over or cultivated, and the removal of huge, unsightly walls, laid up many years ago, rather as a means of disposing of vast quantities of stones, than to answer any purpose of necessity or utility as walls, had been continued by the son; and new operations of similar character had been begun and progressed in to a very considerable extent. The evident thoroughness and benefit of all these operations, and the good judgment and skill displayed in them, struck every observer. The luxuriant crops of grass appeared to be a sufficient return for all the labor and cost; and to this might be reasonably added, the comparative neatness and beauty of the place, resulting from the change. The smooth, even surface of grounds recently laid down, indicated more than

ordinary care in the work ; a fact of great importance in the management of a farm devoted mainly to grass, and to be mowed by use of a machine.

Passing into the barn, we discovered like evidence of good judgment and care in the keeping of stock, and in the method of enlarging and preserving manures. One of Mr. Cheever's special objects of attention is the dairy. This is conducted mainly by himself, and presents an exemplary instance of the purpose and desire to lighten the labor of females in one of the most arduous parts of domestic employment. Every thing in this dairy was in the right condition and promising the best results ; as might be inferred from the fact that Mr. Cheever has, for successive years, received the first premium of the Society for good butter ; and that the price for which his butter has been sold, during the whole year, is much above the average of the market.

Mr. Cheever has never yet made it an object to obtain only pure-blooded or highly graded animals, of any particular breed. His usual course has been to purchase, according to convenience, such animals as afforded good prospect of gain upon his system of feeding, without reference to their pedigree. He practices stall-feeding, mainly ; giving to his cows a mixture of fine feed and Indian meal—about four quarts daily to each—and through the period of green grass, an additional daily feed of hay. We are inclined to believe, that, with his system of feeding, he would obtain larger returns of milk and butter from better selected cows. The animals were, however, in high condition, and might easily be turned for beef at any time, and the manure produced by them is of the best quality. The whole management of this farm is upon well-considered calculations of economy and profit. Every young man, and many men of large experience, might learn here valuable lessons of economy and thrift, and of the benefit of careful and thorough management of a farm.

In view of what we have seen, and, upon mature consideration, are satisfied will afford ample justification of that decision, we unanimously award to Mr. Cheever the Society's first premium of twenty-five dollars.

On the 29th of August, at the invitation of its proprietor, we visited the farm of Edmund Clap, Esq., of Walpole. The special purpose of our visit was to observe the continuation and result of improvements, which had already been noticed in a former report. These improvements consist mainly of the draining and reclaiming a very large tract of what had been considered quite useless bog and swamp land. That portion of it which had been finished prior to our former report, and evidently in a most thorough and skilful manner, was now covered with a heavy bur-

den of rowen. Several lots had yielded, at the first mowing, a crop rated at three tons per acre.

We regard this operation as one of remarkable success ; yielding to its projector ample returns, and presenting an example of what might be effected, with equal courage and skill for the undertaking, upon many other farms. Of Mr. Clap's general management of his farm ; of the construction and admirable arrangement of his barn ; of the care bestowed upon his fine stock ; of the various labor-saving implements used, and of the general aspect of the whole establishment, we need only to add our testimony, in support of that expressed by our predecessors, in the report already alluded to. A new grape-house, on the premises, is one of the best we have ever seen, and is thought to be a model well worthy of imitation. In justice to a faithful and competent overseer, we feel bound to say that Mr. Clap has found such an one in his foreman—Mr. Robbins Richardson.

The past season has been unusually dry, and yet favorable in several respects. Early rains and a warm atmosphere gave rapid growth to all vegetation. A valuable and not stinted hay-crop was secured in the best condition. Corn has seldom ripened so well and seasonably, or been of so fine a quality. Specimens of excellent crops, fully ripened and harvested, one on the 22d day of August, and another on the 10th day of September, have been seen by one of our number. This, however, was in another county. Whether it has been equalled here, is not within our knowledge. Small grains were, in many cases, injured by the drought. Potatoes have been fine in quality and of an average quantity. Of other esculent plants and roots, the crop has been smaller than usual. Of fruit, in general, there has been an unusual scarcity.

This almost unexampled scarcity of fruit—which is probably to be attributed to atmospheric causes that cannot be guarded against nor overcome,—occasions anxiety to discover some means of protection from the ravages of the canker worm, whose progress is extending with ruinous effect through our orchards. Various means have been proposed, which were eagerly made use of, but without satisfactory or useful result. Many orchards seem to have been abandoned in despair ; and some pomologists consider all proposed efforts to remedy, or to guard against the evil, ineffectual. We have been informed, however, of the fact, that one of the best orchards, in the midst of a neighborhood ruinously afflicted by the canker worm, has been completely protected, by tarring the trees *every evening* during the activity of the worm. Even the manifest labor which this remedy would, in many cases, require, cannot be considered too much for the preservation of trees, which are so valuable, and now threatened with ruin.

Having escaped, in great measure, by the employment of active and energetic means, the danger of one form of contagious cattle disease, we are now exposed to another, which has proved equally or even more dangerous and destructive. There is but too much reason to fear that the cattle-plague, which is so rife and fatal in some parts of Europe, will be transmitted to our shores. We suggest, therefore, the expediency and necessity of immediate petitions to Congress for the absolute prohibition of any importation of foreign stock for the period of two years. The pure-blooded animals now in the country are amply sufficient, if properly husbanded, to supply any enlargement of the different breeds which can be desired. And no proper estimate of the evil that might result from the importation of a single diseased herd, can be, for a moment, set aside by any advantages possible to be derived from the possession of any foreign breed, though it were perfectly free from disease.

The utility of keeping only pure-blooded animals of different breeds at the several State Almshouses and other institutions of the State, has been ably set forth in one of our public journals. Similar reasons might be given for the advantage of having, in every town where a public farm is connected with the almshouse, pure-blooded animals, by which a pure or highly-graded stock might be spread through the surrounding farms. Benefit would accrue therefrom to the whole town, and the cost of the animals might, therefore, and with good reason, be a public one.

In conclusion, we cannot forbear to refer to the happy change in our national condition since our last report, and to the new and brighter prospects which are now spread before the people. Perhaps, by no portion of the community, as a class, had the hardships and sufferings of the war been felt more deeply, or borne with less repining, than by the farmers of Massachusetts. Moved by their own patriotic ardor, or in compliance with constitutional obligations to enter the public service; or, in other instances, lamenting the absence or the sacrifice of their sons in that service; oppressed by the accumulated burden of taxes; by the necessity for large reduction of the ordinary breadth of cultivation in their farms, on account of the scarcity and exorbitant price of labor; sharing with others the many anxieties and griefs, and frequent demands upon the best impulses of the heart, which events have made familiar to all; they have borne their full proportion of the public sufferings, and contributed in like manner to the public needs. But their sufferings have been borne with as little complaint; their charities have been contributed with as much cheerfulness; their patriotism has been displayed as unequivocally as can be said of any other class of men. And now

rejoicing heartily in the triumphant military success which has crowned our country with added glory and in the return of peace, with all its attendant and prospective advantages, they see before them new fields of enterprise, new openings for the employment of capital and labor. They feel, also, new claims upon their fidelity to their country, to liberty and to humanity. And by no portion of the people will these claims be more sacredly regarded or scrupulously and faithfully discharged.

For the Committee,

CHARLES C. SEWALL, *Chairman.*

STATEMENT OF A. W. CHEEVER.

GENTLEMEN:—In compliance with the rules of the Society and a request from your Chairman, I will endeavor to give you some account of my mode of management on the farm owned by Otis G. Cheever, and examined by you during the past summer, together with my reasons for adopting my present course.

The entire farm consists of about ninety acres, divided into wood and sprout land thirty-three acres, old pasture, growing up to wood, twenty-five acres, other pasture seven acres, mowing and tillage twenty-five acres. Formerly all the pasture was classed as improved land. I think it has really improved faster since adopting the "let alone" system, than it did when it was occasionally plowed, sowed with rye and re-seeded with the application of little or no manure, or by the still later practice of mowing the bushes every fall. It is now gradually coming up to pines, birches and other kinds of forest trees. By the old management it was worthless land, as it would not pay expenses. Now it is slowly, and without any expense, becoming valuable. One lot of three acres on which I rode horse to cultivate a field of potatoes twenty-five years ago, is now covered by a thick growth of white and pitch pines that are about thirty feet high and a foot through at the butt.

Most of the seven acres now used for pasture was formerly included in the mowing and tillage, and took its turn at being plowed, planted with corn and potatoes, and re-seeded to mowing. It has been my aim to have no more land under cultivation than what could be managed well, with the amount of capital at command.

The soil of the farm is not above the average in natural fertility, being rather cold and wet. The surface is made quite uneven by many gravelly knolls, some of them topped out by huge ledges of rock. Between the knolls the loam is deep, though, in many

places, it was too wet for cultivation previous to being drained. Its chiefest productions, for the last seventy years, have been piles of rocks and miles of stone walls; some idea of the amount of which can be formed by reference to a report of the farm published in the Society's Transactions for the year 1859.

In deciding what kind of farming the land was best adapted to, I took into consideration its situation in regard to markets, the character of the soil and the demands of the times. The character of the soil, its inclination and exposure, does not seem to favor orcharding. The constant cultivation required would subject its steep hill-sides to severe washings.

Nor do I believe Indian corn can be profitably raised in Norfolk County on land that is cold and heavy enough to be classed among the best grass lands. Nor are such lands the kind for successful sheep-husbandry. The grasses naturally growing on them are too sour for sheep, and, for the same reason, stock raising would not be profitable. It seems to me that the supply of cows and oxen for this part of the State, ought to come from those sections of the country where home markets are fewer, and where land is cheaper and better adapted to pasturing.

Having decided what not to do, I took up the one branch of farming left, namely, the dairy. But this business I could not carry on in the usual manner, for want of good pasture, and I am too far from a village to be able to sell my milk every day. So what shall I do but make butter, and that, too, principally on hay and grain, and green crops in their season, fed in the stall. The advantages will be, a chance to make a large amount of manure, with which to keep up the fertility of the soil, the saving of expense in keeping up fences, and, consequently, the less cost of working the cultivated fields. Then just as I was commencing in earnest to make this a dairy farm, the increased interest in sheep and wool draw off a large part of the capital from the dairy business, which, as a natural consequence, made a better market for those who remained in it.

But there are few questions that have but one side. Who is going to do all the work of making the butter from eight or ten cows every week? Farmers' wives, undoubtedly, work the hardest of any class in the community. They are expected to do the duties, not only of the dining-room and parlor, but also of the nursery, the kitchen, the wash-room and the chamber, and, too often, of the swill-room and pig sty. Is not that enough for one woman, without being obliged to take the care and responsibility, and do most of the work of a butter factory? Is it a wonder that where so much care and attention is required to make a perfect article of butter, that there is so little made in the country, when she on whom the labor devolves is already overloaded with

the other cares and labors demanded of a farmer's wife? If I decide to have a dairy farm, I must contrive so that it will not crowd too hard on the ordinary business of the kitchen. In order to accomplish this, I determined to fit myself for the business. This work, including tempering the cream, churning, washing, salting and working the butter, and preparing it for market, takes not less than a half day of my time each week, and is a much better arrangement than to hire a girl and board her principally to do that work. Besides, I believe butter making must eventually be done by men more than at present in all large dairies. It is too hard work for women, and ought to be done by men, and in some kind of a wholesale way, something as cheese making is now carried on. Then, and not till then, will the butter of the country be of a uniformly high character.

One great source of profit the butter manufacturer has, is in the skimmed milk. My custom has been to keep enough swine during the summer to use up all the milk, after it has been thickened by the addition of meal and mill feed or shorts. The result has been that my pork has been made at a cost of about one half what it would bring in market. This year, owing to the unusual difference between corn and pork, it will cost less than half.

In the winter, by going to a village about six miles distant, twice in the week, where most of my farm products are sold, I am able to dispose of my sweet skimmed milk at much more than it is worth for feeding swine.

As I buy all my grain, I endeavor to do so at such times and in such quantities as will be most advantageous. I believe it is as necessary for farmers to make their purchases at the right time, as for merchants, and to do so is a legitimate part of their business.

Potatoes are, at present, my only hoed crop. I plow as much sward land in the fall as I expect to be able to manure well in the following spring, first clearing the surface of rocks, by blasting or sinking. Have learned that sinking is often cheaper and better than blasting, where the land is loam or gravel, and the rocks not over three or four feet across, and mostly under ground. A man will often sink a rock in two hours, that would require two men and a team that length of time to remove with drills and powder. As soon as the potatoes are harvested, I draw on another coat of manure, and plow or work it in with a cultivator, then smooth off and sow grass seed if it is early in September. If later, leave it till spring, when, after once more working it over with cultivator, I sow grass seed only, as early as the ground will permit. In either case, I have taken two heavy crops of hay the first year. Sowed a piece this spring the fourth day of April, mowed the first crop the fifth of July, the second the last week of

August ; both crops were well headed out and considerably lodged, and were worth much more than a crop of oats or barley would have been, besides I think the land is seeded a great deal better than it would have been, if grain had been sowed in connection with it.

I have this year kept about eight cows. They are stabled every night, and, except in the best of the pasturing season, much of the day. They have full feedings of hay every morning and night, also, five or six quarts of grain each, every morning. In the season of it, green corn takes the place of hay, in part. Have this year grown over half an acre of very heavy corn fodder, planted in drills and worked out with Nourse's New Horse Hoe. The cows stand on a platform four feet and eight inches long, and directly behind there is a gutter in the floor twenty inches wide by six deep, into which sandy loam enough is thrown every day to absorb all the urine ; I have no further expense for composting. When the loam and droppings are together hauled down through the floor into the hog pens, it is in excellent condition to be drawn to the potato field, or to use as top dressing for grass.

I draw no more manure for top dressing in one day than I can well bush down the same day, before the lumps get dried and hard. I find the best time is immediately after cutting the grass. On land moist enough to be profitably treated in that way, the grass will at that time soon start up and cover the manure with the second crop. I commenced cutting lodged grass this year the last day of May, and finished mowing, with the machine, my first crop on twenty acres the last day of June. This early cutting makes my hay almost as good as rowen. On about ten acres I obtained a very good second crop, which was cut in August.

At the time I commenced the management of the farm, there were several jobs that had been started and left in an unfinished condition. One acre of pasture, thickly covered with fast rocks, and surrounded on three sides by half fallen old walls, the whole lot jutting out into the middle of the largest mowing field, has been brought under a reformatory process. The walls have been used to fill a mud hole in the meadow below, and the rocks have been blasted or sunk, the whole planted with potatoes and made ready for grass seed, after which it will become a part of the mowing and tillage of the farm. Eight or ten rods of an old, dilapidated wall have been sunk, as being the best way of getting rid of it. An old causeway, built of small stones, from one to three feet deep, and wide enough for two or three teams to pass abreast, which was commenced by my grandfather, and several times added to by my father, has this fall been buried several feet below where it was before. The meadow over which it was

made to cross, having been underdrained, it was no longer needed as a road. Now its place will be known no more; but, instead, will be seen straight rows of potatoes or winrows of hay in their season. An unfinished drain has been extended, a main open drain in the meadow has been filled with stones from the hills above, and covered over with mud taken from four or five feet below the surface. All these jobs seemed to need to be done in order to have a clear, unobstructed field to work in. If past generations could have known what style of farming was in the future, much of this labor might have been avoided.

I keep a farm journal, by which I can refer to the business of any day of the year. A cash book, in which are entered all the moneys received as income, or paid as expenses. Also a debt and credit account with each kind of stock, as cows, horses, swine and fowls. I find, by cash book, that I sold in one year, ending Nov. 18, 1865, of butter 1285 lbs., at a fraction over fifty cents per pound, or \$647.87; 2000 quarts of milk, mostly sweet skimmed, at an average of five cents, or \$114.20. During the same time sold about 220 bushels of potatoes for \$200.

Most of the labor is performed by my father and myself. Last summer I paid about \$60 for labor by the day. This year have paid for (110) one hundred and ten days work, about one hundred and ten dollars, exclusive of board. I have to take an account of stock on the first day of April of each year, so that I cannot give an exact account of this year's operations. The books showed an income last year ending April, 1865, of \$931.32, out of which was to be paid rent, or interest on capital, and the labor of myself and father and for work in the house. I have every reason to expect this year's balance will be more satisfactory, as the price of produce is about the same, while the grain I buy is not much more than half as high. If it is no better, I shall have to agree with Mr. Pinkham, of Chelmsford, that farming wont pay labor and interest both. If interest is reckoned, the labor must be thrown away, and if labor is reckoned, the interest on capital invested cannot be taken into account.

But however small may be the profit of farming compared with other branches of trade, I believe it will always be in proportion to the skill and intelligence brought to bear, and that the concentrating of manure and labor on a small quantity of good land will pay much better than the old system of skinning and gleaning from many acres of inferior quality.

A. W. CHEEVER.

Wrentham, Nov. 20, 1865.

REPORT ON ESSAYS.

The Committee on Essays have to regret that no more papers are submitted to them for examination. They believe that the object of the Society in printing an annual volume of Transactions, can in no better way be promoted, than by the publication of instructive and suggestive Essays upon subjects of interest and importance to the farmers of the county. They would urge upon members the care of preparing such articles, or of procuring them from others; and, as an inducement thereto, would recommend the offer of larger premiums for Essays than have hitherto been given.

The Essay on "Cheese Factories," presented by Mr. E. A. Samuels, is a well-prepared and useful paper, upon a subject of much interest to the farmers of Norfolk, and the Committee award him therefor the premium of ten dollars.

For the Committee,

CHARLES C. SEWALL, *Chairman.*

Medfield, Dec. 15, 1865.

CHEESE FACTORIES.

BY E. A. SAMUELS.

The establishment of cheese factories in this and other Northern States has already demonstrated to farmers and others interested in the productions of the dairy that the factory system yields, taking every thing into consideration, the largest possible pecuniary returns to the producer; and as the subject attracts greater attention, and the working of the system becomes better understood, its introduction is being agitated in various localities, and the establishment of several new factories in this State may reasonably be anticipated during the coming year.

The matter is of sufficient importance to receive the attention of the farmers of Norfolk county, who, possessing not the best grazing lands in the State, and depending on their dairy products for meeting a great portion of the current expenses of the year, have, nevertheless, generally allowed them to pass from their hands without receiving for them nearly their true value. The loss, in many cases, has been very considerable; and it is to demonstrate this as much as to give a brief description of the factory system as it now exists, that this paper has been prepared.

Let us, in the first place, approximately ascertain the amount of milk produced in the county.

The census for 1860 represents Norfolk county as having 8019 milch cows; there has, probably, been no material increase since that year, and we may safely adopt it as the number at present in the county. The average daily yield of these cows throughout the year is probably about five quarts, making the yield of the whole number for the year about 3,658,668 gallons. Of this quantity, probably one-half, or, in round numbers, 1,800,000 gallons are sold to the milkmen. Milk, on the average, yields about fourteen ounces of cheese to the gallon; consequently, the milkman purchased the equivalent of 1,575,000 pounds of cheese. Let us find the price actually paid for it.

It is a matter of considerable doubt, if, throughout the county, the farmer realizes from the milkman through the year an average of ten cents per gallon for his milk; but, to make all reasonable margin, we will assume that he receives twelve cents per gallon; the total receipts then for the milk are \$216,000, or, in other words, that amount is paid for 1,575,000 pounds of cheese; or but about thirteen and three-fourths cents per pound, a price exceedingly small, when compared with those in the following table of the average number of cows, amount of cured cheese, average price, and average pounds of milk to one of cured cheese, for the several factories from which full reports have been received; nearly all of which are in New York State.

Name of factory, location, and county.	Average number of cows.	Am't of cured cheese made in pounds.	Average price per lb. in cts. & fractions.	Average lbs. of milk for one of cured cheese.
McLean Factory, Tompkins	937	302,084		9.60
Adams Cheese Factory, Adams, Jefferson,	700	142,518	23.09	9.95
Blodgett Mills Factory, Cortlandville, Cortland	290	71,800	21.00	10.12
Gilbert Mills Factory, Oswego	350	110,465	18.96	10.10
Oneida Cheese Factory, Oneida, Madison		119,346	13.32	9.87
Hart Factory, Oneida Lake, Madison	270	55,422	21.42	10.30
Oneida Cheese Factory, Oneida, Madison		174,848	21.05	9.94
Roberts's Factory, Floyd, Oneida	200		22.17	
Woodworth's Factory, Yorkshire, Cattaraugus	420	124,284	23.00	9.51
Higginsville Factory, Higginsville, Oneida	245	65,776	21.81	9.75
Peeksport Factory, Eaton, Madison	850	284,543	20.50	9.91
Frankfort Factory, Frankfort, Herkimer	475	191,702	21.23	9.42
Herkimer County Union Factory, Little Falls, Herkimer	460	151,980	22.43	9.88
Mannsville Factory, Mannsville, Jefferson	600	162,000	23.06	10.01
Parker's Factory, Wardwell, Jefferson	300	72,010	21.50	9.85
Centre Brook Factory, Otsego		21,945	25.00	9.23
C. H. Curtis's Factory, Waterville, Oneida	250	61,140	22.54	10.18
Decatur Factory, Decatur, Otsego	600	207,634		9.50
Wallkill Creamery Association, Middletown, Orange	400	73,100		
Philadelphia Factory, Barber's Corners, Jefferson ..		90,401	21.68	10.26
Weeks's Factory, Verona, Oneida	530	173,691	21.31	9.59
Daniels's Factory, McDonough, Chenango	500	149,131	19.50	9.75
Holmesville Factory, Holmesville, Chenango	400	114,246	20.62	9.90
Miller's Factory, Constableville, Lewis	580	182,111	22.77	9.54
Collins Factory, Collins, Erie	851	249,608	20.73	9.85
Hawleyton Factory, Hawleyton, Broome	265	68,660	21.80	
Coal Creek Factory, Coal Creek, Herkimer	475	176,000	18.80	10.00
Stevens's Factory, Lowville, Lewis	750	207,121	21.60	10.16

Name of factory, location, and county.	Average number of cows.	Am't of cured cheese made in pounds.	Average price per lb. in cts. & fractions.	Average lbs. of milk for one of cured cheese.
Charleston Factory, Charleston, Montgomery.....	335	98,101	22.25	9.84
Nelson Factory, Nelson, Madison	575	199,884	19.69	9.78
West Schuyler Factory, West Schuyler, Herkimer..	550	196,916	21.90	9.71
Springfield Centre Factory, Springfield Centre, Otsego	300	137,866	21.29	9.97
Mile Strip Factory, Fenner, Madison.....	360	122,105	21.14	9.85
West Exeter Factory, West Exeter, Otsego	500	172,894	21.75	10.07
Brookfield Factory, Brookfield, Madison.....	200	64,999	24.25	8.31
Orwell Factory, Orwell, Oswego.....	250	72,557	21.70	10.00
North Litchfield Factory, North Litchfield, Herkimer	375	127,275	21.70	9.90
Deansville Factory, Deansville, Oneida.....	275	83,094	21.33	10.38
Deerfield and Marcy Factory, Marcy, Oneida	1,032	295,115	20.07	10.26
Stanley's Factory, Adams, Jefferson	400	134,050	18.80	9.90
Scriba Factory, Scriba, Oswego.....	400	100,744	20.00	9.35
East Berkshire Factory, Franklin, Vermont.....	500	101,539	24.00	10.00
Ingraham & Hustis's Factory, Adams, Jefferson...	600	142,518	23.09	9.95
Whitestown Factory, Whitestown, Oneida.....	600	204,025	22.70	10.05
Turin Factory, Turin, Lewis.....	730	206,333	19.68	9.58
Sear's Factory, Cuyler, Cortland.....	770	206,897		9.93
Loraine Factory, Loraine, Jefferson.....	409	106,000	21.25	9.72
Brown's Factory, Columbus, Chenango.....	375	114,429	22.00	9.64
Canton, Factory, Canton, St. Lawrence		68,032		9.76
E. N. Carrier's Factory	400	126,625		9.59
Westcott's Factory, Watertown, Jefferson.....	318	91,639	23.37	9.52

It will be seen, by the above table, that the yield of the cows, both in milk and in lbs. of cheese, (allowing 10 lbs. of milk to the weight of one gallon,) is about the same as that we assumed as the yield of the cows of Norfolk County; but the average price that the cheese sold for at the factories was $21\frac{4}{10}\%$ cts. per pound, or about 8 cts. per pound more than that realized by the farmers of this county for the sale of their milk to the milkman. It seems to me that nothing further is needed to show that the establishment of a cheese factory, or of several of them, is *peculiarly* desirable in Norfolk county; and a glance at the map gives us at once the most desirable localities in which they can be situated, both with reference to access from neighboring towns, and transportation to market. Dedham, situated at the junction of several railroads running through many of the best farming towns in the county, and also reached by numerous carriage roads which extend in every direction, certainly offers the most favorable situation; but in Randolph, in the south-eastern portion of the county, Wrentham, in the southern, and Medfield, or Medway, in the western sections, the establishment of a factory is not only practicable, but desirable.

Having selected the locality where the factory is to be established, the first necessary step is to choose a proper site for its erection. The organization and starting of a factory is thus described in an article in the monthly Report of the Department of Agriculture (June and July, 1865):

“When it is proposed to start a factory, several persons who are neighbors to each other get together and talk over the matter

among themselves. If enough are found willing to turn in their dairies together, so as to make a fair start, (say 300 cows,) a committee is appointed to look further into the matter, to visit factories, and get all the information on the subject that can be had. A favorable report from the committee being had, they then organize, choose directors, and adopt some general rules or plan for the guidance of the association. The next step will be the selection of some experienced cheese-maker as superintendent and the place for the erection of the factory building."

"In choosing the place for the erection of the factory buildings," says the report* for 1864, two requisites are sought—good water and convenience as to access and distance for the dairies furnishing the milk. The site, above all, should command an abundance of pure spring water. This is regarded by those who have had longest experience at the business as imperative.

"Even in family cheese-making a considerable quantity of water is needed in various ways about the dairy—for cooling milk, cooking the curd; and keeping the utensils and buildings clean and sweet; but for the factory the quantity of water should be abundant and unfailing. It is usual to have a considerable stream of water passing under the manufacturing room, so as to carry off the drippings of whey and refuse slop, so that there be no accumulation of filth or taint of acidity hanging about the premises. Where whey and slop are allowed to collect from day to day about the milk-room, the stench at times becomes intolerable, and must do great damage to the milk, which absorbs taints of every character with great readiness. Hence means must be taken to have all the refuse matter swept beyond the reach of the premises."

When a factory is established, the milk is brought to it at such times each day as is agreed upon. Each person's milk is weighed, and credit given to him for the amount. He receives an amount of cheese in proportion to that of the quantity and quality of the milk, and is charged a stated price, usually about one cent per pound, for its manufacture. Herein is seen the first benefit of the association. The *quality* of the milk is a subject of close observation and discussion, and all matters affecting its quality and condition, and their relation to cheese-making, assume a practical bearing. The breed of cows, their food, other causes, such as overheating the cows by too far or too rapid driving, weeds in the pastures, &c., all are topics of investigation. It is easy to see that there is a *levelling upwards to the standard of the best milk*. Herein the manufacturer acts on the dairymen. They, in turn, act on the manufacturer by comparing his manufactured cheese

* New York State Cheese Manufacturers' Association.

with the best kinds made in the best markets. Thus comparisons are instituted and investigation promoted. It is needless to say that the result is *progress*.

The following is the description of the process of manufacturing the famous Cheddar cheese, as given in the same Report:—

“ In the improved Cheddar process, adopted by Mr. Harding, of England, great attention is paid to the milk-house. It is constructed with reference to regulating temperature by admission or exclusion of air, and exposing the milk to a fresh and untainted atmosphere. The evening’s milk is cooled to 60 or 62 degrees, and the highest temperature at which it should stand in the morning is 64 degrees. When the temperature is high in the evening, the milk is set thin in coolers, and exposed to a free admission of air. The first act in the morning is to test the temperature of the evening’s milk. If the temperature is above 62 degrees, the milk is allowed to remain in the plates or coolers until the morning’s milk is put in the cheese tub. But if the evening’s milk is at or under 62 degrees, it is lifted and sieved through a fine cloth into the cheese tub, and the morning’s milk added to it. When the temperature of the evening’s milk is high in the morning, it is an indication that it is on its way towards acidity.

“ The testing of the cold milk by the thermometer serves as a guide for the quantity of rennet needed for coagulation, as less is necessary when the evening’s milk stands at a high temperature in the morning. In the Cheddar process of manufacture it is *preferred* that the milk be kept at a low temperature, and the acid (which is sour whey distinctly acid) to be applied directly to the milk at the time of adding the rennet.

“ Its use is to assist the rennet in the more complete conversion of the sugar of milk into lactic acid. When this is effected to a proper degree, and no more, the acid passes away in the whey during pressing and in the cheese-room, leaving the curd in a condition that will not only make the cheese produced more solid and close in texture, but richer, firmer, sweeter, and of greater specific gravity than when the acid has not been present in a sufficient quantity. When the temperature of the cold milk is 64 degrees, no sour whey is used, the acid being present in a sufficient degree without it. In large dairies less sour whey is needed in proportion to the milk than in small ones.

“ The milk is set at 78 degrees, and if the temperature of the evening’s milk has been kept at about 60 degrees, five quarts of sour whey, distinctly acid, is added to 165 gallons of milk, at the time of putting in the rennet, and coagulation is effected in from forty-five to sixty minutes. It is preferred that coagulation be perfected in so short a time, as there will be waste of richness if it is protracted.

“ After the milk has stood fifteen minutes, the top or surface is gently stirred up with the fingers to prevent the cream from ascending, and this is to be repeated if the curd is longer in beginning to form. As soon as it is sufficiently formed, (and it is not allowed to get very firm,) the operation of breaking is at once commenced, and is performed *carefully, gently, and minutely*. This is accomplished in about thirty minutes. Before the breaking is finished, the mass is raised, by the addition of heated whey, to 80 degrees. This additional heat not only keeps up the temperature, but hastens the separation of the whey from the curd, and assists in promoting the necessary acidity. The curd is now allowed to stand forty-five minutes, if the acid is not present in too great quantity, but when too much is present it is allowed to stand no longer than the time occupied in heating. When the curd has stood the proper time, the whey is drawn till the surface of the curd appears, when the curd is carefully broken up, and the temperature of the mass gradually raised to 100 degrees by the addition of heated whey. The length of time that stirring is continued is varied, according to the state of the curd, from fifteen to twenty minutes when rather acid, and from twenty-five to thirty minutes when rather sweet. When the curd is sufficiently firm, it is in small particles like peas, firm, elastic to the touch; and when a portion is taken up and squeezed in the hand, it does not readily adhere together, but separates in particles. The stirring is continued until the curd has the proper feel, without regard to the time occupied, and should then be given up, the temperature being 100 degrees, for if continued longer, the cheese will be hard and stiff. This process of saturating the curd with the heated whey has the effect of completely separating the whey from it; the moisture which adheres to the particles, and which will come out under pressure, is all that is left. The curd, when separated from the whey in the manner described above, retaining all its natural richness, and the cheese produced has the sweet, nutty flavor, something like new milk, known as the *Cheddar flavor*.

“ When the curd is only brought up to or a little over the natural heat of the milk, all the butter is retained and fixed in the curd; for although subjected, even at first, to a pressure of half a ton, no trace of butter appears.

“ After the curd has been allowed to remain *undisturbed* in the scald about thirty minutes, the separator is again inserted, and the whey run off.

“ The curd is then thrown into a heap in the centre of the cheese board, or on the side of the tub if it is flat-bottomed; it is then covered over with a cloth, and allowed to lie thirty minutes, the whey meanwhile flowing slowly from the heap. At the end of

this time it is cut across in large lumps, heaped up, and covered as before, and allowed to lie other thirty minutes, when it is taken out of the cheese-tub, laid upon a cooler, split by the hands into thin flakes, and spread out to cool. The curd at this change has a distinct acid smell; its taste is slightly sour, and by no means palatable, and such as would lead a novice to think it unlikely to produce a fine cheese.

“When the curd is placed on the cooler (which is placed in the coolest part of the dairy) for ten minutes, it is turned over and allowed to lie the same length of time. It is afterwards put into a vat, having a clean cloth inside, and put to press under a weight of half a ton. After having been subjected to this process for about ten minutes, it is taken out, ground in the mill, accurately weighed, and returned to the cooler, where it is salted at the rate of one pound of salt to fifty-six of curd, and cooled down as near to sixty degrees as the temperature of the air will admit. In summer it will not easily be reduced below sixty-five degrees; but no hurt will accrue from its being put into the vat at that temperature.

“The curd is then finally put into the hoop and under pressure of six hundred pounds. In the evening it is taken out of press, and a clean cloth put on it, the cheese being turned and put back to press under a pressure of half a ton. Next morning it is again taken out and gets a dry cloth, is turned and put to press, with four hundred pounds additional pressure. On the following day it receives its third and last cloth, and is placed under an additional pressure of four hundred pounds. In the evening it is again taken from the press, gets a calico cap neatly stitched on it, and put under a pressure of one ton, until the following morning, when it is finally taken from the press, having remained under pressure for seventy-two hours.”

These directions are fully and clearly stated. We have preferred to make these extracts, rather than present our own opinions in another form, because it is due to such practical men, and whose special occupation is cheese-making, that they should speak for themselves.

It is not because of the comparative profit resulting from cheese manufacture, alone, that the establishment of factories is desirable, but there are other reasons equally powerful which clearly prove this to be one of the most valuable branches of industry to the whole farming community. Cheese is essentially the products of the farm *in a condensed form*; it is in itself the hay, grain and roots raised by the farmer. But while it is less difficult of transportation than almost any other production, still the farm itself is not robbed of the valuable material which is due to it in the form of manure, as it is when the hay, grain, &c., are sold from it in their natural form.

The farmer who crops thirty tons of hay every year and sells it, either robs his farm of the nutriment contained therein, or is obliged to replace it by purchasing manure; an operation which, however profitable it may have been during the past three or four years, could not, in ordinary times, be performed except with loss, or, at any rate, without profit. But if that hay is fed to milch stock, while a large profit is to be counted on from the manufacture of cheese, the manure which is produced richly replaces in the soil the constituents that were taken from it.

The question might be asked, "Why not, if the products of the farm are to be used on it, raise cattle for the butcher? There is a good demand for beef cattle." Because cheese husbandry is more profitable, as is shown by the following statement by S. L. Goodale, Secretary of the Maine Board of Agriculture. "Judging from the best data we have been able to obtain, the opinion is held that the food which will make one pound of meat, will, usually, make at least twenty pounds of milk, and, where really good dairy cows are kept, probably twenty-five pounds. Assuming, then, only twenty pounds of milk to be the equivalent of one pound of meat, we can have, if we choose, in its place, two pounds of cheese. Although the proportion of cheese to be obtained from milk is valuable, depending on the amount of butter and caseine which the milk contains, it may be safely set at as much as one pound from ten pounds of milk. In one case, I was credibly informed of its having been made from eight and a half pounds; but nine and a half are usually required with average milk and fair management. So long, therefore, as a pound of cheese commands as much money as a pound of meat, it would seem that we may largely increase the returns from our grazing lands; or, if we take the usual prices of meat, as a basis for our estimate, we may conclude that the actual cost of producing a gallon of milk does not exceed five cents; and if we can, without too large cost for manufacture, convert it into what will bring eight, ten, twelve, or fifteen cents, it must be a profitable operation. It is not supposed that mere economy will ever induce people to restrict their diet to the single article of cheese, however nutritious it may be, and that thus an unbounded demand for it should be created. But the shrewd farmer ever looks closely to the market value of different products, and changes his crop as circumstances suggest. It is pertinent, therefore, to inquire what is the market for cheese, and where and what it is likely to be in the future, and how soon it may be so supplied that prices shall fall below remuneration."

Let us give a brief glance at the facts that statistics furnish us for information on these points.

In 1857 the total exports of American cheese amounted to but 6,500,000 pounds, about 4,000,000 of which went to Great Brit-

ain, and the rest to other parts of the world. From September, 1858, to September, 1859, the exports of American cheese to Britain were little more than 5,000,000 pounds. From September, 1859, to September, 1860, a trifle over 15,000,000 pounds. The exports from New York alone in 1860 were 23,252,000 pounds; and in 1861, 40,041,000 pounds; while, in the year just past, the exports from New York have probably reached 50,000,000 pounds, and upwards. "The rapid rate at which cheese dairying is being introduced, must soon bring our exports up to more than 100,000,000 pounds;" and, as the present total product of the country probably exceeds 200,000,000 pounds, the time is very near when our exports will reach the above figure.

Now this enormous increase is owing, not so much to the establishment of cheese factories, in itself, but to the superior quality of the article which they produce. If the quality of the cheese which they manufacture were inferior to that of the great dairy districts of the United Kingdom, there would be no demand for it; we could not, for a moment, compete with them, if we produced a poor article; but the fact is, the cheese which is manufactured in the system which is now so well established, is of a *very superior quality*; it is preferred by the cheese-loving Englishmen to the product of their own soil. At the great show of dairy-products at the exhibition of the Ayrshire Association in 1862,—which was largely represented by leading men from all parts of the United Kingdom,—Mr. Bowles of London, said, "It was quite useless for the farmers of Scotland to compete with the farmers of America, except in one way, and that was by making a better article. In London there was always a steady, active demand for fine goods, which could always command a large price. To show that he was right, as to the inexpediency of Scottish farmers competing with their agricultural brethren across the Atlantic, unless they provide a first rate article, he might tell them that during the year from the first of January, 1861, ending December 31st, there were imported 716,673 boxes of American cheese, equal to 45,000 tons. This year the importations were on the increase. For nine months, closing the 30th of September, 1861, the imports were 447,678 boxes, equal to 28,000 tons, while, for the same period of 1862, the numbers were 500,317 boxes, equal to 31,000 tons,—showing an increase of 3,000 tons over the corresponding period of last year. These figures plainly proved that competition was futile unless the Scottish cheese-makers could turn out a superior article."

Our limited space will not permit a more extended consideration of this important subject. We think we have shown that the comparative profit, resulting from the system of factory dairying, is very great; and it now remains with the farmers of Norfolk

County to reflect upon the advantages derived from the system, and to establish, when practicable, factories in such localities as are suitable, and add to the value of the products of their county, and also rejuvenate many of their splendid farms, which, under the old system of management, are fast running out.



REPORT ON MANURES.

The Committee on Experiments with Manures have had but one applicant for the premium offered by the Society, that of Mr. Charles Breck of Milton, which experiments he has conducted for the last three years, and has rendered a valuable statement each year, as required by vote of the Society.

Gentlemen must judge for themselves how far Mr. Breck's statements will go to settle the question as to the application of manures; all will, however, acknowledge that the three annual statements made by him are valuable to the farmer; and have required much time, care and labor, and the Committee, therefore, award him the first premium of twenty-five dollars.

The subject is far, very far from being exhausted; we want to know the *right form* and the *right time*, in order to secure favorable results with organic manures, and how far we are dependent on soil, climate, wind and weather.

The Committee think it is well worth a trial to offer a premium on the use and application of *inorganic manures*, such as ashes, lime, bones, salt, gypsum, &c. All these have been recommended by scientific men, who have applied them to their lands, as of great and enduring benefit to the crops, and in the opinion of the Committee they may be made so on nearly all the farms in the county by judicious application.

For the Committee,

CHEEVER NEWHALL, *Chairman.*

Dorchester, Jan. 8, 1866.

STATEMENT OF CHARLES BRECK.

CHEEVER NEWHALL, Esq. :

Chairman of a Committee of the Norfolk Agricultural Society on Experiments with Manures.

SIR—In concluding my experiments with manures, commenced in 1863, I have to report as follows:—The land was planted the present year with bush beans, with the following result:—

	lbs.	Bushels per acre.	Value per acre.
No. 1.	24.03	16.02	\$40.05
" 2.	24.69	16.46	41.15
" 3.	27.43	18.29	45.72
" 4.	26.55	17.70	44.27
" 5.	18.20	12.13	30.33
" 6.	28.90	19.26	48.20

Synopsis of the Weather.

Month	first third	Moist,	second third	Moist,	last third	Moist.
May,						
June,	"	Dry,	"	Dry,	"	Dry.
July,	"	Dry,	"	Moist,	"	Dry.
August,	"	Dry,	"	Dry,	"	Dry.
September,	"	Dry,	"	Dry,	"	Dry.

Average of thermometer in May 58°; in June 68.51°; July 70.72°; August 69.72; September 67.18°.

May was about 1 $\frac{3}{4}$ ° warmer than the average for the last 17 years.

June " 2 $\frac{1}{2}$ ° " " " " " " " " 17 " and the warmest June since 1851.

July was $\frac{1}{2}$ ° warmer than the average, but not so warm as last summer (1864) by 1°.

August was 1° warmer than the average, but not so warm as the two preceding summers by 2 $\frac{1}{4}$ °.

September was about 5° warmer than the average, and 2 $\frac{1}{2}$ ° warmer than any September for the last 17 years.

The past summer has been the warmest since the experiment was commenced, and about 2° warmer than the average of the two preceding summers.

No. 5 this year has not done as well as last year, being \$12.46 behind the average of the four which had manure.

No. 6 this year has a gain of \$5.41 over the other lots, which sum, added to the surplus of the two preceding years, makes \$45.41, and, no doubt, if the experiment was continued, it would, at least, amount to \$50, a sum which would well pay for using a liberal quantity of manure.

The question often comes up, what portion of the manure does the first crop take up? It seems that this experiment might go far towards settling that question. The gain from the manure the first year was \$30.35, the two last years it has been \$17.19, and probably what remains in the ground would make it up to \$20, from which it appears that the first crop took up about three-fifths of the manure.

The result of the experiment seems to be this :—

The first year,	No. 3 first,	No. 1 second,	No. 2 third,	No. 4 the poorest.
Second year,	No. 4 " "	No. 3 " "	No. 1 " "	No. 2 " "
Third year,	No. 3 " "	No. 4 " "	No. 2 " "	No. 1 " "

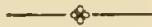
If any thing is to be learned from this trial, it is that the manure should be kept near the surface of the ground, as only in one

instance has that which was plowed under at the first plowing been even second best, and one year third, and one year the poorest, and only in one instance has that which was spread upon the surface after planting been the poorest, while one year it stood first and one year second best; that which was plowed in at the second plowing for two years was the third, and one year the poorest, while that which was worked in with the cultivator was the best for two years, and the second best for one year.

Respectfully yours,

CHARLES BRECK.

Milton, Dec. 8, 1865.



REPORT ON UNDERDRAINING LAND.

The Committee award a premium of \$10 to A. W. Cheever, of Wrentham, whose statement is hereunto annexed.

For the Committee,

S. W. RICHARDSON, *Chairman.*

Franklin, Dec. 1, 1865.

STATEMENT OF A. W. CHEEVER.

GENTLEMEN—The lot of drained land to which I have called your attention contains about two acres. I cannot give the Committee an exact statement of the cost of bringing it from a birch and alder swamp to its present condition, as it has been done at odd jobs, and in connection with other farm improvements, and at different times, through the management of three generations.

My grandfather commenced its improvement by cutting off the wood, burning the brush, and by digging an open ditch through the middle to take the water. This he dug for the double purpose of making a drain and furnishing muck for the cattle yards, which last I think he must have accomplished, for my first recollections of the meadow is of a ditch about fifteen feet wide, and from three to five feet deep, and always full of water except in very dry seasons. Once since I can remember it was dry enough so that my father was enabled to clean out this main drain of the mud that had worked in by the frosts, rains, muskrats, &c., and carted it to the yards; but in no ordinary years could a team pass over the ground. The bog hay it produced for thirty years was carried out on haypoles. In the fall of 1838, my father having heard of a few successful experiments in growing the

English grasses on bog meadows, commenced its improvement on a new plan.

It had been flowed winters by means of a dam across the lower end of the lot. He took up this dam and relaid the water course so that it lowered the water several inches. I think the water after that time did not usually rise higher than within twelve or fifteen inches of the surface, except during freshets. His next step was to cut off the turf and bogs with sharp steel hoes on a few square rods, then burned this turf and bogs, spread the ashes, raked in seed, and soon had the satisfaction of cutting the first English grass on meadow bottom that was ever seen in this neighborhood. One of his neighbors told him he was foolish, for he had no more meadow hay than he needed, and if he got it all into English, he would not have enough meadow hay to feed in the winter. My father replied, that if he could get two tons of English hay instead of one of meadow, he would be satisfied with the exchange.

So well did this first experiment prove, that for several years after my father spent a part of every fall in cutting and burning bogs, and getting more of the meadow into English grass. But before he got over it, all the first lot had gone back to meadow grass again, and did not produce much more than before it was cut over. For the next few years his improvements consisted in digging ditches through and around it, deep enough to get through the mud into a kind of clay that underlies most of it, and spreading this clay on the surface in connection with barn-yard manure. This improved the grass and made the sward firm enough so that teams could pass over the ground with light loads. But so many cross ditches soon came to be very much in the way, besides, they were constantly filling up, and required to be cleaned out every few years. The next step was to clean them out, fill up with small stones from the upland hills, and then dig another ditch near by, filling that also with stones, and, using the mud and clay from the last to cover the stones of both. This work was continued till all the cross ditches and the upper end of the main were filled.

According to my father's ideas at that time of thorough drainage, he considered the job about finished, and it was in this condition when he gave up the management of his farm to me. But reading and observation soon convinced me that the meadow was not yet thoroughly drained. That main ditch began to look more like a nuisance than a drain. But what should be done with it? Fifteen feet wide, twenty rods long, water and soft mud about two feet deep, the banks full of muskrat holes, which made it dangerous to drive within twenty or thirty feet of the edge. On the hills above were plenty of old stone walls that were not much needed, also many rocks over the mowing fields that were not at

all needed, but how to get them in there, and what to cover them with, was the question. The banks were soft, the mud from the ditch had been carried away years ago. If that water could only be removed, I could then dig deeper, and get stuff enough to cover the stones, and the stuff thrown out on the banks and leveled off would make a road on which a team could travel to draw in the stones.

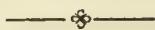
But to remove the water, I must go down some twenty-five rods below the meadow to get fall enough to lower the water two feet, and then that dam, which is now used for a road, must again be taken up, and the water-course laid deeper. Will it pay? That depends upon how we look at it. I looked at it as I would the payment of an old debt entailed by some past generation; a debt that must be paid by somebody, at sometime; just such a debt as I believe the farmers of the West are now entailing on their sons when they sell corn and wheat to the East or to Europe at prices that do not pay the depreciation of soil on which it grew. My grandfather borrowed capital of that meadow which he never paid, nor did he suppose payment would ever be demanded. But times and ideas have changed. Wet meadows and swamps that can be drained have come to be considered by the most intelligent farmers of the present day the very best grass lands of the country, although the mass of farmers do not yet fully realize it, nor will they until they learn the difference between partial and thorough drainage. Removing the water must be the very first step. If that can not be done for what the meadow will be worth when finished, it had better be left till some future generation, more in need of land than this, can afford to do it. This meadow lies very near to the farm buildings. It costs but little to cart manure on, or hay off.

I can now plow every rod of it with any kind of a team without meadow shoes. Can cart with narrow wheels, without getting mired, although the clear mud or peat is in many places four feet deep. It is mowed with a machine, and I do not have to turn out for a single ditch. I have this year taken two heavy crops of hay from that part which had been plowed and re-seeded, and on a portion of it three crops, in spite of the dry weather, and all of them lodged. Since it was visited by members of the Committee, I have turned over a half acre of it to be planted in the spring to early potatoes, and re-seeded in August with herdsgrass and red-top.

The experiment has been a costly one, because what was done last should have been done first. Much labor of cutting and burning turf was lost, as it might have been done with the plow after the water had been drawn off, and the bogs had dried for the want of it. The quality of the soil is improved by spreading on sand, clay, or gravel, but I find, contrary to my expectations, that

a team can work without miring on four or six feet of meadow mud, if it is drained that depth. A. W. CHEEVER.

Sheldonville, Nov. 20, 1865.



REPORT ON VEGETABLES AND ROOT CULTURE.

The show of vegetables this year was better both in quantity and quality than we have seen for several years previous, notwithstanding the severe drought. Twenty entries were made in this department, and the Committee award the following premiums:—

For the largest and best collection of vegetables, first premium to John Sias, of Milton, \$10.

Second to J. S. Eldridge, of Canton, \$5.

Third to C. E. C. Breck, of Milton, \$4.

Fourth to W. S. Ware, of Grantville, \$3.

Fifth to J. Cartwright, of Wellesley, \$2.

Sixth to J. P. Bush, of Milton, \$1.

For the largest and best collection of potatoes, first premium, to John Sias, of Milton, \$3.

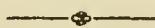
Second to J. P. Bush, of Milton, \$2.

The thanks of the Society are due to C. C. Sewall, of Medfield; C. G. Upham, of Needham; Eliphalet Stone, of Dedham; John Tims, of Dedham; Patrick Wall, of Dover, and others, for collections of vegetables.

The Committee subsequently examined a crop of onions entered for premium by A. P. Knapp, of Wellesley, to whom they awarded the first premium, Burr's vegetables.

A. T. MESERVE, *Chairman.*

West Roxbury, Dec. 1, 1865.



REPORT ON FRUIT.

The Committee award the following premiums:—

Apples.

For the best collection, Frederick Clapp, of Dorchester, first premium, Harris's Treatise on Insects.

T. Harding, Medway, second do., \$4.

Henry Goulding, Dover, third do., \$3.

Pears.

For the best collection, Frederick Clapp, Dorchester, first premium, silver cup.

A. D. Weld, West Roxbury, second premium, \$4.

Joseph H. Billings, West Roxbury, third do. \$3.

For the best single dish of Apples—F. Clapp, Dorchester, first premium, Barry's Fruit Garden.

A. P. Knapp, Needham, second do., Cole's Fruit Garden.

For the best dish Pears—Frederick Clapp, Dorchester, first premium, Barry's Fruit Garden.

J. Cartwright, Needham, second do., Cole's Fruit Garden.

Hon. M. P. Wilder exhibited 105 varieties of pears, for exhibition only.

Foreign Grapes.

For the best exhibition, R. W. Turner, Randolph, first premium, \$4.

H. S. Clark, Walpole, second do., \$3.

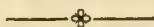
Native Grapes.

For the best collection, B. C. Vose, Milton, first premium, \$3.

J. S. Eldridge, Canton, second do., \$2.

STEPHEN M. WELD, *Chairman.*

West Roxbury, Sept. 29, 1865.



REPORT ON FLOWERS.

“Many and various are the pleasures and advantages to be attained from the study of plants, and the cultivation of them in the flower garden. The first leads to the knowledge of one of the most beautiful and instructive branches of science; and the second furnishes an employment well calculated to lead the contemplative mind, in the language of Shakespeare, to

‘Find tongues in trees, books in the running brooks,
Sermons in stones, and good in every thing.’

The cultivation of the flower garden must be considered as an amusement extremely well calculated to employ our leisure hours, being one of the most innocent, as well as one of the most salutary employments that can excite the attention of the human mind.”

Our exhibition of flowers, like every other part of the Fair, showed the effects of the drought which marked the latter portion of the summer. But we may safely say that it was very good, and pleased the eyes and gratified the tastes of an immense number of visitors. It is true that many of our people feel little or no interest in horticulture. They go through the world insensible to the beauty with which the Creator has clothed it. They pass by unnoticed, or carelessly trample upon graceful and delicate

flowers, whose colors, fragrance and forms would seem to mark them out as worthy of the minutest attention. Then they lose a large part of the benefits they might receive from the influences of the natural world. But every year enlarges the class of cultivated men and women, who find some of their purest satisfactions in an intimate acquaintance with the qualities and the modes of growth of flowers; and their pleasure is changed into admiration in proportion to the increase of their knowledge, which incites them to new study and reflection. Farmers feel constrained to look after the useful first and chiefly; sometimes grudging to wives and daughters even the front court-yard, which might be planted with potatoes. They forget that the value of the house, as a dwelling, is increased by a garden with trees and flowering shrubs, and none the less by flowers in the windows or climbing on trellises. But the heart has *its* claims, and there is a rational satisfaction in gratifying the demands of taste,—a pleasure that leaves no sting behind. Besides, God takes as much pains with flowers as he does with corn, finishing them with exquisite grace to attract our attention and to lead us through them to Himself. Solomon, in his glorious apparel, was not arrayed like the lily of the valley or the rose of Sharon. Shall these works of the Divine artist be disregarded or fail to be appreciated?

Why should floriculture be esteemed a trivial business, when it preserves purity and suggests good thoughts?—when it develops our sense of the beautiful, and intensifies our conviction of the presence of God in the world?

We are glad to see that every year our common house-gardens are enriched by improved varieties of old favorites. It is a bad fashion to neglect old, and once cherished flowers, for the latest novelties, which are usually expensive and often worthless. We refer, especially to the peony, phlox, larkspur, holly-hock and gladiolus. Within a few years these have been much improved, and have become worthy, not only of domestic cultivation, but also of the florist's care. We hope, in each succeeding year, to see an increasing contribution to this department of the Fair, which is sure to attract throughout the day a crowd of admiring visitors. Norfolk County is unrivalled in respect to its conservatories and hot-houses and costly exotics. May it also occupy the first place in respect to those more common flowers within the reach of all, which make our homes more precious by making them more attractive.

“ There is a lesson in each flower,
A story in each stream and bower;
In every herb on which you tread,
Are written words, which, rightly read,
Will lead you from earth's fragrant sod,
To hope and holiness and God.”

The whole number of entries at the Exhibition were 22, and the premiums were awarded as follows:—

Best collection of cut flowers, Lizzie J. Watt, West Roxbury, first premium, \$4.

George Craft, Brookline, second premium, \$3.

Mrs. George Vose, Milton, third premium, \$2.

Bouquets—First premium not awarded.

Mrs. William Lyon, Needham, second premium, \$3.

Third premium not awarded.

Gladiolus, none named on exhibition.

George Craft, Brookline, for the best collection of seedlings, first premium, \$3.

Second premium not awarded.

For best new seedling, no award.

Japan Lilies—none on exhibition.

Pompon Dahlias—Macey Randall, Sharon, best collection, first premium, \$2.

Second not awarded.

For seedling Verbenas, no award.

Double Zinnias—George Craft, Brookline, best collection, first premium, \$2; second premium, \$1, to Mrs. George Vose, of Milton.

Gratis—Macey Randall, Sharon, for collection of cut flowers, Breck's Book of Flowers.

John Adams, Milton, for collection of cut flowers, Breck's Book of Flowers.

William Dunbar, Canton, for an elegant funereal wreath and cross, Breck's Book of Flowers. This wreath was composed of wild flowers and forest leaves, surrounding a cross covered with pure white "immortelles" of perfect form. The whole indicating a refined taste, and suggestive of consoling hopes to every wounded breast.

Diplomas—Mrs. S. M. Stewart, Fairmount, for flower basket, diploma.

John S. Eldridge, Canton, for bouquet and cut flowers, diploma.

Mrs. Hannah P. McIntosh, East Needham, for cut flowers, diploma.

William Dunbar, Canton, for bouquet of dried flowers, diploma.

Mrs. R. W. Beales, Dedham, for a plant of English Ivy, diploma.

Mrs. John G. Herter, Dedham, for orange tree, diploma.

For the Committee,

ROBERT WATT, *Chairman.*

West Roxbury, Nov. 15, 1865.

REPORT ON BREAD.

The Committee award the following premiums:—

Wheat and Indian—First premium to Mrs. Nathan Longfellow, Needham, \$3.

Second premium to Miss Elizabeth S. Sewall, Medfield, \$2.

Unbolted Wheat—First premium to Miss Elizabeth S. Sewall, Medfield, \$3.

Rye and Indian—First premium to Mrs. N. Longfellow, Needham, \$3.

Wheat—First premium to Miss Nancy Story, Medfield, \$3.

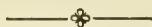
Second premium to Mrs. Elijah Tucker, Milton, \$2.

HONEY.

First premium to Nathan Longfellow, Needham, \$3.

EDMUND QUINCY, *Chairman.*

Dedham, Sept. 29, 1865.



REPORT ON THE DAIRY.

Whole number of contributors, eleven.

Butter—To A. W. Cheever, of Wrentham, for 20 lbs., first premium, \$10.

Second premium to Nathan Longfellow, of Needham, \$8.

To Elizabeth S. Sewall, of Medfield, for the best box of 12 lbs., the first premium, \$5.

Second premium to Wm. Pierce, of Needham, \$3.

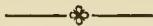
To Ruel Ware, of Needham, Flint's Treatise on Dairy Farming.

Cheese—To Henry Bird, of Stoughton, first premium, \$5.

Second premium to Ruel Ware, of Needham, \$3.

JEREMIAH W. GAY, *Chairman.*

Dedham, Sept. 29, 1865.



REPORT ON HORSES.

The Committee on Horses attended to the duty assigned them, and respectfully report that they made every exertion to secure a larger exhibition of valuable horses than usual; and to this end they caused a dozen new box stalls to be erected for the care and

shelter of such horses upon the Fair ground, their owners having, heretofore, been deterred from sending their horses for exhibition from the want of suitable provision for their shelter and protection; and the result of this was a better show of valuable horses than usual. A serious inconvenience was experienced in the exceedingly dry and dusty condition of the roads and grounds. This was obviated, as far as practicable, by watering and rolling the track, so that on the last day of the exhibition it was placed in quite good condition.

Before proceeding to the report upon the several classes of horses exhibited for premiums, the Committee desire to acknowledge their obligations to Thomas Motley, Esq., for his kindness in exhibiting, for the benefit of the Society, two Norman stallions, three Norman mares, and a colt by the side of Empress, belonging to the Massachusetts Society for the Promotion of Agriculture. These horses are very large and finely formed, and the stallions especially were graceful and fleet in their movements, in a degree surprising to all who witnessed their evolutions, whilst they were perfectly kind and docile in every position in which they were placed.

CLASS A.

In this class there were thirteen entries. There was but one stallion entered, by Oliver Dean, of Canton, and the Committee award him a diploma, he having previously received a premium for the same horse.

To Richard Holmes, of Roxbury, the Committee award a diploma for his pair of horses, Columbus and Drew, he having previously received a premium for the same horses.

J. G. Metcalf, of South Dedham, for his pair of horses, a second premium of \$7.

Alfred Barnard, of Wrentham, for his pair of bay horses, a diploma.

J. H. Billings, of West Roxbury, for his Hamiltonian and Columbus mare, first premium, \$8.

Alden Bartlett, of Jamaica Plain, for his Morrill mare, second premium, \$6.

Daniel T. V. Huntoon, of Canton, for his chestnut horse, third premium, \$4.

Alvin S. Ellis, South Dedham, for his Drew Horse, fourth premium, \$2.

WILLIAM R. MANN, *Chairman, Class A.*

CLASS B.

There were twelve entries in this class. The following premiums and gratuities were awarded:—

William E. Coffin, of Dorchester, for his brood mare and colt, first premium, \$7.

Corodon Spaulding, of Canton, for brood mare and colt, second premium, \$5.

M. Andrews, of Walpole, for his brood mare and colt, gratuity, \$2.

Henry Goulding, of Dover, for best three years old colt, first premium, \$5.

A. K. Howe, of Dover, for second best, \$3.

S. R. Payson, of Needham, for second best 2 years old colt, \$3.

Henry Goulding, Dover, for second best one year old colt, \$3.

Joshua Fisher, of West Dedham, for his one year old colt, gratuity, \$2.

For horses of all work in carriages, no premiums were provided by the Society, which the Committee regard as an oversight, and, therefore, recommend that a premium of \$5 be awarded to E. U. Sewall, of Medfield, for his bay Vermont horse.

They would also make honorable mention of a fine mare of Morgan and English blood, exhibited by John Dean, of Dedham; also, a valuable horse of Black Hawk blood, exhibited by H. N. Wood, of Dedham.

WARREN COBB, *Chairman, Class B.*

CLASS C.

There were thirty-four entries of this class. Premiums were awarded as follows:—

E. C. Dudley, of Needham, for his stallion, Rob Roy, first premium, \$10.

The Committee also recommend a gratuity of \$25 to E. C. Dudley, for the exhibition of his fine trained stallion Mohawk, taught to obey the motion of the whip without rein.

Walter Janes, of Medfield, for his best brood mare, with foal by her side, first premium, \$7.

H. E. Bacon, of South Walpole, second premium, \$5.

J. S. Eldridge, of Canton, for his four months' colt, a diploma.

George N. Stevens, of Jamaica Plain, a diploma for his fine Black Hawk mare, which, by some mistake, was left off the Committee's book, but was properly entered, and ought to have received the first premium.

Thomas Decatur, of Jamaica Plain, for his saddle horse, first premium, \$6.

E. U. Sewall, of Medfield, for the best single pony, \$3.

Alexander Dickson, of Jamaica Plain, for his best buggy and chaise horse, first premium, \$8.

William Porter, of Randolph, second premium, \$6.

S. E. Morse, of South Dedham, third premium, \$4.

Diplomas to Phineas Frost, Jr., of Medfield ; E. N. Capen, of Dorchester ; Silas P. Mack, of Dorchester ; George N. Stevens, of Jamaica Plain.

A. C. Chandler, of Randolph, for his best pair carriage horses, first premium, \$10.

S. Eaton, of Dedham, second premium, \$7.

Diplomas to B. F. Brown, of Dorchester ; F. B. Ray, of Franklin ; W. Janes, of Medfield ; and Mr. Curtis, of Medfield.

Colts and Fillies—H. C. Perry, of Roxbury, for his best three years old colt, first premium, \$5.

C. Spalding, of Canton, second premium, \$3.

J. H. Beegan, for his best two years old colt, 1st premium, \$3.

J. W. Wason, of West Roxbury, for his second best two years old colt, second premium, \$2.

Joshua Fisher, of West Dedham, for his best one year old colt, first premium, \$3.

F. P. Denny, of Brookline, second best, second premium, \$2.

ALFRED BARNARD, *Chairman, Class C.*

CLASS D.

There were six entries in this class. The Committee award as follows :

W. S. Ware, of Needham, for his pair of horses of Rank No. 1, a diploma,—he being excluded from a premium, having previously received one on the same horses.

C. A. Bigelow, of Dover, for his pair of gray horses, first premium, \$7.

Luther Eaton, of Dedham, second premium, \$5.

SILAS G. WILLIAMS, *Chairman, Class D.*

The undersigned desires, in closing this Report, to express his obligations to the individual members of the Committee associated with him, for their hearty and prompt co-operation in the discharge of the duties imposed upon them, and to especially acknowledge the services rendered by William R. Mann, Esq., in entering and classifying the horses presented for exhibition ; his experience in former years having peculiarly fitted him for the discharge of all the labors required of the Committee.

AXEL DEARBORN, *Chairman.*

Dedham, Sept. 30, 1865.

REPORT ON PURE BRED STOCK.

Jersey Bulls—First premium not awarded.

Second premium of \$3 to Allen Brothers, of Medfield, for Jersey bull "Hero," fifteen months old.

Third premium not awarded.

Jersey Cows—First premium of \$5 to J. S. Eldridge, of Canton, for Jersey cow six years old (no name).

Second premium of \$4 to Dr. W. T. G. Morton, of Wellesley, for Jersey cow "Juno," six years old.

Third premium of \$3 to J. S. Eldridge, of Canton, for Jersey cow five years old (steel color, no name).

Jersey Heifers—First premium not awarded.

Second premium of \$2 to J. S. Eldridge, of Canton, for Jersey heifer two years old (no name, youngest of his lot).

Third premium not awarded.

Ayrshire Bulls—No premiums awarded.

Ayrshire Cows—First premium not awarded.

Second premium of \$4 to H. W. Tilton, of Walpole, for Ayrshire cow "Queen 4th," four years old.

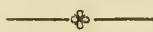
Third premium not awarded.

Ayrshire Heifers—No premiums awarded.

For the Committee,

P. C. BROOKS, JR., *Chairman.*

Dedham, Sept. 29, 1865.



REPORT ON GRADE AND NATIVE COWS.

The Committee award the following premiums:—

S. D. Bacon, of Dedham, grade six years old cow, first premium, \$5.

A. B. Endicott, of Dedham, grade cow, six years old, second premium, \$4.

James McLane, of Dedham, grade cow, five years old, third premium, \$2.

John Minchin, of Needham, for two very promising cows, a diploma.

The Committee could not make any award on the best milch cows without regard to breed, which requires a written statement, the statements, together with those for herds, having been handed

over to the Committee on pure blood stock with the entries, and were not returned, they having been lost or mislaid.

Several fine cows were entered for exhibition only, by E. Stone, of Dedham, Thomas Motley, of West Roxbury, and others.

J. W. GAY, *Chairman*.

Dedham, Sept. 29, 1865.



REPORT ON GRADE AND NATIVE HEIFERS.

Whole number of entries, eight.

One year old and under two—First premium to Edward Dean, of Dedham, \$2.

Second premium to Edward S. Rand, of Dedham, \$1.

Two years old and under three—No first premium awarded. Second to John S. Swett, of Dedham, \$2.

Third to S. R. Payson, of Needham, \$1.

EPHRAIM WILSON, *Chairman*.

Dedham, Sept. 29, 1865.



REPORT ON WORKING OXEN.

There were four competitors for drawing, and the Committee awarded the first premium to Daniel Sullivan, of Dover, \$6. Second to George O. Farrington, of Dedham, \$4. Third to Jesse Farrington, of Dedham, \$2.

EBENEZER W. TOLMAN, *Chairman*.

Dedham, Sept. 29, 1865.



REPORT ON STEERS.

Three years old and under four—Second premium to Dr. Morton, of Wellesley, \$3.

Two years old and under three—Second premium to Dr. Morton, of Wellesley, \$2.

No fat cattle entered.

HIRAM W. JONES, *Chairman*.

Dedham, Sept. 29, 1865.

REPORT ON SHEEP.

The Committee on Sheep would state that two years ago they were obliged to report, "that for several years they had come seeking sheep, but finding none." That year they were gratified by finding one noble ram on exhibition, which they hailed as a precursor of better times coming, which has this year been fully realized, there having been fifty-eight sheep entered for exhibition and premium.

Thomas Motley, Esq., of West Roxbury, presented for exhibition only, twenty, mostly grade Leicesters; but some of them were pure stock, and of very superior quality, particularly one two-year old ram was very fine. As they were for exhibition only, and not for premium, the Society are much indebted to him for his kindness in thus contributing so liberally to the show.

E. R. Andrews, Esq., of West Roxbury, presented fifteen, mostly Cotswold, among which was the celebrated ram Guelph, which took the first premium at the Concord show. Some of his Cotswold were very fine sheep. Wm. B. Bacon, of West Roxbury, presented six very fine South Down sheep. Six very fine Leicesters were presented by S. R. Payson, of Needham. Nine sheep, breed unknown, by Dr. Morton, of Wellesley, one very fine South Down ram by H. W. Tilton, of Walpole, and one very fine South Down ram, $1\frac{1}{4}$ year old, by G. Willard, of Wayland. The Committee regard it as much the finest exhibition ever made by the Society, and one which does great credit to the Society, as well as to the gentlemen who constituted it, and whose statements fully demonstrate the fact that sheep-raising may be made very profitable, even in Norfolk county.

They have awarded the premiums as follows:—

To Wm. B. Bacon, of West Roxbury, for his fine lot of South Down sheep, the first premium, \$8.

To E. R. Andrews, of West Roxbury, for his Cotswold sheep, the second premium, \$6.

To E. R. Andrews, of West Roxbury, for his Cotswold lambs, second premium, \$3.

To E. R. Andrews, of West Roxbury, for his fine Cotswold ram Guelph, the first premium, \$5.

To S. R. Payson, of Needham, for his very fine Leicester ram, the second premium of \$3.

Hoping that the same liberal spirit which has this year animated the wool-growers of Norfolk county may continue to increase until it attains that rank which its importance demands, is the sincere wish of your Committee.

Respectfully submitted,

CHARLES BRECK, *Chairman.*

REPORT ON SWINE.

Whole number of entries, twenty-three.

Boars—First premium to S. R. Payson, of Wellesley, breed half Chester County and half Suffolk, \$6.

Second premium to S. Knapp & Sons, of Wellesley, breed mixed, \$4.

Sows—First premium to S. Knapp & Sons, of Wellesley, breed mixed, \$6.

Second premium to S. R. Payson, of Wellesley, breed mixed, \$4.

Weaned Pigs—First premium to S. Knapp & Sons, of Wellesley, breed mixed, \$6.

Second premium to W. S. Ware, of Needham, breed Norfolk County and India, \$4.

Fat Hogs—First premium to Thomas Beless, of Needham, breed erroneously named Essex County, \$6.

Second premium to S. Knapp & Sons, of Wellesley, breed mixed, \$4.

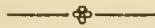
Largest and best collection contributed by one person, first premium to S. Knapp & Sons, of Wellesley, \$8.

Second premium to S. R. Payson, of Wellesley, \$4.

The boar and two sows contributed by W. S. Ware, of Needham, were fine animals, and we recommend that he be paid the sum of \$3 as compensation for travel.

LUCIUS CLAPP, *Chairman.*

Dedham, Sept. 29, 1865.



REPORT ON POULTRY.

Shanghai—First premium to M. J. Ellis, of Walpole, \$2.

Second premium to F. Alden, of Dedham, \$1.

Speckled Dorkings—First premium to Eben Wight, of Dedham, \$2.

Bramah—First premium to W. Mercer, of Dedham, \$2.

Second premium to C. L. Gove, of Dedham, \$1, and hoping next year to have a better coop.

Black Spanish—Second premium to C. B. Ward, of Dedham, \$1.

Seabright Bantams—First premium to H. E. Pond, of Franklin, \$2.

Second premium to James Cartwright, of Wellesley, \$1.

H. E. Pond, of Franklin, for a coop of fancy fowls, \$2.

Turkeys.—First premium to Wm. Garret, of Milton, \$3.

Second premium to Lemuel Kingsbury, of Needham, \$2.

Geese—First premium to Wm. Garret, of Milton, \$3.

Ducks—First premium to S. R. Payson, of Needham, \$3.
Second premium to W. Mercer, of Dedham, \$2.

Ruffled-neck Pigeons—First premium to A. Dean, of Dedham, \$2.

Two coops of fowls contributed by David Tyler, of Dedham, (Dorking and Shanghai,) were very handsome.

A splendid coop of fowls, contributed by H. E. Pond, of Franklin, attracted much attention.

FRANCIS ALDEN, *for the Committee.*

Dedham, Sept. 29, 1865.



REPORT ON PLOWING.

DOUBLE OX TEAMS.

There were four entries for premiums; two subsoil plows, and two common plows.

Subsoil Plow—First premium of \$10 to George O. Farrington, of Dedham.

Second premium of \$8, to Henry Goulding, of Dover.

Common Plow—Second premium of \$8, to Wm. Fales, of Dedham.

Third premium of \$6, to Jesse Farrington, of Dedham.

NATHAN LONGFELLOW, <i>Needham,</i>	} <i>Committee.</i>
WILLARD P. CLARK, <i>Medway,</i>	
ROBERT PORTER, <i>Stoughton,</i>	

Dedham, Sept. 29, 1865.

DOUBLE HORSE TEAMS.

The Committee on Plowing with double horse teams (Josiah H. Carter and John E. Weatherbee present only) report that there were four teams of this class entered, and award to Messrs. Bigelow & Sawin, of Dover, with their three horses and Ames's No. 73½ plow, the first premium of \$10.

To H. & A. Blackman, of Needham, with three horses and Ames's P. & M. plow, the second premium of \$8.

To Wm. F. Lynch & Co., of Dedham, your Committee did not award a premium, for various reasons, one of which was, they did not plow so deep by a full inch as our regulations required.

SOD AND SUBSOIL PLOWING.

Mr. Wm. S. Ware's team was the only one that came under our charge. He did his work well, aye, very well. He turned in the glebe and brought up the subsoil at least nine inches from the surface, leaving not a spear of grass to be seen. It gave us pleasure to see how even in depth and width and straight he cut his furrows. His plowing would compare favorably with that of the colored yeomanry of the South. We therefore award to Wm. S. Ware, of Needham, the first premium, \$10.

It is but just to say that Mr. Ware used Messrs. Whittemore, Belcher & Co.'s No. 50 Michigan Plow, and we would recommend it favorably to the farmers of Norfolk County.

For the Committee,

JOSIAH H. CARTER.

Dedham, Sept. 29, 1865.

SINGLE HORSE TEAMS.

The Committee report but two entries in this department, and award the following premiums:—

First premium, \$6, to Patrick McNamara, of Dover, with No. 4 Doe plow.

Second premium, \$4, to C. W. Upham, of Needham, with S. Mead's plow.

A. T. MESERVE, *Chairman.*

Dedham, Sept. 29, 1865.

SINGLE OX TEAMS.

The Committee on single ox teams report but one entry; that, the well-known and well-trained team of Daniel Sullivan, of Dover, using the Doe plow E 4 by Whittemore & Belcher. Your Committee think that but little can be added to his well-established reputation as a plowman, the work being done in his usual skilful and workman-like manner, in the opinion of your Committee, as well if not better than any performed on the ground, and were unanimous in awarding him the first premium of six dollars. Time occupied in plowing, forty minutes.

LEMUEL BILLINGS, *Chairman.*

Dedham, Sept. 29, 1865.

REPORT ON SEEDS, &c.

Your Committee regret very much the misunderstanding of premiums on grains, as, with few exceptions, no corn was entered for premium.

For the best forty ears we award the first premium of \$2 to Robert Mansfield, of Needham, for his eight-rowed yellow improved corn.

The second premium of \$1 to Eliphalet Sias, of Milton, for his Webster corn.

To John Sias, of Milton, a premium of \$1, for a peck of winter wheat, it being a part of the produce from a few ounces of seed sent him from the Patent Office. Numerous varieties of sweet and popping corn, and also several parcels of field corn were shown, that told well for the exhibitors, but were not proper entries for premium. We noticed fifteen boxes of seeds from C. E. C. Breck, among which were onion, turnip, tomato, peas, beans, squashes and melons. We recommend him a gratuity of two dollars.

In conclusion, your Committee earnestly recommend, in future, the offer of liberal premiums on grain crops, to induce the "Agriculturists" to join their endeavors to render the exhibition "worthy of the patronage of the Commonwealth, and creditable to themselves."

For the Committee,

ROBERT MANSFIELD, *Chairman.*

Dedham, Sept. 29, 1865.



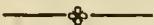
REPORT ON NATIVE WINES, &c.

For native wine contributed by N. B. Wilmarth, of South Walpole, first premium, \$2.

For the Committee,

THEODORE DUNN, *Chairman.*

Dedham, Sept. 29, 1865.



REPORT ON AGRICULTURAL IMPLEMENTS.

The Committee award the following premiums viz. :—

To Joel Nourse, agent, of Boston, for best collection of agricultural implements, first premium, \$6.

To George F. Shaw, of West Roxbury, for corn sheller, a gratuity of \$3 and a diploma.

To S. Wales, of Boston, for patent removable window sash, a diploma.

For the Committee,

S. W. RICHARDSON, *Chairman.*

Dedham, Sept. 29, 1865.



REPORT ON LEATHER WORK.

To T. W. Robinson, of Jamaica Plain, for best single harness, \$2.

To Jos. Cheney, of East Walpole, for single harness, a diploma.

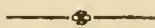
To Josiah Reed, of South Weymouth, for best specimen of calf boots, first premium of \$3 and a diploma.

To John Mann, of South Walpole, for the best kip skin boots, a diploma.

For the Committee,

JOSEPH DAY, *Chairman.*

Dedham, Sept. 29, 1865.



REPORT ON STRAW WORK.

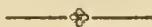
To L. G. Baker, of West Dedham, for best specimen of straw braid, first premium, \$2.

Second premium to Samuel Gilbert, of Walpole, \$1.

For the Committee,

CHARLES HAMANT, *Chairman.*

Dedham, Sept. 29, 1865.



REPORT ON METALS AND WOOD.

To L. A. Tolman, of West Roxbury, a diploma, for five elegant wood and gilt picture frames, manufactured and contributed by him.

For the Committee,

CHARLES BRECK, *Chairman.*

Dedham, Sept. 29, 1865.



REPORT ON CARRIAGES, WAGONS, &c.

For best open buggy, to Alexander Dickson, of Jamaica Plain, \$5.

Best Beach Wagon, S. E. Morse, of South Dedham, \$4.
 For Milk Wagon, to S. E. Morse, of South Dedham, \$2.
 To S. E. Morse, of South Dedham, for open buggy, second
 premium, \$1.

SANFORD CARROLL, Dedham, }
 T. L. BARNEY, Medfield, } *Committee.*

Dedham, Sept. 29, 1865.



REPORT ON INSECTS AND BIRDS.

Three cases of Birds and three of Insects were presented. They were all the product of Norfolk County, and though they contained but a small number of the species that might be obtained in it, they proved that it is by no means deficient in objects of interest to the naturalist. But few persons seem to be aware of the countless forms of beauty which flit, by day and night, over our fields and through our forests. Still fewer ever think of the influence these denizens of the air have upon the prospects of the agriculturist. But when the farmer finds all his labor wasted, because of the undue prevalence of some insect family, he is obliged to own that a knowledge of their habits is of the utmost importance. To increase such information among those who cultivate the soil, is certainly an object worthy the attention of every agricultural society.

There being but one premium at the disposal of your Committee, they were unanimous in awarding it to Mr. George E. Brown, of Dedham, who presented two cases of birds, and a rare collection of moths and butterflies.

Mr. Henry F. Colburn, of West Roxbury, for a beautiful case of birds, is entitled to the diploma of the Society. Also a diploma is awarded to master Theodore S. Slafter, for a cabinet containing over two hundred insects.

Your Committee cannot, in justice, omit to commend the example of Mrs. Hannah P. McIntosh, of Needham, who reported her experiments in destroying insects in her orchard and garden. She exhibited several bottles filled with the remains of thousands of the silly marauders, who fell victims to alluring sweets.

C. SLAFTER, *Chairman.*

Dedham, Dec. 1, 1865.

REPORT ON LADIES' WORK.

Whole number of contributors, forty-two.

The Committee award the following premiums:—

Miss M. A. Wilmarth, of Sharon, embroidered slippers, a gratuity of 50 cents.

Miss L. A. Clapp, of Dorchester, wax flowers, 50 cents and diploma.

Miss A. A. Barnes, of Boston, hair wreath, the Society's diploma.

Mrs. F. D. Ellis, of West Roxbury, an elaborately pieced quilt, the Society's diploma.

Katy Connor, of Dedham, four chair tidies, 75 cents.

A. G. Everett, Wrentham, infant skirt and socks, 50 cents.

Miss O'Neal, of West Roxbury, bead mat, \$1.

Miss S. A. French, Braintree, embroidery, \$2.

Miss E. J. Baker, of Dedham, mats and chair tidy, 25 cents.

Mrs. Wm. Paul, of Dedham, union quilt, 1895 pieces, diploma.

Mrs. B. F. Neal, of Medfield, two chair covers, 50 cents.

Miss Patterson, of Dedham, cozie for steeping tea, (bead work and embroidery,) \$1.50.

Miss M. Mercer, of Dedham, (bead work and embroidery,) needle case neatly made, \$2 and diploma.

Mrs. R. Mansfield, Wellesley, straw mat made from tips of bonnets, 25 cents.

Carrie E. Mills, of Needham, Afghan, \$2.

Carrie E. Mills, of Needham, lamp mats, cushion and watch-cases, \$1.

Mrs. O. Baker, of West Dedham, still remembers our table. We award a diploma for book marks and cushions and thread cases.

Miss Mary Shumway, of Dedham, for chemise crochet yoke, very neatly executed, \$2 and diploma.

Henry Hunt, of Dorchester, dried flowers, a diploma.

Mrs. Wm. Gay, South Dedham, sofa cushion, 50 cents.

Miss Urry, of Dedham, crochet tidies, 50 cents.

Miss S. M. Stuart, of Fairmount, two paintings, a diploma and \$3. The paintings were very beautiful.

Mrs. F. B. Ray, of Franklin, for Afghan, a diploma.

Mrs. Richard Bates, of Dedham, two mats and toilet cushion, 25 cents.

Mrs. Catherine Smith, Dedham, embroidery and foot cushion, diploma and \$1.

Mrs. R. Mansfield, Wellesley, shell frame, wreath of bead work, \$1.

Mrs. R. Mansfield, Wellesley, monument of glass and stone, \$1 and diploma.

Mrs. E. H. Tyler, Medway, embroidered blanket, \$1.

Miss Belle H. Boyd, Medway, chemise yoke, 50 cents.

Miss Finneven, Medway, cambric collar, 25 cents.

There were not so many articles contributed as usual, but the articles were superior, and displayed much skill and industry. We would urge increased interest in the articles of plain sewing and knitting. We appeal to you, ladies of the county, to fill the tables of the Society, which offers every inducement it can, consistently with the by-laws, to encourage contributions to this department. We hope another year to see the tables filled, now that our sympathies and hands are not so much occupied with our brothers on the battle-field. Let us show our gratitude for the return of peace by encouraging our brothers the farmers, and render this part of our exhibition attractive.

We wish to thank Mr. E. Stone for his beautiful basket of shells and mosses and other articles lent us for the decoration of our tables.

For the Committee,

MRS. RICHARD RICHARDSON.

Dedham, Sept. 29, 1865.

RECAPITULATION OF PREMIUMS

AWARDED BY THE

NORFOLK AGRICULTURAL SOCIETY,

FOR 1865.

ESSAYS.		PURE BRED STOCK.	
E. A. Samuels,	\$10.00	J. S. Eldridge,	\$10.00
EXPERIMENTS ON MANURES.		W. T. G. Morton,	4.00
Charles Breck,	\$25.00	H. W. Tilton,	4.00
FARMS.		Allen Brothers,	3.00
A. W. Cheever,	\$25.00	GRADE AND NATIVE COWS.	
UNDERDRAINING LAND.		S. D. Bacon,	\$5.00
A. W. Cheever,	\$10.00	A. B. Endicott,	4.00
HORSES.		J. McLane,	2.00
E. C. Dudley,	\$35.00	GRADE AND NATIVE HEIFERS.	
A. C. Chandler,	10.00	Edward Dean,	\$2.00
J. H. Billings,	8.00	John S. Swett,	2.00
Corodon Spaulding,	8.00	E. S. Rand, Jr.,	1.00
Henry Goulding,	8.00	S. R. Payson,	1.00
E. W. Sewall,	8.00	WORKING OXEN.	
Alexander Dickson,	8.00	Daniel Sullivan,	\$6.00
J. G. Metealf,	7.00	George O. Farrington,	4.00
W. E. Coffin,	7.00	Jesse Farrington,	2.00
Walter Janes,	7.00	STEERS.	
S. Eaton,	7.00	W. T. G. Morton,	\$5.00
C. A. Bigelow,	7.00	SHEEP.	
Alden Bartlett,	6.00	E. R. Andrews,	\$14.00
Thomas Decatur,	6.00	W. B. Bacon,	8.00
William Porter,	6.00	S. R. Payson,	3.00
Joshua Fisher,	5.00	SWINE.	
H. E. Bacon,	5.00	S. Knapp & Sons,	\$28.00
H. C. Perry,	5.00	S. R. Payson,	14.00
Luther Eaton,	5.00	W. S. Ware,	7.00
D. T. V. Huntoon,	4.00	Thomas Beless,	6.00
S. E. Morse,	4.00	POULTRY.	
A. K. Howe,	3.00	William Garrett,	\$6.00
S. R. Payson,	3.00	W. Mercer,	4.00
J. H. Began,	3.00	H. E. Pond,	4.00
A. S. Ellis,	2.00		
M. Andrews,	2.00		
J. W. Wason,	2.00		
F. P. Denny,	2.00		

TREASURER'S REPORT.



C. C. CHURCHILL, *Treasurer, in account with Norfolk Agricultural Society.*

	Dr.
Balance in Treasury, Nov. 30, 1864,	\$35.25
Cash received from new members,	87.00
“ “ “ Commonwealth,	600.00
“ “ “ net proceeds of Exhibition of 1865,	419.52
“ “ for rent of land,	30.00
	\$1,171.77



	CONTRA.	Cr.
Cash paid incidental expenses,		\$50.91
“ premiums,		503.75
“ salary of Recording Secretary,		50.00
“ “ of Treasurer,		50.00
“ interest,		506.61
Cash in Treasury,		10.50
		\$1,171.77

C. C. CHURCHILL, *Treasurer.*

Dedham, Nov. 30, 1865.

PROCEEDINGS
ON THE OCCASION OF THE
SEVENTEENTH ANNIVERSARY
OF THE
NORFOLK AGRICULTURAL SOCIETY,
Thursday and Friday, September 28 & 29, 1865.

The Seventeenth Annual Exhibition of the Norfolk Agricultural Society was held at Dedham on Thursday and Friday, September 28th and 29th. Although the remarkable and unprecedented drought kept away many contributors and spectators, yet the exhibition was one of the best ever given by the Society, and the receipts were larger than at any previous exhibition.

The show of Horses was large, many of the animals exhibiting marks of great excellence. The leading feature of this department was the exhibition of the Norman Mares and Stallions, which attracted great attention. The exhibition of Stock was very fair, embracing contributions from the best breeders in the county, prominent among which were those of Messrs. Eldridge, of Canton, Motley, of West Roxbury, Morton, of Needham, Allen Brothers, of Medfield, Stone, of Dedham, and Tilton, of Walpole.

The exhibition of Swine was the largest and best ever made by the Society, and, as usual, *Need-ham* bore off the prize. The Messrs. Knapp, of Wellesley, filled eight pens with fine specimens, and Mr. Payson, of the same locality, made a very large contribution. Of Sheep, there were a large number of superior animals, prominent among which were those of E. R. Andrews, of West Roxbury, including the ram "Guelph," which took the "sweep-stake" premium for long-wooled sheep at the late New England Fair at Concord, N. H., W. B. Bacon, Thomas Motley, West Roxbury, S. R. Payson, Needham. The Poultry were not as numerous as on former occasions, the chief feature of the department

being a splendid coop of several different kinds of fowls, entered by H. E. Pond, of Franklin, which attracted much attention.

In the Hall, the display was of more than average excellence. The ladies' table was well supplied with useful and ornamental articles. Elegant contributions were made to the Flower stand by Miss Watt, of West Roxbury, George Craft, of Brookline, Mrs. Mackintosh and Mrs. Lyon, of Needham, Macy Randall, of Sharon, and John H. Adams, of Milton. Of Fruit there was a good display, considering the unfavorable condition of the season. Marshall P. Wilder, of Dorchester, exhibited 105 varieties of Pears, and Frederick Clap, of Dorchester, contributed thirty-two varieties of Apples, and 16 kinds of Pears. Fine displays were made by A. D. Weld, J. H. Billings, C. G. Mackintosh, and J. W. Page, of West Roxbury. Of Grapes, the finest display was made by R. W. Turner, of Randolph. Marshall P. Wilder and Baker, of Dorchester, exhibited fine specimens of Rogers's Hybrids. The display of Vegetables was of unusual excellence. John Sias, of Milton, exhibited eighty-five varieties, C. E. C. Breck, of Milton, thirty-five, J. P. Bush, of Milton, J. Cartwright, of Needham, nineteen, and E. U. Sewall, of Medfield, eight varieties. Mr. Sewall also entered a Tomato vine, with a bushel of fruit upon it, the result of a single seed from the Patent Office.

Of Agricultural Implements there was a large display from Joel Nourse, of Boston, and other manufacturers; and there were several excellent vehicles from the well-known manufactory of S. E. Morse, of South Dedham.

Messrs. Josiah Reed, of South Weymouth, and John Mann, of South Walpole, exhibited excellent specimens of Boots manufactured by them.

Thursday, the first day, was mainly devoted to the entering and examination of articles. At 2 o'clock, P. M., the Plowing Match took place on a lot of land belonging to the heirs of the late J. F. Richards, on High Street. There were eight competitors, and the work was well done, considering the dryness of the ground and the oppressive heat of the day. The Drawing Match took place on the grounds of the Society at 3 o'clock. An exhibition of Mr. Dudley's trained horse Rob Roy upon the track, closed the performances of the day.

On Friday morning, the first exercise was the exhibition of Horses upon the track, which, by the untiring exertions of the Committee, had been got in fair condition, the whole of the preceding night having been occupied by a large force of men in watering and rolling it. Mr. Dudley gave another exhibition of his trained horse, and an opportunity was afforded for the display of the Norman Mares and Stallions.

At 12 o'clock, M., a procession was formed on the grounds under the direction of Col. John W. Thomas, Sheriff of the county and Chief Marshal of the day, assisted by his Aids, Messrs. C. G. Mackintosh and Thomas Decatur, of West Roxbury, J. R. Gay, Hiram Gay and Nathaniel Wales, of Stoughton. Preceded by the Weymouth Band, which furnished splendid music during the day, the procession marched to the upper hall, where, after a blessing had been invoked by Rev. Jacob Roberts, of East Medway, Chaplain of the day, the company partook of an excellent collation, which had been provided under the direction of the Committee of Arrangements.

At the conclusion of the dinner, Col. Wilder introduced the orator of the occasion, Rev. James Freeman Clarke, D. D., of West Roxbury, whose admirable and eloquent address will be found on pages 5 and 17 of this volume.

At the conclusion of the Address, Rev. C. C. Sewall, of Medfield, offered the following sentiment:—

“Welcome, thrice welcome, to him who has come to grace our festival to-day with his inspiring presence and his genial heart.”

The Band played “Auld Lang Syne,” the company standing, and the President, Col. Wilder, who appeared on the platform for the first time after a severe illness of two years, rose to address the assembly. Col. Wilder was received with loud and continued cheers, after which he proceeded to address the Society as follows:—

“Thanks! thanks! a thousand thanks for this kind reception!

“Once more, friends and fellow-citizens, through the kind Providence of a merciful God, and after an absence of two years from this chair, I am here to participate in the privileges and pleasures of this occasion, and to rejoice with you on the success of the present exhibition, which, I under-

stand, in the judgment of competent persons, is one of the best ever held by the Society.

“By the terms of our Constitution, my official duties will close with the present year. Having held the office of President since the organization of the Society, sixteen years, I have not the presumption to believe that I ought to occupy the chair for a longer time to the exclusion of others equally well qualified for the duties of the office. For several years I have accepted the office at the earnest solicitation of friends, and in the hope that I might extend the influence and increase the utility of the Society. To you, my fellow-associates, who have shared with me the discharge of official duty, and to every member of the Society, and especially to the ladies, I tender my heartfelt and grateful acknowledgments for the countenance and support given to my administration.

“The intelligence and zeal evinced by the founders of the Society were sure precursors of success and prosperity. And who can forget the brilliancy of the assembly on the first Exhibition of the Society? On that occasion we were honored by the presence of Daniel Webster, Edward Everett, Horace Mann, Charles Francis Adams, the elder and junior Quincy, Robert C. Winthrop, Governors Briggs, Lincoln, Reed, Hill, and many other distinguished guests. May the future success of this Society equal their fondest anticipations! It cannot possibly exceed my own desires for its prosperity.

“If the Society has not accomplished all that was anticipated, it surely has been the means of developing the resources of our county, and exciting a spirit of emulation in the establishment of new Societies in our Commonwealth. The Norfolk Society was the first to purchase lands and erect a Hall for its accommodation—a practice now generally adopted. From this Society emanated the establishment of the Massachusetts Board of Agriculture. From this Society proceeded the first general efforts for the advancement of agricultural education, and the establishment of the Massachusetts Agricultural College, and with diffidence may I not also add, from the same source originated the idea of the United States Agricultural Society—an institution which, until the breaking out of the late rebellion, was exerting a most happy influence on the agricultural and political condition of our country.

“When I last addressed you, a dark cloud overshadowed the horizon of our beloved country, but, thanks to a merciful Providence, it is retiring, gilded with the bow of promise, and radiant with the hopes of a fairer and brighter to-morrow. Terrible as this crisis has been, we doubt not that the progress of our beloved country is onward and upward in all that tends to the development of freedom, civilization and human happiness, when our fields shall no longer be plowed with the deadly cannon, or fertilized with the blood of our brethren.

“And now that secession and slavery are dead, and the bonds of our glorious Union cemented with fire and blood, and consecrated with incense

and prayer, we can realize better than ever the import and force of those memorable words :

‘ *Liberty and Union, one and inseparable, now and forever !* ’

“ O yes, my friends, a Union with Empire, Power, Wealth, and Immortal renown !

‘ A Union of lakes and lands,
A Union that none can sever,
A Union of hearts and hands,
Around the flag of our Union forever.’ ”

Loud applause followed the conclusion of the speech.

The following Hymn, written for the occasion by Mr. F. B. Sanborn, of Concord, was sung by the audience to the tune of Old Hundred, accompanied by the Band :—

No more we reap the bloody field
Where War his horrid furrow tears ;
But harmless fruit our labors yield,
And earth, unstained, her burden bears.

On Northern hills the ripened ear
Bursts early through its husky sheath ;
Betimes the bounty of the year
Has graced the vales and plains beneath.

Thus kindly Nature hastes apace
To hide the mournful Past from view ;
Can Sorrow keep her ancient place
When every season blossoms new ?

And never season smiled so fair
As this that sees our country free ;
For mercies asked in anxious prayer
Shall thanks arise, O God, to Thee !

Thanks for the harvest of our hands,
And every skilful labor wrought—
But solemn praise from peaceful lands
For nobler gifts Thy love hath brought !

For now shall Freemen guide the plow,
The hammer wield, the shuttle ply,
And Toil shall be the sovereign now,
Where'er our conquering Eagles fly.

The President proposed the sentiment,

“ *The Commonwealth of Massachusetts ;* ”

To which it was expected that Governor Andrew would respond, but his absence from the State prevented his attendance. In the absence of Ex-Governor Boutwell, who was also unavoidably absent, the Band gave an appropriate response.

A sentiment complimentary to Commodore Winslow, who occupied a seat upon the platform, was received with much enthusiasm, and that gallant officer responded in a neat and appropriate speech, in which he made some pleasant allusions to the school days passed by him in Dedham.

Brief speeches in response to sentiments were made by the Orator and Chaplain, and the proceedings at the Hall concluded at half-past 2 o'clock.

The exhibition and trial of horses on the track took place at 2 o'clock. The principal trial of speed took place between the fine Hambletonian Columbus grey, owned by Joseph H. Billings, of West Roxbury, the bay Morrill mare of Alden Bartlett, of Jamaica Plain, and J. Farnum's brown gelding Christy. These three trotted to harness in the first trial, mile heats, best two in three, the grey winning in two straight heats. Time, 2.52.

The result of the Exhibition was very gratifying. Probably no show ever made by the Society was attended with severer labor on the part of the Committee of Arrangements, or involved greater discomfort both to contributors and spectators. The unprecedented drought and the oppressive heat of the weather kept away much stock that would otherwise have been present, and greatly increased the risk and trouble of that which came in spite of dust and heat. It was only by the greatest exertion that the horse track could be placed in decent condition. But in spite of all these obstacles, the Show was a decided success. The receipts were upwards of \$2100, a sum larger by several hundred dollars than has ever before been realized at any Exhibition.

One of the most agreeable features of the day, and one that afforded unusual satisfaction, was the inspiring presence of the honored President, Hon. Marshall P. Wilder, who, after an enforced absence on account of sickness for two years, again resumed his place at the head of the Society. The enthusiastic manner in which he was every where received testified most unmistakably to the strong hold which he had gained upon the esteem and affection of the people, and to the sincere pleasure with which they welcomed him back to active participation in the duties and responsibilities of pursuits which he had done so much to dignify and adorn.

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1865.

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—
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OTIS CARY, of *Foxboro'*,

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THE
SEVENTEENTH ANNUAL
CATTLE SHOW AND FAIR

OF THE

Norfolk Agricultural Society

WILL BE HOLDEN

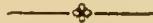
AT DEDHAM,

ON

Thursday and Friday, Sept. 28 & 29, 1865.



☞ The Trustees invite the Agriculturists, Mechanics, Manufacturers, Horticulturists, and Ladies of the County, to join their endeavors to render it worthy of the patronage of the Commonwealth, and creditable to themselves.



BOSTON:
J. M. HEWES, PRINTER, 65 CORNHILL.
1865.

Norfolk Agricultural Society.

[SUCCESSFUL COMPETITORS MAY RECEIVE THEIR PREMIUMS IN PLATE
OR MONEY, AT THEIR OPTION.]

LIST OF PREMIUMS FOR THE YEAR 1865.

FARMS.

EXPERIMENTS AND IMPROVEMENTS THEREON.

PROGRESSIVE HUSBANDRY.

For the best conducted and most improved Farm during five consecutive years,—of which the occupant shall present annually to the Trustees a satisfactory account of the whole management of it,—of the crops produced, of the improvement made and of the stock kept,—a premium of *One Hundred Dollars*, to be paid at the end of the term.

NOTE. Whenever any farm shall be entered for this premium, the Secretary of the Society shall give notice thereof to the Committee on Progressive Husbandry annually, who will be required to examine the farm, and certify the general management of it.

MANAGEMENT AND IMPROVEMENT OF FARMS.

For the best managed Farm, taking into view the condition of the buildings, fences and orchards, the cultivation of the lands, the care and management of the stock, the quantity, quality and preservation of the crops, the expenses incurred and the improvements made during the year, with a detailed statement of the whole to be rendered on or before November 15th, \$25 ; second best, \$20.

Competitors must give notice of their intention to the Secretary, on or before June 15th. Farms entered for premium will be viewed by the Supervisory Committee, as they shall deem expedient, between June 20th and September 20th. Any farm offered for inspection, without being entered for a premium, will be viewed and reported by the Committee, if seasonable application be made to the Chairman.

IMPROVING MEADOW AND SWAMP LANDS.

For the best experiment in reclaiming wet meadow or swamp lands, by drainage or otherwise, on not less than one-half acre,

with statement, in detail, of the previous condition and produce of the land, the method and expense of the experiment, and the produce at the present time, \$8; second best, \$4.

UNDER-DRAINING LAND.

For the best experiment in under-draining land, not less than forty square rods, regard being had to the character of the soil and subsoil, the method, extent, expense and result of the experiment, \$10; second best, \$5; third best, French's Drainage.

OLD PASTURE AND UNIMPROVED LANDS.

For the best conducted experiment in renovating and improving old pasture lands and lands hitherto lying waste, on not less than one acre, with or without plowing, with a statement of the previous condition of the land, and of the method, expense, and result of the experiment, \$8; second best, \$5; third best, Flint's Dairy.

TURNING IN CROPS AS MANURE.

For the most satisfactory experiment of turning in crops as a manure, either *green or dry*, on not less than *one-half acre of land*, a detailed account of the whole process, expense and result to be given in writing, \$6.

EXPERIMENTS IN SUBSOIL PLOWING.

For the best experiment, on not less than one acre of land, of the effect of subsoil plowing, to be determined by the difference in the value of crops, raised on equal portions of equally manured land, of like quality, one half of which having been subsoil plowed, the other half plowed in the usual manner,—statements of the depth of plowing, in each instance, together with all the particulars of culture, required, \$8; second best, Burr's Vegetables.

COMPARATIVE VALUE OF CROPS AS FOOD FOR CATTLE.

For the best experiment upon a stock of cattle, not less than four in number, to ascertain the relative value of the different kinds of fodder used, with a statement in detail of the quantity and value of the same, as compared with English hay, the experiment to be made in the three winter months, \$12; second best, Stephens' Farmer's Guide.

FEEDING OF MILCH COWS.

For the best experiment in the feeding of milch cows by soiling, stall feeding or pasturing, with a detailed statement of the com-

parative advantages of either method, regard being had to the saving of manure, comfort of the animals and produce of the dairy, \$12; second best, \$8; third best, Flint's Dairy.

FATTENING CATTLE.

For the best experiment in *feeding* cattle, with a statement in detail of the process, expense and result, \$5; second best, Flint's Grasses.

FATTENING SWINE.

For the best experiment in *feeding* swine, with a statement in detail of the process and result, \$5; second best, Flint's Dairy.

HAY.

For the largest quantity and best quality of English hay per acre, produced on any farm in the County, regard being had to the character of the soil, the mode and cost of cultivation and making, \$5; second best, Flint's Treatise on Grasses.

CRANBERRY VINES.

For the best experiment in transplanting Cranberry Vines, or in growing them from seed, on not less than one-eighth of an acre which shall be in the most flourishing and productive state, on the 10th September, \$6; second best, \$3; third best, Eastwood's Cranberry Culture.

Competitors will be required to give an exact statement of the process, expense, and result of the experiment.



GRAIN AND ROOT CROPS.

GRAIN CROPS.

For the best experiment in raising *Wheat*, Harris' Treatise on Insects; second best, Flint's Grasses.

For the best experiment in raising *Rye*, *Oats*, or *Barley*, each Harris' Treatise on Insects; second best, each, Flint's Grasses.

For the best experiment in raising *Indian Corn*, Harris' Treatise on Insects; second best, Flint's Dairy.

For the best experiment in raising *White Beans*, *Millet*, or *Buckwheat*, each, Bridgeman's Young Gardener's Assistant.

Samples of each kind of Grain, not less than a half-bushel, properly labelled, must be exhibited at the Show. The quantity of the crop to be ascertained by weight, as follows:—Corn and Rye, 56 pounds each to the bushel; Barley and Buckwheat, 48 pounds each; Oats, 32 pounds; Wheat, 60 pounds.

ROOT CROPS.

For the best experiment in raising *Potatoes*, Burr's Vegetables ; second best, McMahon's American Gardener.

For the best experiment in raising *Sugar Beets*, *Carrots*, *Parsnips*, *Mangold-Wurtzel*, or *Ruta Baga*, each, Burr's Vegetables ; second best, each, McMahon's American Gardener.

For the best experiment in raising *Onions*, Burr's Vegetables ; second best, McMahon's American Gardener.

For the best experiment in raising *Flat Turnips*, Burr's Vegetables ; second best, McMahon's American Gardener.

Samples of Roots, not less than one bushel, properly labelled, must be exhibited at the Show. The quantity of the crops, which must be on not less than one quarter of an acre, shall be ascertained by the weight of the Roots—freed from dirt and without tops—as follows :—Potatoes, Sugar Beets, Mangold-Wurtzel and Ruta Bagas, 60 pounds ; Carrots, 55 pounds ; Onions and Flat Turnips, 50 pounds ; Parsnips, 45 pounds to the bushel.

Experiments will be viewed by the Committee between July 1st and September 20th.

Claimants for premiums must render to the Chairman of the Committee, on or before November 15th, a written statement of the character and previous condition of the land, its present value, and the taxes upon it ; the kind, quantity and value of manure used ; the quantity and cost of seed sown ; the labor and expense of cultivating and harvesting the crop, and the quantity, quality and value of the crop. In awarding premiums, regard will be had to all these circumstances, and to the area of the ground in cultivation.

VEGETABLES.

For the best experiment in raising *Squashes*—one half dozen of each variety to be exhibited at the Show—Burr's Vegetables ; second best, Thomas' Rural Affairs.

For the best experiment in raising *Cabbages*—not less than six heads to be exhibited at the Show—Burr's Vegetables ; second best, Thomas' Rural Affairs.

MIXED CROPS.

For the best experiment in cultivating mixed crops of Grain and Vegetables, in alternate portions, or of different roots, in alternate rows, Harris' Treatise on Insects ; second best, Burr's Vegetables ; third best, French's Drainage. The experiment must be made on not less than half an acre of land, and a detailed statement of the mode of culture, expense and product must be rendered on or before November 15th.

PLOWING MATCH.

DOUBLE OX TEAMS. *With Sod and Subsoil Plow.* For best performance in plowing *sward* land, at least one-eighth of an acre, eight inches in depth, \$10; second best, \$8; third best, \$6.

With any other Plow. Same conditions. Best, \$10; second best, \$8; third best, \$6.

DOUBLE HORSE TEAMS. *With Sod and Subsoil Plow.* Same conditions. Best, \$10; second best, \$8; third best, \$6.

With any other Plow. Same conditions. Best, \$10; second best, \$8; third best, \$6.

SINGLE OX TEAMS. *With any Plow.* For the best performance in Plowing *Sward Land*, at least one-eighth of an acre, six inches in depth, within an hour, \$6; second best, \$4; third best, \$2.

SINGLE HORSE TEAMS. Same conditions. Best, \$6; second best, \$4; third best, \$2.

NOTE. A **DOUBLE TEAM** will consist of two yokes of oxen, with or without a driver; or a team of one yoke of oxen and a horse, with or without a driver. **SINGLE TEAM**, one yoke of oxen or one pair of horses, without a driver. Competitors must own their teams and plows, and enter the same in their own names. Plows must be held and teams driven by their owners, or by persons stably in their employ. Notice to compete must be given to the Secretary on or before the Wednesday previous to the Exhibition. In awarding premiums, one hour will be allowed for the performance of the work, regard being had to the width and depth of the furrow slice, and the evenness, ease and quiet with which the work is performed.



ARBORICULTURE.

FRUIT TREES.

APPLE ORCHARD. For the best Apple Orchard, of not less than *fifty trees*, which shall have been set out at least five years, and which shall be in the best and most thriving condition in 1865, \$8; second best, Downing's Fruits and Fruit Trees.

PEAR TREES. For the best engrafted or budded standard Pear Trees, set out at least five years, and which shall be in the most thriving condition in the autumn of 1865, not less than *twenty-five trees*, \$8; second best, Downing's Fruits and Fruit Trees.

For the best engrafted or budded Pear Trees on Quince roots, with same conditions, and not less than *fifty trees*, \$8; second best, Downing's Fruits and Fruit Trees.

PEACH ORCHARDS. For the best Peach Orchard, of not less than *fifty trees*, which shall be in the most thrifty bearing condition in the autumn of 1865, \$8; second best, Downing's Fruits and Fruit Trees.

For the Peach Orchard, of not less than *fifty trees*, grown from pits planted since 1858, on the spot where the trees stand, which shall be in the best condition in 1865, \$8; second best, Downing's Fruits and Fruit Trees.

SEEDLING APPLES OR PEARS. For the best variety of *new Seedling Apples or Pears*, of decidedly superior quality, *one dozen specimens* to be exhibited, together with a history of the origin of the tree, a description of the growth, and its bearing character, \$8; second best, Downing's Fruits and Fruit Trees.

SEEDLING PEACHES. For the best Variety of *Seedling Peaches* of decidedly superior quality, and worthy of general cultivation—*one dozen specimens* to be exhibited two years in succession—together with a history of its origin, a description of its growth, and the bearing character of the tree, \$5; second best, Barry's Fruit Garden.

FOREST TREES.

For the best plantation of Forest Trees, of either of the following varieties, viz.: White Oak, Yellow Oak, Locust, Birch, White Ash, or Walnut, Scotch Larch, Norway Spruce, Pitch, White and Norway Pine, or other varieties, not less than three years old, and not less than one thousand trees,—entries to be made to the Society previous to June 10th,—a premium of \$15.

For the best plantation, containing not less than five hundred trees, Emerson's Shrubs and Trees of Massachusetts.

ORNAMENTAL PLANTING. To any individual or society, regard being had to the number of persons associated, for the largest number and best growth of ornamental trees, not less than fifty, which shall have been planted in a public square or on the roadside at least two years—first premium, \$10; second do., Emerson's Shrubs and Trees of Massachusetts.

HEDGES.

For the best *Live Hedge Fence*, not less than five hundred feet in length, \$5; second best, Warder's Hedges.

For the best *Evergreen Hedge*, of Hemlock or Norway Spruce, not less than four hundred feet in length, \$5; second best, Warder's Hedges. Premiums to be awarded in 1870.

HORTICULTURE.

FLOWERS.

For the best collection of cut flowers, \$4; second best, \$3; third best, \$2. For the best bouquets, or tastefully arranged basket of flowers, not less than four, \$4; second best, \$3; third

best, \$2. For the best collection of named gladiolus in spikes, \$4; second best, \$3; third best, \$2. For the best collection of new seedlings in spikes, \$3; second best, \$2. For the best new seedlings, \$1. For the best collection of Japan lilies, \$3; second best, \$2. For the best new seedling, \$1. For the best collection of pompon dahlias, \$2; second best \$1. For the best collection of seedling verbenas with foliage, \$2. For the best new seedling, \$1. For the best collection of double zinnias, \$2; second best, \$1.

A statement in writing of the sorts contributed, and the contributor's name, will be required.

Gratuities, in publications, to the amount of \$10, may be awarded at the discretion of the Committee.

FRUITS.

For the best collection of *Apples*, not less than twelve specimens of each variety—first premium, Harris' Treatise on Insects; second do., \$4; third do., \$3; fourth do., Barry's Fruit Garden.

For the best collection of the best twelve varieties of *Pears*, not less than twelve specimens of each variety, first premium, a silver cup of the value of twelve dollars; second do., \$4; third do., \$3; fourth do., Barry's Fruit Garden.

For the best collection of *Peaches*, not less than twelve specimens of each variety—first premium, \$3; second do., \$2; third do., Cole's Fruit Book.

For the best collection of *Plums*, not less than twelve specimens of each variety—first premium, \$3; second do., Thomas' Rural Affairs.

For the best *dish* of Pears, not less than one dozen specimens, Barry's Fruit Garden; second do., Cole's Fruit Garden.

For the best *dish* of Apples, not less than one dozen specimens, Barry's Fruit Garden; second do., Cole's Fruit Garden.

For the best basket of assorted Fruits, of different kinds, McMahon's American Gardener; second best, Downing's Fruits and Fruit Trees; third best, Barry's Fruit Garden.

For the best exhibition of Quinces, not less than a peck, \$2.

GRAPES. For the best exhibition of *Foreign Grapes*,—first premium, \$4; second do., \$3, or \$3 in publications, at discretion of Committee.

For the best collection of *Native Grapes*, by the ordinary mode of cultivation, without ringing, \$3; second do., \$2; third do., \$1.

For a new variety of *Native or Seedling Grape*, equal or superior to the Isabella, ripening in this County in the open air, by the *Middle of September*, prolific and suitable for the table, first premium, \$20; second do., \$10.

CRANBERRIES. For the best collection of Cranberries, not less than four quarts, \$3; second best, \$2; third best, Eastwood's Cranberry Culture.

Gratuities, in publications, to the amount of \$20, may be awarded at the discretion of the Committee.

GARDEN.

For the best **VEGETABLE GARDEN**, regard being had to the variety, excellence and quantity of the products thereof, and the mode and expense of cultivation, Burr's Vegetables; second best, Bridgeman's Young Gardener's Assistant.

Entries must be made before the 10th of June, and an exact statement rendered before the 1st of November.

GARDEN VEGETABLES.

For the best collection and variety of **GARDEN VEGETABLES**, regard being had to the quantity as well as quality exhibited, \$10; second best, \$5; third do., \$4; fourth do., \$3; fifth do., \$2; sixth do., \$1. \$20 in agricultural publications, may also be awarded, at the discretion of the Committee.

POTATOES. For the best new variety of *Seedling Potatoes*, superior to any kind now in cultivation, a premium of \$10.

For the largest and best collection of *Potatoes*, not less than a *peck* of each variety, a premium of \$3; second best, \$2.

SEEDS.

For the best sample of ears of Seed Corn, not less than forty in number, first premium, \$2; second do., \$1.

For the best collection of Onion, Carrot, Beet, Parsnip, and Ruta Baga Seeds, first premium, \$3; second do., \$2.

For the best 10 pounds of Timothy, Red Top, and Clover Seed, \$1.

For the best sample, one peck each, of Wheat, Rye, Barley and Oats, \$1.



ANIMALS.

All animals are to be entered in the name of the owner, who must have had them in his possession, at least six months before the exhibition.

All animals, entered in accordance with the rules and regulations, will be fed, during the Exhibition, at the expense of the Society.

No animal, entered in one class, except working oxen and draught horses, will be allowed to compete for a premium in another, under a different entry.

For any animal worthy of the first premium, having received a similar one at any previous Exhibition, a diploma, certifying the rank of such animal at the present Exhibition, shall be awarded instead of a premium.

A diploma may also be awarded, at the discretion of the several Committees, for any animal, worthy of exhibition, from without the limits of the Society.

CATTLE.

For the best BULL, one year old and upwards, of either Jersey, Durham, Devon, Ayrshire, Hereford, Kerry, or other foreign stock—in each class, \$5; second best, \$3.

For the best Grade or Native BULL, \$3; second best, \$2.

For the best BULL CALF, under one year old, foreign or native stock, \$3; second best, \$2.

Cows. For the best Cow, three years old, or upwards, foreign stock, of either class, each \$5; second best, \$4; third best, \$3.

Grade, \$5; second best, \$4; third best, \$3.

HEIFERS. For the best Heifer, two years old and under three, foreign stock, of either class, each \$3; second best, \$2; third best, \$1.

Grade or native, \$3; second best, \$2; third best, \$1.

For the best Heifer, one year old, of any stock, \$2; second best, \$1.

MILCH COWS. Three years old and upwards. For the best Milch Cow, without regard to breed, each, \$8; second best, \$6; third do., \$4; fourth do., \$2.

For the best Milch Heifer, less than three years old, without regard to breed, each, \$6; second best, \$4; third best, \$2.

A written statement of the quantity and quality of Milk and Butter, and of the manner of feeding the animals in the last two classes shall be required. If no butter is made, the statement must give the quantity and weight of the milk, the quality of the last calf, and the time when it was dropped.

HERDS OF MILCH COWS. For the largest and best herd of Milch Cows—not less than six—kept on any farm in the County, and exhibited at the Show, regard being had to the breed, age, and milking properties, with a written statement thereof, first premium, \$12; second do., \$8; third do., \$6.

WORKING OXEN. For the best yoke, four years old and upwards, \$6; second best, \$4; third best, \$2.

STEERS. For the best yoke, well broken, three years old and under four, \$4; second best, \$3; third best, \$2.

For the best yoke, well broken, two years old and under three, \$3; second best, \$2.

NOTE. For Oxen or Steers, and also for Herds of Milch Cows, bred and raised by the exhibitor, twenty per cent. additional. In testing the strength, docility and training of Working Oxen, the load shall not be less than 3000 pounds for oxen of five years old and upwards; and not less than 2500 pounds for oxen under five years old. In testing the character of Steers, as the Committee may direct, special regard will be paid to their docility and proper training.

TOWN TEAMS. For the largest and best team, of not less than ten yokes of Oxen or Steers, from any city or town in the County, first premium, \$12; second best, \$8.

FAT CATTLE. For the best beef animal fattened by the exhibitor, within the County, regard being had to the manner and expense of feeding—of which a written statement will be required, first premium, \$8; second do., \$6.

SWINE.

BOARS. For the best Boar, not less than six months old, \$6; second best, \$4.

SOWS. For the best Sow, not less than six months old, \$6; second best, \$4.

WEANED PIGS. For the best litter, not less than four in number, and not more than six months old, \$6; second best, \$4.

FAT HOGS. For the best Fat Hog, regard being had to breed, age and feeding, \$6; second do., \$4.

SHEEP.

For the best lot of Sheep, not less than six, \$8; second best, \$6.

For the best lot of Lambs, not less than six—bred by the exhibitor, \$5; second best, \$3.

For the best Ram—Cotswold, Leicester, Oxford Down, or South Down—not less than one year old, \$5; second best, \$3.



POULTRY.

For the best collection of not less than three fowls, either Shanghai, Black Spanish, Dorking, Poland, Bolton Gray, Guinea, or Bantam, each variety, \$2; second best, \$1.

TURKEYS. For the best collection, \$3; second best, \$2.

GEESE. For the best collection, \$3; second best, \$2.

DUCKS. For the best collection, \$3; second best, \$2.

PIGEONS. For the best collection, \$2; second best, \$1.

NOTE. Poultry must be entered on the first day of the Exhibition before 12 o'clock, to be entitled to a premium.

HORSES.

In awarding the premiums on Roadsters, the general good qualities—such as style, action, constitution and enduring properties—as well as speed of the animals, will receive special consideration.

In testing the speed of horses, each animal—four years old and over—will be required to draw a carriage weighing, with driver included, not less than 350 pounds.

It is understood that horses which have heretofore been classed under the head of “Thorough-bred and part Thorough-bred,” may compete as Roadsters, or in any other class.

Colts and Fillies will compete in separate classes, as heretofore, the premiums being the same for either sex.

No stallion will be entitled to a premium without a guaranty of his remaining for service in the County six months.

In testing the strength, docility and training of Draught or Team Horses, the load shall not be less than 2500 pounds for a single horse, and 3500 pounds for a pair of horses.

Every entry for premium must be made before 12 o'clock of the first day of the Exhibition, and the Stock must be present the second day, on or before 9 o'clock, A. M.

It must be distinctly understood that premiums will not be awarded to any animal that does not, in the opinion of the Committee, possess decided merit and a sound constitution.

CLASS A.

ROADSTERS.

1st Division. *Stallions.*

For the best Stallion, 4 years old and upwards, a prem. of	\$10.
“ 2d best “ “ “ “ “	7.

2d Div. *Pairs in Harness.*

For the best pair of Roadsters, a premium of	\$10.
“ 2d best “ “ “	7.

3d Div. *Harness Horses.*

For the best Gelding or Mare, a premium of	\$8.
“ 2d best “ “ “	6.
“ 3d best “ “ “	4.
“ 4th best “ “ “	2.

CLASS B.

HORSES OF ALL WORK.

1st Div. *Stallions.*

For the best Stallion, 4 years old and upwards, a prem. of	\$10.
“ 2d best “ “ “ “	7.

2d Div.	<i>Brood Mares.</i>	
For the best Brood Mare, with a Foal at her side, a prem. of		\$7.
“ 2d best “ “ “ “		5.
3d Div.	<i>Colts and Fillies.</i>	
For the best 3 years old, a premium of		\$5.
“ 2d best “ “		3.
For the best 2 years old, “		5.
“ 2d best “ “		3.
For the best 1 year old, “		5.
“ 2d best “ “		3.

CLASS C.

FAMILY HORSES.

1st Div.	<i>Stallions.</i>	
For the best Stallion, 4 years old and upwards, a prem. of		\$10.
“ 2d best “ “ “ “		7.
2d Div.	<i>Brood Mares.</i>	
For the best Brood Mare, with a Foal at her side, “		\$7.
“ 2d best “ “ “ “		5.
3d Div.	<i>Colts and Fillies.</i>	
For the best 3 years old, a premium of		\$5.
“ 2d best “ “		3.
For the best 2 years old, “		3.
“ 2d best “ “		2.
For the best 1 year old, “		3.
“ 2d best “ “		2.
4th Div.	<i>Carriage Horses 15 to 16 Hands High.</i>	
For the best pair of Carriage Horses, a premium of		\$10.
“ 2d best “ “		7.
5th Div.	<i>Buggy or Chaise Horses.</i>	
For the best Buggy or Chaise Horse, a premium of		\$8.
“ 2d best “ “		6.
“ 3d best “ “		4.
6th Div.	<i>Saddle Horses.</i>	
For the best Saddle Horse, a premium of		\$6.
“ 2d best “ “		4.
“ 3d best “ “		3.
7th Div.	<i>Ponies.</i>	
For the best matched Ponies, a premium of		\$6.
“ 2d best “ “ “		4.

For the best single Pony, a premium of	3.
“ 2d best “ “	2.

CLASS D.

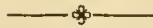
DRAUGHT OR TEAM HORSES.

1st Div. *Single Draught or Team Horses.*

For the best Draught Horse, a premium of	\$7.
“ 2d best “ “	5.

2d Div. *Pairs of Draught or Team Horses.*

For the best pair of Draught or Team Horses, a premium of	\$7.
“ 2d best “ “ “	5.



DAIRY.

BUTTER.

For the best produce of BUTTER, on any farm within the County, for four months, from the 20th of May to the 20th of September,—a sample of not less than twenty pounds to be exhibited,—*quantity* as well as *quality* to be taken into view, with a statement of the number of cows, and a full account of the manner of *feeding* them, and the general management of the milk and butter, first premium, \$10; second do., \$8; third do., \$5; fourth do., \$4.

NOTE. It will be seen that these premiums are offered for the best produce on the Farms, and not simply for the best specimens exhibited. Competitors will therefore be required to keep an account, and render a statement of the entire produce within the time mentioned. Each lot must be numbered, but not marked; any public, or known mark, must be completely concealed, nor must the competitors be present at the examination.

For the best box of Butter,—not less than 12 pounds,—first premium, \$5; second do., \$3; third do., “Flint’s Treatise on Dairy Farming.”

 NOTE. *Butter must be presented only on the morning of the second day, before 9 o’clock.*

CHEESE. For the best lot of Cheese,—not less than 40 pounds,—with a written statement of the whole process of making, first premium, \$5; second do., \$3; third do., “Flint’s Treatise on Dairy Farming.”



BREAD.

For the best loaf of Wheat and Indian, of not less than two pounds weight, first premium, \$3; second do., \$2.

For the best loaf made of Unbolted Wheat, which has been

grown in the County, of not less than two pounds weight, first premium, \$3 ; second do. \$2.

For the best loaf of Rye and Indian, of not less than four pounds weight, first premium, \$3 ; second do., \$2.

For the best loaf of Wheat Bread, of not less than two pounds weight, first premium, \$3 ; second do., \$2.

For the best specimens of each or any of the aforementioned kinds of bread, made by any young woman under eighteen years of age, an additional premium of twenty-five per cent.

The bread presented for premium must be made on the first day of the Exhibition, by some member of a family, (excluding hired persons,) in whose name the entry shall be made, and to whom the premium shall be awarded. The bread shall be made without the use of saleratus or other alkaline substance, and baked in the oven used by the family, and be presented *only on the second day of the Exhibition, before 9 o'clock in the morning.* A written statement of the process of making the bread must accompany each entry, but no name or mark shall be put on the loaves, except the number of the entry in the Committee's book.

The names of contributors shall not be known to the Committee, and no person shall serve on the same if any member of his family shall be a competitor.

HONEY.

For the best specimen of Honey in the comb, not less than six pounds, Longstrath on the Honey Bee ; second best, \$1.



MANUFACTURES.

AGRICULTURAL IMPLEMENTS.

For the best collection, \$6 ; second best, \$4.

For any new or improved Plow, which on trial shall be found best adapted for the thorough pulverization of old plowed land, a premium of \$6.

NEW INVENTIONS. For any new invention of decided superiority and usefulness to the farmer, a premium or gratuity, at the discretion of the Committee.

DOMESTIC MANUFACTURES.

FANCY ARTICLES—including Needlework, Crochetwork, Shell-work, Millinery, Drawings, Paintings, &c.

For such articles in this department as may be deemed worthy, a sum, not exceeding fifty dollars, shall be appropriated, to be

paid in premiums or gratuities, proportioned to the cost and value of the article, at the discretion of the Committee.

NOTE. It should be understood that, in this department of Ladies' work—while other things will receive due consideration—the premiums are intended SOLELY FOR NEWLY MADE articles which are really useful or particularly beautiful. For well made garments of any kind; for stocking knitting of wool, cotton or silk; or bonnet and cap making; for all articles for children's wear well made or tastefully embroidered; for neat and thorough mending, patching, and darning; for drawing, designing, or painting in oil or water colors; for models in plaster, wood, or marble, &c,

Any article well and tastefully wrought, offered by children under twelve years of age, will receive particular attention.

MANUFACTURES OF STRAW. For the finest collection and best manufactured *Plain Braid Bonnets*, not less than twelve in number, \$5; second do., \$3.

For the finest collection and best manufactured *Fancy Bonnets*, whether of Straw, Hair, or other material, not less than twelve in number, \$5; second do., \$3.

For the best specimen of *Straw Bonnets*, wholly of domestic manufacture, \$4; second do., \$2.

For the best specimen of *Straw Braid*, of domestic straw, not less than 100 yards, \$2; second do., \$1.

For the best specimen of *Sewed Bonnets*, of Straw, Hair, or other material, when exhibited in an unfinished state, with the blocks upon which they are made, and not less than three specimens from each sewer, \$3; second do., \$2.

MANUFACTURES OF CLOTH, FLANNELS, HOSIERY, &c. *Cotton Cloth.* For the best specimen of Cotton Cloth, of any description, not less than twenty-eight yards in quantity, a premium or gratuity, at the discretion of the Committee.

Woolen Cloth. For the best specimen of Woolen Cloth, of any description, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

Cotton and Woolen Mixed. For the best specimen of Cotton and Woolen Cloth of any description, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

Flannels. For the best specimen of Flannel, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

For the best specimen of Cotton Flannel, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

For the best pair of Woolen Blankets, a premium or gratuity, at the discretion of the Committee.

Hosiery, &c. For the best specimen of Woolen Hose, a premium of \$1.

For the best specimen of Woolen Half Hose, a premium of 50 cents.

For the best specimen of Cotton Hose, a premium of 50 cents.

For the best specimen of Cotton Half Hose, a premium of 25 cents.

For the best specimen of Worsted Hose, a premium of \$1.

For the best specimen of Worsted Half Hose, a premium of 50 cents.

For the best specimen of Sewing Silk, not less than one pound, a premium of \$2.

For the best specimen of Knitting Yarn, not less than one pound, a premium of \$1.

For the best specimen of Spool Thread, not less than one pound, a premium of \$1.

For the best Fleece of Wool, a premium of \$1.

For the best dozen seamless Grain Bags, a premium of \$1.

For the best specimen of neat and thorough mending, patching, or darning of garments, hose, &c., a premium of \$1.

COUNTERPANES. For the best Counterpane—regard being had to quality and expense of materials—first premium, \$3; second do., \$2.

CARPETING, RUGS AND FLOOR CLOTH.

For the best "Common" Ingrain 2-ply Carpeting;

do. do. "Fine" do. do. do.

do. do. "Superfine" do. do. do.

do. do. "Common," "Fine," or "Superfine" Ingrain 3-ply Carpeting;

do. do. Brussels Floor Carpeting;

do. do. Tapestry do. do.

do. do. Velvet Carpeting;

For each of these descriptions of Carpeting, a premium or the Society's diploma, at the discretion of the Committee.

NOTE. Ingrain 2-ply Carpeting will be judged by the comparative merits of pieces of similar weight; or, disregarding weight, by the quality of color, the taste of shading, and evenness in spinning and weaving.

For the best piece of Stair Carpeting, the Society's diploma.

For the best Hearth Rug, the Society's diploma.

For the best specimen of painted Floor Cloth, a premium or the Society's diploma, at the discretion of the Committee.

NOTE. Any articles in either of the foregoing departments, which shall have been manufactured in THE FAMILY of the person presenting it, will receive the particular consideration of the Committee, and, if worthy, a suitable premium.

GLASS, EARTHEN, STONE AND WOODEN WARE. For the finest collections and best specimens of articles in each of these departments, a premium or gratuity, at the discretion of the Committee.

BRASS, COPPER, TIN, IRON AND BRITANNIA WARE. For the finest collection and best specimens of articles in each of these departments, a premium or gratuity, at the discretion of the Committee.

CABINET WORK. For the best specimen of Cabinet Work, a premium or the Society's diploma.

IRON FENCING, GATES AND POSTS. For the best specimens of each—regard being had to cost and utility, as well as ornament—a premium or gratuity, at the discretion of the Committee.

STOVES. For the best Farmer's Cauldron Stove ;
 do. do. Cooking do.
 do. do. Parlor do.

—a premium of \$2 each.

HORSE AND OX SHOES. For the best set of Horse and Ox Shoes, a premium of \$1.

For the best specimens of Horse Shoes *for meadow lands*, a premium of \$1.

INDIA RUBBER GOODS. For the finest collection of India Rubber goods, a premium or gratuity, at the discretion of the Committee.

BRUSHES, COMBS, HATS, CAPS AND GLOVES. For the finest collection and best specimens of each of these articles, a premium or gratuity, at the discretion of the Committee.

LEATHER, AND ARTICLES MANUFACTURED THEREFROM.

For the best specimen of Thick Boots, a premium of	||\$2.
do. do. Calfskin, do.	3.
do. do. Thin Boots, other than Calfskin, do.	2.
do. do. Kipskin, do.	2.
do. do. Thick Brogans, do.	1.
do. do. Fine Brogans, do.	1.
do. do. Ladies' Boots, do.	1.

For the best specimen of Upper or Sole Leather, or Morocco, a premium or gratuity, each, at the discretion of the Committee.

For the best single Carriage Harness ;

do. do. double do.

do. do. Cart Harness—a premium or gratuity, each, at the discretion of the Committee.

For the best Riding Bridle, a premium of \$1.

do. do. do. Saddle, do. 2.

do. do. Carriage or Cart Whip, a premium of 1.

CARRIAGES, WAGONS, CARTS, &c.

For the best specimen of Family Carriages, for one horse or for two horses ;

For the best Covered Wagon ;

do. do. Open do.

do. do. Farm do.

do. do. do. Cart ;

For the best Farm Wheelbarrow—either a premium or gratuity, at the discretion of the Committee.

JELLIES, PRESERVES, PICKLES, AND KETCHUPS. For the finest collection and best specimen of each, made of articles of domestic growth, a premium or gratuity, at the discretion of the Committee.

NATIVE WINES, CORDIALS, &c.

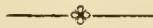
For the best specimen of Wines from cultivated wild grapes, not less than two bottles to be exhibited, \$2; second best, \$1.

For the best specimen of Wine or Cordial from currants, blackberries, raspberries, or elderberries, not less than two bottles to be exhibited, each, \$1.

NOTE. It is to be understood that all articles presented for premium, in each of the foregoing departments, except Agricultural Implements, shall have been manufactured or produced within the County, and by the person presenting them. Also, that in every case, the Examining Committee shall have the right to substitute the Society's diploma for a premium or gratuity, or to give it where no premium or gratuity has been offered, at their discretion.

All discretionary premiums or gratuities shall be proportioned to the actual value and utility of the articles.

Articles in either of the above departments, contributed to the Exhibition by persons not resident in the County, shall receive suitable attention from the Committee, and, if worthy, be awarded the Society's diploma.



MISCELLANEOUS.

AGRICULTURAL LABORERS.

For a certificate—signed by his employer, and countersigned by any two of the Trustees residing nearest to the applicant—of the superior qualifications of any man or youth, in the employment of any member of the Society for a period next preceding, of not less than two years, attesting the industry, integrity, respectful demeanor and general good habits, during the time, of the bearer of such certificate, a premium of Membership of the Society and a diploma.

CABINET OF INSECTS.

For the largest and best collection of Insects found within the County, beneficial or injurious to vegetation, properly arranged and classified, to be exhibited on the Society's tables, at the next Annual Fair, one copy of Harris' Treatise on Insects.

AGRICULTURAL ESSAYS.

For the best Essay on the relative importance and value, as sources of profit, of the various grasses, or cereal, fruit or vegetable crops, a premium of \$10.

For the best Essay on the relative importance and value, as sources of profit, of the breeding and raising of the different classes of farm stock, a premium of \$10.

For the best Essay on the fattening of cattle, swine or sheep, detailing the process and expense of the same, a premium of \$10.

FOREST TREES. For the best Essay on the raising and cultivation of Forest Trees, a premium of \$10.

INSECTS. For the best Essay on the destruction of Insects injurious to vegetation, such as *Curculio*, *Borer*, *Canker-Worm*, *Catterpillar*, *Cut-Worm*, *Squash-Bug*, *Striped-Bug*, *Rose-Bug*, &c., &c., a premium of \$10.

PRESERVATION OF WINTER FRUIT. For the best Essay on the preservation of Apples and other Winter Fruits, \$10.

PRESERVATION OF VEGETABLES. For the best Essay on the preservation of Vegetables, a premium of \$10.

AGRICULTURAL EDUCATION. For the best Essay on Agricultural Education, a premium of \$10.

FARM ACCOUNTS. For the best Essay on a system of Farm Accounts, a premium of \$10.

For the best Essay on Domestic Poultry, \$10.

For the best Essay on Fences for Farms, uniting economy, strength and appearance, a premium of \$10.

For the best Essay on the extermination of Weeds and Plants destructive to crops, a premium of \$10.

For the best Essay on the preservation and application of Liquid Manure, a premium of \$10.

For the best Essay on the introduction of new Fruits or of new articles of Field Culture, a premium of \$10.

For the best Essay on the value and application of Phosphate of Lime, or any fertilizer of the soil, a premium of \$10.

For the best Essay on Bees and Structure of Hives, with particular reference to feeding Bees, and guarding against the spoliation of the Bee Moth, a premium of \$10.

For the best plan for a Barn and Barn Yard, with regard to the keeping of the Hay, the comfort of the Cattle, the ease and convenience of tending them, and the making and preserving the Manure, a premium of \$10.

These premiums will not be awarded unless the Essays offered shall, in the judgment of the Committee appointed to decide upon them, be deemed worthy of an award, without reference to their comparative merit.

FARM BUILDINGS.

For the best planned house and out-buildings—regard being had to the cost and economy of labor—the house to be warm, well lighted and ventilated, with a cellar protected from frost and vermin, and the whole not to cost over \$1,800;—to be examined by the Committee on Farms—a premium to be adjudged by said Committee.

FORM FOR STATEMENT OF CROPS.

[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.]

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 ?

What was the crop of 1864 ?

What manure was used, and how much ?

What is the nature of the soil ?

When, and how many times plowed, and how deep ?

What other preparation for the seed ?

Cost of plowing and other preparation ?

Amount of manure, in loads of thirty bushels, and how applied ?

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.

Acting Surveyor.

I hereby certify that appointed for that purpose by
the Committee on crop, appeared before me, and took oath
that he has ascertained the weight of the above crop, according to the regu-
lations of the State Board of Agriculture, on the day of
and that it was pounds.

Justice of the Peace.

In ascertaining the amount of crop, any vessel may be used, and the weight of
its contents once, multiplied by the number of times it is filled by the crop.

The certificate shall state the weight of all crops only in a merchantable state.

In measuring the land, any competent person may be employed, whether a
sworn surveyor or not.

In ascertaining the amount of a hay crop, entered for premium, the measurement
of the hay in the barn may be employed.

The Committee with whom crops are entered for premium, may, at their option,
select such entries as are in their judgment entitled to the application of the above
regulations.

RULES OF MEASURE.

Practiced and adopted by the State Board of Agriculture.

Wheat, Potatoes, Sugar Beets, Mangel Wurtzel, Ruta-	
Bagas, White Beans, and Pease,	60 lbs. to the bushel.
Corn, Rye,	56 " " "
Oats,	32 " " "
Barley, Buckwheat,	48 " " "
Cracked Corn, Corn and Rye and other meal, except	
Oat, and English Turnips,	50 " " "
Parsnips,	45 " " "
Carrots,	55 " " "
Onions,	52 " " "

RULES AND GENERAL REMARKS.

It is understood that all premiums will be restricted to articles grown or manufactured in the County, unless otherwise specified in the premium list. Essays and Agricultural Implements being excepted from this rule, will be open to general competition.

 *Committees are prohibited from awarding gratuities, other than diplomas, unless specified in the premium list.*

Any gentleman, not a member of the Society, entitled to a premium of five dollars or upwards, and any lady, not a member of the Society, entitled to a premium of two dollars or upwards, shall receive the amount exceeding the sum of five dollars or two dollars, respectively, and may thereafter become a member.

All animals and articles intended for exhibition and premium—bread and butter excepted—must be on the ground at or before 12 o'clock on Thursday, the first day of the Exhibition, to be entitled to any premium. Animals will not be allowed to be removed from the pens before 3 o'clock on Friday, the second day, and all other articles not until 5 o'clock, without the permission of the Committee having them in charge.

In order to extend liberal encouragement to citizens of the County living remote from the Society's grounds in Dedham, a sum—not exceeding fifty dollars—will be appropriated for compensation of travel to the owners of all such neat cattle, swine and sheep, as have been brought or driven more than five miles—reckoning the distance from whence they came to the place of exhibition—and receive no premium. Only one travel will be allowed to the same person. Payment will be made at the rate of ten cents per mile, for a yoke of oxen or steers; eight cents per mile, for each bull, cow, heifer, or yearling; ten cents per mile, for each boar, sow or litter of weaned pigs; and eight cents for each flock of sheep. But no such payment shall be made for any animal, or animals, which, in the judgment of the Committee appointed to examine them, are not of a superior character and

worthy of exhibition, or have not been entered in accordance with the rules and regulations of the Society.

The animals, while on the ground, will be fed at the expense of the Society.

No person serving on any of the Committees shall have a vote in any case, when he shall be personally interested as a competitor.

All other Entries for premiums must be made in writing, and shall be placed in the hands of the Recording Secretary, on or before the 15th of November.

Premiums awarded, and not called for on or before the last Wednesday in March following, will be considered as given to the Society, in aid of its funds.

After the objects for Exhibition are arranged, they will be under the exclusive charge of the Superintendents, and cannot be removed *without* their consent.

No object or article will be entitled to a premium, unless it possesses points of superiority ; and the Committees are prohibited from awarding premiums, if, in their opinion, the articles or objects are not deemed worthy.

The Trustees have carefully revised and approved of the foregoing list of *premiums*. The respective Committees, appointed to award the same, are required to enforce a strict conformity to all the rules in relation to Entries and Certificates.

In the appointment of *Committees*, the Trustees will seek for the most judicious and skilful individuals in the various towns in the County, *to award the premiums* ; but should they fail to secure the aid of the ablest and most experienced men in the above capacity, they will rely upon the forbearance which, they believe, will be generously extended towards sincere and unwearyed efforts.

As it will become the duty of the Society to make to the Legislature an exact report of its doings, the Trustees deem it of the highest importance that earnest and persevering efforts be made by the citizens of every town in the County, to bring out the results of their skill and industry.

MARSHALL P. WILDER, *President*.

HENRY O. HILDRETH, *Secretary*.

TRANSACTIONS

OF THE

NORFOLK

AGRICULTURAL SOCIETY,

FOR

1866.

PUBLISHED BY THE SOCIETY.

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SYNOPSIS OF ADDRESS,

BY PROF. P. A. CHADBOURNE.

UTILIZATION OF LABOR.

IN the lull of War we have time to taste the sweets of Peace. And in New England, if in no other portion of the world, we can see what men may enjoy under a free government, and what varied sources of enjoyment may be found for every citizen among our healthful hills and along our fertile vallies. All these rich products before us represent so much labor of hand and brain. They have been gathered from the earth by the skilful labor of civilized man. They minister to his wants, and these wants keep pace with new discoveries and new inventions, with the progress of man in civilization. A whole nation of savages could not, in a life-time, supply by their labor the products found in one of our New England homes,—homes the result of the toil of one civilized man. He has these sources of enjoyment because civilization has utilized labor, and thus multiplied a hundred fold the power of a single man. And this utilization of labor, in turn, has still further advanced civilization, and thus we have the elements of progress for the race. Civilization and utilization go hand in hand, mutually reacting upon each other.

And where are found the grand elements of this utilization? Plainly first, in the forces of Nature. These forces are guided and controlled by man till they become his never wearied servants. The rains and dews upon the hills gather in springs, leap towards the vallies in rivulets, until their combined weight poured upon the ponderous wheel gives life to the spindle and the loom. The

guiding hand of man is needed, but with the aid of this falling water he draws out a thousand threads as he could but one by his unaided strength. That wheel through which the water plunges by its own weight, as it rushes on to find its ocean level, multiplies the labor of all who work above it a hundred fold. It took time and hard labor and skill indeed to dam up the floods, to lead them along in canals and to fashion all the wheels and shafting by which their power is transmitted from room to room and from machine to machine, but all of this labor is but a fraction to the multiplied power which they give before worn out by their own revolutions.

The forest trees and beds of coal are so much garnered strength; strength to be set free by fire, that, by expanding steam, moves Titanic wheels and levers obedient to the will of man. Not a single force is now in operation, not a single force or agency has been in operation in all geologic time, that man cannot in some way, even now, make minister to his comfort or multiply his power. Every year he enters more fully into this great inheritance. Every year he compels the forces of nature to lighten manual labor. Every year does he gain greater mastery over these unwearied and exhaustless agencies, and thus realizes more nearly his likeness to his divine Creator.

But all this utilization of labor, though apparent in the mechanic arts, has little bearing upon agriculture, you are ready to say. It has far less indeed than it ought. For when dominion was given to man, it was that he might till the earth and subdue it. He will eat his bread by the sweat of his face, and agriculture must, from the nature of the case, ever demand long-continued manual labor. And because this is so, every advantage should be seized upon to utilize the labor. And to secure this end, the need must be felt and there must be intelligence to direct. Unfortunately for us, the need of utilizing agricultural labor has never pressed upon us as a nation. A broad territory, unsurpassed in fertility and almost boundless in extent, is even now waiting for man to scatter his seed and gather the luxuriant harvests.

The great productiveness of the American soil has given a rich return to the rudest forms of husbandry, and when one plantation has been impoverished an abundance of virgin soil is ever waiting for the plough. The cultivators of the earth have been

like the early miners on the gold fields, gathering the gold ready quarried to the hand. The corn and wheat and cotton have been taken from the soil without return, but these drafts are sure to be dishonored in the end. The account with the earth must be kept good, as well as at the bankers. The agricultural practice has been like that of the spendthrift, who ruins his credit in one place and then tries a new sphere of action, leaving unpaid debts in every town. The inventor's genius has been brought to the farmer's aid, but the main inventions are for putting in and taking off crops, increasing tenfold the farmer's power to rob his soil. With such a land as we have, this process may indeed be long continued, but it must finally come to an end. We may feed the world with our grain and supply their busy looms with cotton; but we do not now do it in the West and South by agriculture; we do it by land robbing. Any process that every year leaves the soil poorer, is wanting in every element which renders agriculture a science.

And so it comes to pass that no portion of our country is so favorably situated for the increase and diffusion of real agricultural knowledge as New England. Her soil is thin and rugged. Her climate is severe. It is impossible to live by land robbery here. The New England soil is no long creditor. You must make full returns for every crop you take, or your drafts are protested. Its early settlement, its broken surface and other physical conditions entirely prevent the Southern and Western system of cultivation. A New England farm would hardly be considered a respectable corn or wheat field in the West. Narrowed down, then, by the necessity of the case, to a few acres, having a soil that must be carefully manured and tilled to produce a crop, living in a climate where winter reaches far into spring, and early frosts often destroy the finest prospects of a harvest,—having all these adverse conditions to contend against, the New England farmer has been compelled to work more with hand and head than any other tiller of the soil in our land. These hard conditions are the secret of the increase of agricultural knowledge among us. The Western man wonders where our farms are found; wonders how we can live; says New England would have been left to the bears and wolves, if the West had been known to

the early settlers. But if he is a man of intelligence, he knows that nowhere else in our land is the *science* of Agriculture so thoroughly understood and applied. Had we been shut out from the fertile West, we should have known more than we now do, and New England soil would have been richer and more productive than it is to-day.

But we proudly point to the products that are now gathered in every part of our State, from Plymouth to Berkshire, as proof of Yankee skill in wringing from a scanty soil the choicest fruits and golden corn. Luxuriant crops and the finest herds and flocks are here on exhibition. And if we have not the abundance of our Western brethren, we glory in our crops as the product of thought and labor.

The time is coming when the deep soils of the West and South will have yielded their superabundant riches, and, like New England soil, will demand the fostering care of Agricultural science. The time is coming when the broad plantation; once growing poorer under the impoverishing curse of slavery, and the rolling prairie starved by years of robbery, shall be the homes of busy millions, intelligent freemen, cutting them into small farms, and reproducing in every part of the national domain something of the New England type of life.

It is then for New England, it is for this great country of ours in the future, that we invoke all that science and skill can do to increase the fertility of our soil and the variety of our products, that in our own limits there may be found all that the highest civilization demands, though the rest of the world were sunk beneath the ocean, or leagued together in arms against us. And where shall we look for the field of thought and the line of discovery that shall do for agriculture what has been done by inventive skill to utilize labor in all the mechanical arts? We want something more than mowers and reapers and shellers; more than improved implements for putting in and taking off crops. These may satisfy those who have never learned that land can be exhausted. But we want to prepare a soil to produce every crop; we want our fruits to be the most delicious, our grains the most prolific, our herds and flocks to be the finest in form and quality. Here lies the farmer's great sphere for utilizing labor, to *secure a soil*

that will produce abundantly, and to bring every product to the highest standard of excellence. Here he must enter a field of higher research than the mechanical inventor can ever occupy; a field requiring the keenest intellect and the most accurately trained powers of observation. Chemistry and the laws of animal and vegetable life are the vast subjects that claim his study now, and will do so while the world stands. In these two fields are his discoveries to be made; every new discovery will increase the quantity or quality of the product, and thus every year shall the farmer's labor be utilized by the more abundant return received.

And in the very law of plant and animal development have been given the means of continued utilization of the farmer's toil. To many species, especially to those most useful to man, has been given the characteristic of appearing under different forms known as varieties. So that in nearly all of our cultivated plants and domesticated animals, there is the possibility of securing choicer kinds than have ever yet been known. It is for us to learn all the conditions by which the most desirable kinds are secured, and to be ever on the alert to preserve them when they appear, that our labor may be turned to the best advantage. What vast changes for the better have been wrought in New England within the last twenty-five years! I need not spend time to recount the changes in stock and fruit which have been so marked. And may we not hope in this line alone that for the next twenty-five years such improvements shall be made that one-fifth more value shall be received for the same labor than now? If so, here alone we have an important element in human progress, an important condition for the advance of civilization. Leisure will be gained, not by stinting ourselves in the necessities or luxuries of life, but because less labor is demanded to secure abundance. This grand law of animal and plant variation, which some have fancied to be without limit, a sort of indefinite unfolding of one specific form into another, is here seen to have a special relation to the progress of the race, a relation so specific that if we recognize a Creative intelligence any where, we must recognize it in the production of varieties, not only in fitting animals and plants to the world, but in their relation to man. He may now have the best kind known, but the next year Wilder may produce a more beau-

tiful flower, Bull a better grape, Hovey a better strawberry, Crawford a better peach ; better grains may wave in our fields, better flocks and herds cover our hills. Man, capable of unlimited improvement and with desire for such improvement, finds Nature perfectly adapted to his constitution.

Not only does the utilization of labor demand intelligence to direct, that every blow may be struck to the best advantage, but it demands virtue in the individual, and the greatest simplicity and freedom in our government. Every jail, every prison and every alms-house is a draft upon the honest labor of the community. The criminals and all who are needed for their keeping are so many transformed from producers to consumers. Every vagabond must live, every thief and every loungeur ; every one who lives by vice or by pandering to vice, makes more hours of labor and harder toil for every man who lives by honest labor. When virtue has so far prevailed that all men work with hand or head, labor will be lightened and the hours of labor may well be shortened.

For us, as a nation, the brightest future is opening. We have universal freedom,—the first great incentive to labor. With this there goes virtue and intelligence to render that labor productive. Wealth must accumulate from our mines of precious metals, but more than all from the products of our soil. In days of ignorance and oppression and vice, labor must be long-continued and exhausting ; but if we are true to ourselves, every year will lighten labor and shorten its hours. And we call upon all advocates of eight hour laws to join with us to secure the conditions that shall make only six hours sufficient for all our wants. See to it that there shall be no more war within our borders. It will be long years before any foreign nation will indulge in the pastime of drawing swords with us. If we are true to ourselves, to the principles of freedom and justice, no more hostile troops will tread our borders till the present generation has passed away, if ever. See to it that vice meets a swift punishment, that virtue may enjoy its own. See to it that education is every where provided for the young ; education that shall guide and quicken industry, that shall enable the farmer and the artisan to press Nature's forces into their service. See to all of this, and you have done for the

working man what no enactment can do. You have made all producers; you have multiplied your powers by the use of Nature's forces, you have stopped all useless destruction of products. Labor is utilized; every blow is turned to the best advantage. It may be impossible to reach such a happy state of society. But New England is already on the road. She has but to be faithful to the church and the school-house, to her wise system of agriculture and manufacture and commerce combined, and she will continue in the van, as she has thus far been. It is not too much to say, that the farmer and artisan of New England can command to-day the comforts of civilized life, all that is desirable for man, as a physical and intellectual being, as fully as the farmer and artisan in any portion of the world. New England has only just begun to understand her own capabilities; but the brain and hand are both at work. Her streams must not hurry on to the ocean without serving human labor every foot that the water falls; her soil must yield its riches to the intelligent, scientific husbandman; virtue and intelligence and love of freedom must be the legacy which we all bequeath to our children. We shall then become a blessing to the world, lightening the toil and cheering the hearts of honest laborers in every part of the globe.

REPORT OF THE PRESIDENT AND SECRETARY.

TO THE SECRETARY OF THE STATE BOARD OF AGRICULTURE :

SIR,—The Report of the Transactions of the NORFOLK AGRICULTURAL SOCIETY for the year 1866, is herewith submitted.

While the usual operations of the Society during the year have been attended with success, it gives us great satisfaction to be able to state, that, owing to the liberality and public spirit manifested by many of its members, the debt, which for several years has been a serious obstacle in the way of its advancement, has been almost entirely extinguished, and it is confidently believed that before the next Annual Meeting of the Society, the entire debt of more than eight thousand dollars, that existed a year ago, will have been paid.

The Annual Exhibition was the most successful ever given by the Society, the receipts being nearly one thousand dollars more than those of any previous year.

For a more specific statement of the operations of the Society for the past year, we refer to the Report of the Supervisory Committee, which, together with the Reports of the several Committees of the Society, is herewith subjoined.

MARSHALL P. WILDER, *President.*

HENRY O. HILDRETH, *Recording Secretary.*

REPORT OF THE SUPERVISORY COMMITTEE.

The Supervisory Committee have to regret that they were unable to prosecute their usual labors, to any very considerable extent, during the past season. They cannot avail themselves, therefore, of a personal knowledge of the actual condition of agriculture throughout the County, or of their observation of any special improvements in the cultivation of crops, in the breeding and management of stock, or in the structure and operation of any new agricultural implements, which it might be of service to report to the Society.

Their visits have been limited to a small portion of the towns of Brookline and West Roxbury, and were made in compliance with the invitations of two members of the Society, who are both deeply interested in its prosperity, and extensively engaged in agricultural and horticultural pursuits.

On the 29th day of June, a majority of the Committee,—together with several invited guests,—assembled at the farm of Francis P. Denny, Esq., in Brookline. This may be called a milk farm; and the crops under cultivation had reference, mainly, to the production of milk for the market. The stock consists of twenty-two milch cows, several young heifers and one fine bull. The mode of feeding is, principally, by soiling; and, for this purpose, brewers' grains are used, and, also, oats and pease, cut green. Corn, potatoes and carrots are grown, and garden vegetables for domestic consumption. The stock is chiefly of grade or native breed. The milk finds sale, at the farm, for twenty cents per gallon. It will be recollected that this fine herd of milch cows was exhibited by Mr. Denny at the last Annual Show, and attracted much attention. Good judgment is apparent, both in the selection and the management of this stock, and the result, as might be reasonably expected, is a profitable one.

After the most courteous and attentive treatment by Mr. Denny, the company were conducted to the farm of Mr. Willard A. Humphrey. This is, also, a milk farm. The stock consists of thirty cows. One of these,—now twenty years old, and still in milk,—has been a very superior animal. From the time of dropping her first calf, she has not failed to present another every succeeding year; and she has yielded twenty quarts of milk per day, when in full feed. Here were, also, a pure blood Jersey bull, two years old, and a grade Durham and Jersey, of both which

animals Mr. Humphrey possesses the pedigree. He does not raise his stock, but prefers to buy, as need requires or opportunity offers, and he certainly selects it with sound judgment. His mode of feeding,—like that of Mr. Denny,—is chiefly by soiling. The calves are usually sold when two days old.

Proceeding hence we visited, with great pleasure, the extensive nursery of Mr. George Craft, the gentleman to whom the Society has been so often and greatly indebted for the fine displays of gladiolas and other beautiful flowers, which graced the hall at our Annual Show. No description we are able to give, would convey any adequate idea of the delight which a lover of flowers would find in visiting this place.

We next came to the farm of Mr. Wm. J. Hyde. His farm is devoted, mainly, to the cultivation of vegetables for the market. Pease, asparagus, potatoes, squashes, cabbages, onions, and other early vegetables and plants were observed in the most promising condition. The potatoes growing here were the “Jackson whites” and the “Sebees.” They were planted in pieces in drills. One piece is dropped in each place, and the places are from fourteen to sixteen inches apart. Manure is put into the hills. For nearly all his crops, Mr. Hyde spreads manure, and, also, puts a portion in the hill. We observed, also, in this place, grass and rye, both of which were in uncommonly promising condition.

Our time being now exhausted, we left Brookline with a strong impression that the grounds we had seen were under the most judicious and thrifty cultivation; and that examples of husbandry might easily be found here, which would rarely be equalled within the limits of our Society.

July 26th the Committee were again assembled,—together with a large number of distinguished gentlemen from different places,—at the celebrated farm of Aaron D. Weld, Esq., of West Roxbury. After an hour of pleasant, social intercourse, and a most munificent entertainment, the whole company adjourned to the beautiful lawn in front of the house. Here brief and pertinent speeches were made by the President of the Society,—Hon. Mr. Wilder,—and several other gentlemen, distinguished in the various departments of agriculture, horticulture and pomology. Hence we proceeded to view the farm premises, every department of which bears ample evidence of the intelligence, skill and orderly system by which the well-known results of Mr. Weld’s husbandry are produced. This is apparent in the minor as well as in the larger

and more imposing objects of regard :—in the wagons, carts and various implements in use upon the farm, as in the barns, capable of containing a hundred tons of hay, and fitted with every convenience for the care and keeping of stock, and for the manufacture and preservation of manure. It is seen, also, in the fruit-room, most conveniently arranged and prepared for the packing and keeping of various fruits ; in the apartments for vinegar and for cider ;—the former filled with some fifty hogsheads of vinegar, in all its different stages of maturity, and the latter containing casks of cider for draught, and boxes filled with bottles, ready for the market. Mr. Weld considers his vinegar fit for use and sale when it is four years old. It is made only of pure apple-juice, and finds ready sale in the market. The cider is manufactured from the best selected fruit, and that of russet apples in preference to all others. In the failure or inferiority of his crop at home, last year, Mr. Weld had a large part of his apples brought from a distance of over five hundred miles. From seventy-five to one hundred barrels of cider are usually made every year. Hardly less famous than the Weld farm cider, is the currant wine manufactured here. Several casks of this wine, now three years old, were in the cellar, ready to be bottled and sent to order.

We also saw orchards and gardens, in which were some two thousand apple trees in bearing condition, and capable of producing from twelve to fifteen hundred barrels, annually, of selected fruit. A large number of thrifty pear trees, also, in full bearing state, with currants, strawberries and vegetables between the rows, in which they stood. A field of rye had been cut and stacked, which, in our judgment, would yield a superior and very heavy crop.

The work on this farm is performed, mainly, with horses. Nine horses are kept for farm and carriage use ; and others, from abroad, are boarded here during the winter. Hay is also sold from the farm. About one hundred and twenty acres of the land are under high cultivation, and of the remaining thirty or more upon the farm, a large part is woodland. The whole presents to the eye one of the most beautiful examples of a true New England farm. It has been held and cultivated by several generations of the same family. And it now offers to any one, desiring to see and understand the most profitable management of a farm, convincing proof of what can be accomplished by intelligent, thorough and systematic husbandry.

Mr. Weld is exceedingly fortunate in having the services of Mr. Méservé, as overseer and director of the work upon this farm. In the ability, good judgment and fidelity of that gentleman, all confidence may be placed ; and many farmers, who are not able to avail themselves of the services of so competent and reliable an assistant, may derive much instruction and benefit

from a personal observation of his method of conducting the various operations on the farm of his employer.

In conclusion, the Committee beg leave to suggest the utility of distributing, at the Annual Meeting of the Society, a brief series of inquiries,—embracing important points in agriculture,—to which full and definite replies may be returned to the Chairman, from each town in the County, before the preparation of the next Annual Report. In this way much valuable information may be obtained and diffused for the benefit of the whole Society.

Respectfully submitted, for the Committee,

CHARLES C. SEWALL.



REPORT ON PROGRESSIVE HUSBANDRY.

The Committee on Progressive Husbandry report that only one farm has been entered for the five years' course,—the farm belonging to Dr. Wm. T. G. Morton, of West Needham. Dr. Morton has complied with the requirements of our by-laws, by making an annual statement of his methods of culture, the condition of the farm, the improvements made, the amount of productions, the expenses incurred, with all the details necessary to a correct judgment of his operations. The Committee have visited the farm at least once each year,—some years oftener. They have had full and frequent discussions with him and among themselves touching the former and present condition of the farm, and the improvements made, and are of the opinion that he is entitled to the premium.

Five years ago the farm was poor and unproductive. What is now the largest and best portion of it, was then a swamp, filled with wild grass, rocks and bushes. This has been reclaimed, drained, plowed and seeded, and produces a large crop of valuable grass. An immense amount of labor has been expended in sinking, filling and covering drains, and preparing the land for seed. The operation is not yet finished. The ditching and reclaiming are still going on, and new tracts are yearly added to the mowing grounds.

Large quantities of manure have been composted,—for which unusual facilities existed,—and applied to the uplands, where excellent crops of roots and grain are raised. Barns and other farm buildings have been enlarged, fences renewed, the general appearance of the farm improved, and its value greatly increased.

In consequence of his large grass crops, Dr. Morton has been able to increase the stock kept on the farm from five head of neat cattle to twenty-eight, all of a very superior quality. By the introduction and propagation of improved stock, Dr. Morton has been a public benefactor. On this point little need be said, inasmuch as his fine herd of cows has often been seen at our Fair, and obtained deserved admiration. His success in this department has done much to quicken the efforts of others.

We have the materials for making an extended and elaborate report; but we have said enough to explain the grounds of our decision. We hereby award to Dr. Morton the Society's premium of one hundred dollars.

By order of the Committee,

J. M. MERRICK, *Chairman.*

Walpole, Dec. 30, 1865.



REPORT ON VEGETABLES.

For the best collection, to John Sias, of Milton, the Wilder plate, valued at \$25; J. W. Richardson, Medway, \$5; C. G. Upham, Needham, \$4; Denys Zingiebel, Needham, \$3; Thomas Barrows, Dedham, \$2; Bradford Farm, West Roxbury, \$1.

For the best collection of potatoes—To John Sias, Milton, \$3; J. W. Richardson, Medway, \$2.

Also to C. A. Skinner, of East Dedham, A. L. Smith, of Dover, D. Sullivan, of Dover, Charles Clapp, of Dedham, and Reed Blanchard of Dedham, for collection of vegetables—one dollar each in agricultural publications.

D. S. MESERVE, *Chairman.*

West Roxbury, Sept. 28, 1866.



REPORT ON FRUIT.

The Committee on Fruit attended to their duty at the Annual Exhibition, and have the pleasure to report that the display of fruit of all kinds was most gratifying, both in the variety and size of the specimens; especially was this the case with the exhibition of pears and native grapes, which we believe to have been superior to that of any former year.

While the apples and pears of the Messrs. Clapp, of Dorchester, to whom was awarded the first prize for these fruits, were unequalled for size and beauty, the Committee were glad to see many single dishes of fine fruit sent in by those who cultivate on a smaller scale, and they took care to distribute prizes to many of these, believing that in this way we may encourage a taste for fruit culture.

We take this occasion to acknowledge our great obligations to our President, Hon. Marshall P. Wilder, for his large and beautiful display of pears, which was sent to help the Exhibition, and not for premium, and likewise for his numerous specimens of native grapes, particularly of the Rogers Hybrids, which were very fine, and which promise to take a high rank among our native grapes.

In every respect the Exhibition of this year has been most encouraging, and gives evidence of increased interest in the culture of fine fruit.

The following is a list of the premiums awarded:—

Apples.

For the best collection of fifteen varieties, twelve specimens of each variety:—

First premium, the Wilder plate, valued at \$25, awarded to F. & L. Clapp, Dorchester; 2d, 3d, 4th, 5th, not awarded.

For the best collection of the following varieties, not less than twelve specimens of each. Baldwin—1st premium, S. E. Morse, South Dedham, \$2; 2d, C. F. Curtis, Jamaica Plain, \$1. R. I. Greening—1st premium, F. & L. Clapp, Dorchester, \$2; 2d, Mrs. L. Ramsdell, Dedham, \$1. Gravenstein—1st premium, F. & L. Clapp, Dorchester, \$2; 2d, Mrs. L. Ramsdell, Dedham, \$1. Hubbardston Nonsuch—1st premium, F. & L. Clapp, Dorchester, \$2; 2d, C. F. Curtis, Jamaica Plain, \$1. Roxbury Russet—1st premium, F. & L. Clapp, Dorchester, \$2; C. F. Curtis, Jamaica Plain, \$1. Tolman Sweet—1st premium, F. & L. Clapp, Dorchester, \$2; 2d, not awarded. New York Pippin—1st premium, Mrs. L. Ramsdell, Dedham, \$2; 2d, Wm. Chatfield, Dedham, \$1.

The Committee recommend the awarding of the following gratuities:—

Collection of Apples—S. E. Morse, South Dedham, Harris's Treatise; Thomas Barrows, Dedham, \$4. Maiden's Blush Apples—W. P. Baker, Quincy, \$1.

Pears.

For the best twenty-five varieties of Pears, twelve specimens of each variety. First premium, the Wilder plate, valued at \$25,

awarded to F. & L. Clapp, Dorchester ; 2d, Walker & Co., Roxbury, \$8.

For the best collection of the following varieties, not less than twelve specimens of each. Merriam—1st premium, J. W. Page, Jamaica Plain, \$2 ; 2d, not awarded. Duchesse d'Angouloume—1st premium, Edw. Pierce, Dorchester \$2 ; 2d, not awarded. Seckel—1st premium F. & L. Clapp, Dorchester, \$2 ; 2d, not awarded. Swan's Orange—1st premium, F. & L. Clapp, Dorchester, \$2 ; 2d, not awarded. Sheldon—1st premium, Stephen M. Weld, West Roxbury, \$2 ; Dana's Hovey ; 2d, Stephen M. Weld, West Roxbury, \$1.

The Committee recommend the awarding of the following gratuities :—

Collection of Pears—C. F. Curtis, Jamaica Plain, \$5 ; A. D. Weld, West Roxbury, \$4 ; J. H. Billings, West Roxbury, \$3 ; Thomas Groom, Dorchester, \$3 ; G. W. Palmer, Milton, \$3 ; A. Talbot, Jamaica Plain, \$3 ; J. H. Carter, Dorchester, \$2 ; A. K. Teel, Milton, \$2 ; Benjamin Mann, Roxbury, \$2 ; J. W. Page, Jamaica Plain, \$2.

Striped Beurre d'Amanlis—Albert Crosby, West Roxbury, diploma.

Foreign Grapes.

For the best exhibition of Foreign Grapes—1st premium, Thomas Barrows, Dedham, \$4 ; 2d, J. M. Baker, South Dedham, \$3.

Native Grapes.

For the best exhibition of Native Grapes—1st premium, N. B. White, South Dedham, \$2 ; 2d, C. F. Curtis, Jamaica Plain, \$1.

The Committee recommend that the following gratuities be awarded .—

Collection of Grapes—J. W. Page, Jamaica Plain, \$2. Royal Muscadine and Black Hamburg Grapes in tubs—S. W. Bacon, Walpole, \$2.

Honorable mention should be made of the following :—President Wilder's large collection of Pears and Native Grapes, not entered for premium ; Eliphalet Stone, of Dedham, fine collection of Pears ; Pears from Bradford Farm, West Roxbury ; Apples and Pears from Warren Cobb, Sharon ; Pears from E. M. Wood, Wellesley ; Duchess d'Angouloume Pears and Delaware Grapes from George Cartwright & Co., Wellesley ; Beurre Diel from Samuel Cook, Milton ; Shepard's Seedling Pear from Ann E. Porter, Sharon ; Gloria Mundi Apple, large and handsome, from G. F. Curtis, Dedham ; Concord Grapes from J. W. Richardson, Medway.

For the Committee,

STEPHEN M. WELD, *Chairman.*

Jamaica Plain, Dec. 1, 1866.

REPORT ON FLOWERS.

Like every thing else connected with the Fair, the flower show was a success. Competent judges pronounced it equal to that of any former year. Without doubt there is a growing taste in our community for the culture of flowers, as a part of a more refined civilization. The evidences of it are seen in the increased number of conservatories, in the better stocked gardens of people of moderate means, and in the praise-worthy attempts to adorn the door-yard and windows of the poorest houses with favorite plants. This Society furnishes a common meeting-place for all who are interested in this pursuit, while the almost endless variety of flowers on exhibition gratifies a natural and innocent love of the beautiful.

It will not be practicable to refer to particulars so minutely as we desire ; but two or three things require special notice. Perhaps the most attractive collection by one person, was that of gladiolas, by Mr. George Craft, of Brookline. All were beautiful, but the new seedlings were so perfectly formed and richly colored, as to draw forth a unanimous expression of delight from thousands of admirers.

Mr. Eliphalet Stone, of Dedham, and Mr. William Dunbar, of Canton, showed their skill as florists and their interest in the success of the exhibition, by filling large spaces in the flower-stand with the beautiful productions of their gardens.

Mr. C. J. Power, of South Framingham, presented a collection of choice dahlias. Though Mr. Power is out of our County limits, we welcome him to our exhibition, and hope that he will often grace our tables and feast our eyes with his offerings.

Miss Mary Emerson, of West Dedham, exhibited an elaborately and tastefully arranged wreath of dried flowers.

There was, also, a fine display of exotics from the garden and conservatory of Mr. H. H. Hunnewell, of Wellesley, which deserved and attracted particular attention.

To these and to many others, our Society and the public are under special obligations for the gratification furnished by their extensive and brilliant contributions.

We take this occasion to commend to the young the pleasure and advantage of cultivating an acquaintance with wild flowers of our fields and woods. They will thus be brought into contact with the natural world in some of its most attractive forms, and practically repair the injury to health incurred by an uninterrupted devotion to labor or study. They may follow the course of the seasons, as they successively develop the delicate flowers of spring, springing out from the decaying leaves of the forest ; then the brighter colors and gorgeous beauty of roses and lilies ; and in

autumn the asters, golden rods, gentians and many others that clothe the earth in a glorious splendor, precursor of winter's gloom. Some of the earliest are the May flowers,—anemone, blood-root, columbine, spring-beauty, which, were they not common, would be equally sought and cultivated in gardens. The journals devoted to horticulture tell us of the success which has followed such cultivation in particular instances. The popular ignorance in respect to this branch of natural history might be illustrated by many remarkable examples.

The brief life of flowers affects us with a feeling of sadness, yet mingled with a satisfaction akin to that which we derive from, or hold upon, those friends who have died in the bloom of youth or early manhood.

“ Though thou fade,
From thy dead leaves let fragrance rise,
And teach the maid,
That goodness time's rude hand defies;
That virtue lives when beauty dies.”

Your Committee award the premiums as follows:—

Best collection of cut Flowers—Mr. G. Craft, Brookline, 1st premium, \$4; Mrs. G. W. C. Washburn, Needham, 3d premium, \$2.

Bouquets—Mrs. H. P. Mackintosh, East Needham, 3d premium, \$2.

Gladiolas—For the best collection of named gladiolas, in spikes, G. Craft, Brookline, 1st premium, \$4.

For the best collection of New Seedlings, in spikes, G. Craft, Brookline, 1st premium, \$3.

For the best New Seedling, G. Craft, Brookline, \$1.

Double Zinnias—George Craft, Brookline, 2d premium, \$1.

Gratuities—William Dunbar, Canton, for funeral wreath and two bouquets of wild flowers, “American Agriculturist” for one year. Mrs. Wm. Lyon, Needham, for two bouquets and one dish of flowers, “Breck's Book of Flowers.”

Diplomas—To Miss Lizzie J. Watt, West Roxbury, for cut flowers; Mr. G. W. Palmer, Milton, for cut flowers; Mrs. H. W. Hewins, Dedham, two baskets flowers; Mrs. G. W. C. Washburn, for four bouquets; Miss Mary Emerson, West Dedham, wreath of dried flowers; A. K. Teele, Milton, for dahlias; C. J. Power, South Framingham, for dahlias; Miss Mary Sewall, Medfield, for four baskets flowers; Miss Anna F. Haynes, Dorchester, for basket of cut flowers.

To Mr. H. H. Hunnewell of Wellesley, the Committee recommend the Society's diploma, for a fine collection of cut flowers, entered only for exhibition.

For the Committee,

ROBERT WATT, *Chairman.*

West Roxbury, Nov. 14, 1866.



REPORT ON BREAD.

The Committee award the following premiums:—

No. of entries sixteen.

Wheat—1st premium to Mrs. Thomas Payson, Dorchester, \$3.

2d premium to Mrs. Richard Richardson, Medway, \$2.

Wheat and Indian—1st premium to Mrs. Nathan Longfellow, Needham, \$3.

Unbolted Wheat—1st premium to Miss Elizabeth S. Sewall, Medfield, \$3.

Rye and Indian—1st premium to Miss Elizabeth S. Sewall, Medfield, \$3.

EDMUND QUINCY, *Chairman.*

Dedham, Sept. 28, 1866.



REPORT ON THE DAIRY.

The Committee award the following premiums:—

Butter—20 lb. lots. A. W. Cheever, Wrentham, 1st premium, \$10.

Nathan Longfellow, Needham, 2d premium, \$8.

Mrs. John Turner, Needham, 3d premium, \$5.

12 lb. lots.—Mrs. Charles C. Sewall, Medfield, 1st prem. \$5.

Ruel Ware, Needham, 2d premium, \$3.

A. W. Cheever, Wrentham, 3d premium, "Flint's Treatise on Dairy Farming."

Cheese—Henry Bird, Stoughton, 1st premium, \$5.

Ruel Ware, Needham, 2d premium, \$3.

JEREMIAH W. GAY, *Chairman.*

Dedham, Sept. 28, 1866.

The following statements of Mr. Cheever are published at the request of the Committee:—

STATEMENT OF MR. A. W. CHEEVER.

To the Committee on the Dairy:—

The box of butter presented by me for your inspection, is a part of a churning of thirty-four pounds made by me on Wednesday and Thursday of this week. Just one week's cream was brought to the temperature of 63° by *trial* and not by *guess*. Found the cream 5° too cold, and brought it up by fire heat, stirring constantly while warming. Churned moderately about one hour. Could have churned a less quantity in the *same churn* in less time. When the butter was well gathered in the churn, the milk was drawn off, and a bucket of cold water put in place of it, in which the butter was churned a few minutes. It was then taken on to a table, or worker, where the milk was pressed out before salting. Three-quarters of an ounce of salt was then worked in, by lever power, to each pound of butter. After standing eighteen hours, it was again brought under the lever, and the brine and milk all worked out that could be. How much there is left, you will, of course, judge. It was then immediately moulded and dropped into the box, as you see it ready for market.

The feed used by the cows is green corn fodder, hay and grain, in the proportion of about three-quarters corn, one-eighth dry hay and one-eighth grain, consisting of two quarts of meal and three quarts of shorts. The cows are turned out to drink and exercise about three hours in the middle of the day. Commenced feeding corn August 1st; shall have enough from one acre to last two months for eight cows. Planted it at seven or eight different times, till July 3d, at the rate of forty kernels per foot, in rows three feet apart. Very little has topped out, and next to none is wasted. The earlier plantings were hoed. The later was cultivated only. The ground was very thoroughly worked before planting, and manured quite liberally. As I make butter all the year round, and do not let my cows calve oftener than once in eighteen months, so that those that come in, in the spring, shall not come in again till the second autumn after, I cannot obtain so large an average from my whole dairy during the summer months, as if I had my cows all come in together in the spring.

The amount of butter sold from May 25th to Sept. 22d, this year, was 630 lbs. Average number of cows, $6\frac{1}{2}$. Average pounds per week, 35. Average per cow, between 5 and 6 lbs. Average number of quarts per cow, June 22d, $8\frac{3}{4}$; Aug. 20, 11 quarts; Sept. 23d, $9\frac{7}{8}$ quarts. Average number of quarts of

milk per pound of butter sold, 16. During the time two families have used milk, butter and cream, that has not been accounted for. Also, about 30 quarts of milk sold per week, skimmed at twelve hours. The butter has all been delivered by me direct to the consumers, at 60 cents per pound.

Table showing the amount of milk given in one day, measured six different times, as it was convenient, and also the time each cow has been giving milk.

	Time of last calf.	Feb. 24, one day's milk measured in quarts.	April 7, measured the milk one day.	May 13, measur'd again	June 22, do.	Aug. 20, do.	Sept. 23, do.	Time of next calf.	Remarks.	Age of cow.
1	1865, April 15	$8\frac{3}{4}$	$9\frac{1}{4}$	8	$7\frac{1}{2}$				Sold for beef, July 18.	8 yrs.
2	1865, July 15	7	$7\frac{1}{4}$	$6\frac{3}{4}$	$6\frac{1}{4}$				Sold for beef, July 18.	4 "
3	1865, Oct. 15	$8\frac{1}{4}$	$8\frac{3}{4}$	$4\frac{3}{4}$	3				The meanest cow I ever saw. Half Jersey ; is farrow & dry	9 "
4	1865, Dec. 15	$14\frac{1}{4}$	$13\frac{3}{4}$	12	$12\frac{1}{4}$	$11\frac{1}{4}$	$8\frac{1}{2}$	May 1867		8 "
5	1866, Jan. 20			$9\frac{1}{2}$	10	$10\frac{1}{2}$	$7\frac{3}{4}$	June 1867		7 "
6	1866, Feb. 27		$10\frac{3}{4}$	$9\frac{1}{2}$	9	11	$9\frac{1}{2}$			9 "
7	1866, Mar. 15		17	14	14	$13\frac{1}{4}$	$9\frac{1}{2}$		Raised her calf by feeding.	10 "
8	1866, Apr. 7	8		$12\frac{1}{2}$	14	$13\frac{3}{4}$	$8\frac{1}{2}$		Raised her calf by hand feeding. Has had an attack of the garget since Sept. 1st.	10 "
9	1866, Apr. 10				$8\frac{1}{2}$	8	$6\frac{1}{2}$		Sold her calf, May 12.	2 "
10	1866, Aug. 10	$8\frac{1}{4}$	$8\frac{3}{4}$	6	$2\frac{3}{4}$	11	$11\frac{1}{4}$		Sold her calf, Aug. 17.	6 "
11	1866, Aug. 28	$7\frac{3}{4}$	$7\frac{1}{2}$				$13\frac{1}{2}$		Sold her calf, Sept. 10.	6 "

Average number of cows milked from May 20th to Sept. 20th, $6\frac{9}{7}$.

A. W. CHEEVER.

REPORT ON FRUIT TREES.

The Committee on Fruit Trees have to report but one entry for their examination during the season. On the 18th of September, notice was received from the Secretary that Joseph H. Billings, Esq., of West Roxbury, had invited the Committee to examine his pear orchard, with reference to the premium of the Society. The Committee were notified to meet at the residence of Mr. Billings, on the 25th of September, and though the day proved rainy, there was but one absence. They spent about three hours among his trees, with much interest and profit; noticing all the particulars of soil, planting, pruning, manuring and culture, which have resulted in the thrifty and beautiful trees now enriching the grounds of Mr. Billings.

There are nearly four hundred trees; not planted together, but occupying different positions on the grounds, suited to the soil and exposure. The attention of the Committee was especially attracted by the strong and vigorous habit of the trees, and by their symmetry of shape. The form is pyramidal; commencing to branch about a foot from the ground, they are filled to the very tops with strong, healthy wood,—not crowded and interlaced,—but open to receive the full benefit of the sun, and at the same time shading the trunk from its too intense rays, and thus, perhaps, preventing the “Blight;” not more than two or three instances of which were visible in this whole collection of trees.

The Committee are able to account for the thriftiness of these trees in the following manner:—

1st. They are not crowded together; but are allowed room to feel the full effects of the sun on their tops, and the full benefit of the soil on their roots. A great mistake is made in crowding trees too closely together. With some, the rule is, to plant trees on the quince eight feet apart; but when they feel the effect of the pear roots, and begin to spread, every other tree must be sacrificed. In our opinion, the distance apart, even for those on the quince, should not be less than twelve feet. 2d. For the most part, the soil is trenched and drained,—thus deepened and pulverized; and sweetened by the removal of all superfluous moisture, it is prepared to ensure a healthy and vigorous growth. 3d. The Committee are inclined to attribute, in no small degree, the healthiness and beauty of these trees to the system of pruning adopted. They have been under the care of Mr. Robert Watt, of West Roxbury, who has exercised great skill and care in their culture. Mr. Watt seems fully aware of the advantages gained by the pyramidal growth of the pear;—he relieves the tree of all superfluous wood, shortens in the last year’s growth, especially

the leading rampant shoots, always cutting back close to a bud; *selecting, in every instance, an outside bud*, that the growth may be outward and not inward; and by thus cutting the outside of the tree, the strength is not expended in terminal buds, the sap is evenly distributed, and the fruit buds are thrown inward in a wonderful manner, and equally scattered over the whole tree.

We had hoped for a statement from Mr. Watt, embodying his system of pruning for insertion here, which would have been interesting and instructive, but have failed to obtain it.

After a careful survey of the orchard, and of the many attractions on the grounds of Mr. Billings, (among which is a hedge of the arbor vitæ 500 feet in length, the most beautiful and perfect we have ever seen,) the Committee were invited to partake of a sumptuous entertainment, where they tested the fruit of the trees, and having passed an hour in pleasant, social converse, adjourned, feeling that the day had been well and profitably spent.

Mr. Billings has furnished the following particulars respecting his pear trees. "I have about 325 trees. The varieties are generally the eighteen kinds recommended for general cultivation by the Massachusetts Agricultural Club, being the best varieties of early, medium and late pears. A little more than half of the soil occupied by my pear trees has been spaded and drained, the balance in common cultivation. The trees do the best where spaded and drained. The manure used has generally been our common stable manure. I have occasionally used wood ashes, and sometimes a top dressing of street scrapings, or the wash of the roads."

The Committee here insert a list of the varieties referred to by Mr. Billings, as recommended by the Massachusetts Agricultural Club, knowing of no body of men in the County better qualified, from long experience and extensive and successful cultivation, to recommend a list of varieties for this locality.

List of Pears for general Cultivation, recommended by the Massachusetts Agricultural Club, January, 1867.

<i>Best Six Varieties.</i>	<i>Second Best.</i>	<i>Third Best.</i>
Bartlett,.....Sept.	Brandywine,.....Aug.	Belle Lucrative,.....Sept.
Seckel,....."	Doyenne Boussock,.....Sept.	Paradise D'Automne,...."
Urbaniste,.....Sept. & Oct.	Swan's Orange,.....Oct.	Beurre Superfin,..Sept. & Oct.
Merriam,....."	Howell,....."	Maria Louise.....Oct.
Sheldon.....Oct. & Nov.	Buerre Bosc,.....Oct. & Nov.	Beurre Clairgeau....."
Beurre D'Anjou, .Nov. & Dec.	Lawrence,.....Dec.	Vicar of Winkfield, .....Dec.

The Committee award the following premiums:—

To Joseph H. Billings, Esq., of West Roxbury, for his pear orchard, the 1st premium, \$10.

To Robert Watt, Esq., of West Roxbury, for his system of pruning, as exhibited in the pear orchard of Mr. Billings, the Society's diploma.

Milton, Dec. 6, 1866.

A. K. TEELE, *Chairman.*

REPORT ON HORSES.

In behalf of our excellent and able Chairman, Major Axel Dearborn, unavoidably absent in a distant part of the States, (but who was mindful of us, and the interests of the day, by giving valuable and material aid,) the following report is respectfully submitted.

We have many thanks to offer the Committee of Arrangements for the efficient manner in which they met the necessary wants of the Department on Horses, and hope that in part we were able to fulfil the expectations of the Society.

The following premiums were awarded :—

CLASS A.

Stallions—“ Danville Boy,” breed “ Morrill.” 1st premium of \$10, to S. W. Stevens, of Jamaica Plain. This horse gives promise of great speed, has many excellent properties, and does credit to his sire.

Society’s diploma to C. H. Brown, of Fitchburg, for his “ Dandy ” Black Hawk, entered for exhibition only—a horse of splendid style and action.

Pairs in Harness—Best pair of roadsters, 1st premium of \$10 to B. F. Brown, Dorchester, for his “ Fancy-matched Morgans.” 2d premium, \$7, to Addison Boyden, for his black mares.

Capt. Richard Holmes, of Roxbury, entered his fine span of sorrels. Having taken the first premium at a previous Fair, and the Society’s diploma, he retired, contented with all the honors.

Horses in Harness—1st premium, \$8, to Richard Holmes, Roxbury, for his sorrel horse, “ Columbus.”

2d premium, \$6, to Henry Jones, Stoughton, for his “ Grey Messinger.”

3d premium, \$4, to Merrick Munroe, West Roxbury, for his “ Black Hawk ” mare.

4th premium, \$2, to D. T. V. Huntoon, Canton, for his chestnut horse.

B. F. Brown, Fitchburg, exhibited two fine horses; J. D. Thompson, West Roxbury, and J. H. Beegan, Brookline, entered their three years old mares. No premiums having been offered under this head, the Committee can only commend them for their fine appearance.

A. B. BALCH, *Chairman, Class A.*

CLASS B.

Stallions—None entered for premiums.

Mr. Charles Moulton, Framingham, exhibited his bay "Dictator," which was regarded by the Committee as a very superior animal.

Brood Mares—The Committee award the Society's diploma, with "Rank No. 1," to W. E. Coffin, Dorchester, for his mare "Fanny," with foal by her side. She having taken the first premium last year, was debarred by the rules of the Society.

2d premium, \$5, to Samuel Cook, Milton, for his English mare and Norman colt.

Colts and Fillies—2d premium, \$3, to Henry Goulding, Dover, for his two years old bay colt.

Horses in Harness—1st premium, \$6, to C. L. Copeland, Milton, for his black horse.

WARREN COBB, *Chairman, Class B.*

CLASS C.

No entry of stallions.

Brood Mares—1st premium, \$7, to Chester Clark, Stoughton, for his mare and colt.

2d premium, \$5, to John S. Eldridge, Canton, for his mare and colt.

Colts and Fillies—three years old. 2d premium, \$3, to Frank Nevins, West Roxbury.

Two years old—1st premium, \$3, to John S. Eldridge, Canton.

One year old—1st premium, \$3, to W. E. Coffin, Dorchester.

Carriage Horses—1st premium, \$10, to J. T. Howland, Jamaica Plain, for his splendid pair of English bloods.

2d premium, \$7, to Luther Eaton, Dedham, for his pair of horses.

A number of pairs were withdrawn, or did not appear the second day, much to the disappointment of the Committee. No cause given.

Buggy or Chaise Horses—1st premium, \$8, to Ira May, Stoughton, for the best buggy horse.

2d premium to John D. Bradlee, Milton, \$6, for the second best.

3d premium to Henry Goulding, Dover, for the next best, \$4.

Quite a number of very fine horses were entered in this Division for exhibition only.

Saddle Horses—1st premium to Richard Holmes, Roxbury, \$6. This horse was rode by Miss Holmes, a very accomplished rider.

2d premium to John Gardner, Dedham, \$4, for bay horse.

Society's diploma to Bradford Kinsley, Stoughton, for his pair of black mares.

Ponies—1st premium to Henry Bowers, Needham, \$6, for his pair of ponies.

Society's Diploma to J. H. Sprague, South Weymouth, for his "Indian Chief."

JOHN M. HARRIS, *Chairman, Class C.*

CLASS D.

Draught and Team Horses—1st premium to M. S. Scudder, Needham, for the best pair, \$7.

2d premium to W. F. Lynch & Co., Dedham, for the second best, \$5.

Single Teams—1st premium to Luther Eaton, Dedham, for the best horse, \$7.

2d premium to Luther Eaton, Dedham, for the second best, \$5.

JOSIAH H. CARTER, *Chairman, Class D.*

\$100 *Purse*. Four entries for this purse were made. J. Turner, Boston, chestnut Morgan; B. S. Wright, Boston, black mare, "Jessie Wales;" G. M. Stevens, Roxbury, b. g. "Captain;" Charles Record, Weymouth, b. g. "Emperor." "Jessie Wales" won the purse in two straight heats. Time 2:40, 2:41. J. Turner withdrew after the first heat.

\$50 *Purse*. Four entries. Frank Briggs, Brighton, c. g. "White Stocking;" Alden Bartlett, West Roxbury, br. m. "Fanchion;" Wm. Barnard, Franklin, s. g. "Sweet Brier;" B. R. Ballou, Stoughton, s. g. "Jack Shepard." Frank Briggs withdrew after the first heat. "Sweet Brier" won the purse in two straight heats. Time 2:45, 2:46.

\$30 *Purse*. Two entries. C. A. Stone, Roxbury, g. g. "Commodore;" Richard Holmes, Roxbury, s. g. "Forest Boy." "Forest Boy" won the purse.

\$30 *Running Purse*. Two entries. A. Sperry, Billerica, c. m. "Flora;" R. Holmes, Roxbury, b. s. "Charlie." "Flora" won the purse in two heats. Time 2:14 1-2, 2:07.

By the liberality of three members of the Society, and the fees for entry, the Society were enabled to offer the foregoing prizes, and we trust that the additional interest will prove beneficial in the end. To those who may object that it detracted from the time and interest of the other Departments, we can only say that the

time occupied was the closing hours of the Fair, when all the other branches had finished their labors.

Respectfully submitted,

WILLIAM R. MANN, *Acting Chairman.*

Sharon, Oct. 1, 1866.



REPORT ON BULLS.

The Committee award the following premiums:—

Ayrshire—F. P. Denny, Brookline, 1st premium, \$5; also, the 2d, of \$4.

Jerseys—S. P. Mack, Dorchester, 1st premium, \$5; John S. Eldridge, Canton, 2d premium, \$4; Allen Brothers, Medfield, 3d premium, \$3.

Grade—Town of Dedham, 1st premium, \$5.

A. S. DRAKE, *Chairman.*

Sharon, Sept. 28, 1866.



REPORT ON WORKING OXEN.

The Committee on Working Oxen report that the number of entries was four, and they award the first premium, of \$6, to Daniel Sullivan, of Dover; the second, of \$4, to Stillman W. Grant, of Wrentham; and the third, of \$2, to George O. Farrington, of Dedham.

The teams drew the load up the hill in very good style, but in going down and backing, their movements were not so satisfactory. The Committee take the liberty to express the opinion that the load was too heavy for cattle of medium size to manage in good order.

There were two vacancies in the Committee,—one caused by death, the other by absence from the State;—those vacancies were filled by the appointment of Walter H. Fisher, of Franklin, and Charles Breck, of Milton.

For the Committee,

ELIJAH TUCKER, *Chairman.*

Milton, Sept. 28, 1866.

REPORT ON COWS.

The Committee respectfully submit the following report :—

For the best cow, (with written statement,) John Bullard, of Dedham, \$8.

Ayrshire—James McLane, Dedham, 1st premium, \$5.

Jersey—E. S. Rand, Jr., Dedham, 1st premium, \$5.

Grade—S. P. Mack, Dorchester, 1st premium, \$5 ; 2d, \$4.
John Swett, Dedham, 3d premium, \$3.

Native—Edward Sumner, Dedham, 1st premium, \$5.

L. H. Kingsbury, Dedham, 2d premium, \$4.

George E. Metcalf, Dedham, 3d premium, \$3.

Milch Heifers—L. H. Kingsbury, Dedham, 1st premium, \$6.

Francis Alden, Dedham, 2d premium, \$4.

Herds of Cows—Francis P. Denny, Brookline, for his herd of Ayrshires, 1st premium, \$12.

Dr. W. T. G. Morton, Needham, 2d premium, \$8.

For exhibition—J. S. Eldridge, Canton, herd of Jerseys. Very fine cows were exhibited by E. Stone, Dedham ; M. P. Wilder, Dorchester ; Henry Grew, Dorchester ; Joseph H. Billings, West Roxbury, and others.

JEREMIAH W. GAY, *Chairman*.

Dedham, Sept. 28, 1866.

 REPORT ON HEIFERS.

The Committee award the following premiums :—

Alderney—For the best heifer, two years old, of foreign stock, 1st premium, \$3, to Allen, Brothers.

Devon—2d premium, \$3, to W. C. Allen.

Grade or Native—1st premium, \$3, to H. O. Hildreth, Dedham.

2d premium to E. S. Rand, Jr., Dedham.

One year old of any stock—1st premium, \$2, to John D. Ellis, Walpole.

2d premium, \$1, to M. S. Scudder, Grantville.

JAMES CAPEN, *Chairman*.

Foxboro', Sept. 28, 1866.

REPORT ON SHEEP.

The Committee on Sheep regret to be obliged to report a much less number of sheep for exhibition than was presented last year, there being but nineteen in the whole. J. S. Eldridge, Esq., of Canton, had thirteen; S. P. Mack, of Dorchester, five; Mr. McCracken, of Wellesley, one. All of them South Downs, and all very fine animals, particularly a four months old ram, owned and entered by Mr. McCracken, of Wellesley, which, had he been entered as one year old, might have received the first premium; as it was, the Committee could only award a diploma. The Committee award the following premiums:—

For the best ram, S. P. Mack, Dorchester, \$5.

For the second best, J. S. Eldridge, Canton, \$3.

For the best lot of sheep, S. P. Mack, Dorchester, \$10.

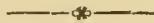
For the second best, J. S. Eldridge, Canton, \$8.

For the best lot of lambs, J. S. Eldridge, Canton, \$8.

For the Committee,

CHARLES BRECK, *Chairman.*

Milton, Sept. 28, 1866.



REPORT ON SWINE.

The Committee on Swine report:—That there were but two entries of Swine;—a boar of the Chester White breed by R. Richardson, of East Medway, and a sow, with six pigs, of the same breed, by Chester Clark, of Stoughton. The boar of Mr. Richardson was a very fine animal of that breed, and we award him the first premium, of \$6. The sow of Mr. Clark, not coming up to the first rank, we award him the second premium, of \$4. The six pigs entered by Mr. Clark, not coming under the head of weaned pigs, no premium could be awarded for them, but, being of very fine appearance, we recommend that a gratuity be paid him, of \$2.

LUCIUS CLAPP, *Chairman.*

Stoughton, Sept. 28, 1866.

REPORT ON POULTRY.

The Committee award the following premiums :—

Shanghai—1st premium, F. Alden, Dedham, \$2.

2d premium, M. J. Ellis, Walpole, \$1.

Black Spanish—1st prem., G. W. Halladay, Hyde Park, \$2.

2d premium, J. Calder, Dedham, \$1.

White Dorking—1st premium, Eben Wight, Dedham, \$2.

Bolton Grey—1st premium, J. M. Farrington, Milton, \$2.

Shanghai and Dorking—1st premium, B. M. Farrington, West Roxbury, \$2.

Bramah—1st premium, B. M. Farrington, West Roxbury, \$2.

Muscovy Ducks—1st premium, J. B. Newell, Dover, \$3.

2d premium, M. J. Ellis, Walpole, \$2.

Ruffled Neck Pigeons—1st premium, Isaac Ellis, Walpole, \$2.

2d premium, F. Fisher, South Dedham, \$1.

A lot of fowls exhibited by David Tyler, (Dorking and White Shanghai,) attracted much attention, but, unfortunately, came too late for premium. The Committee recommend a gratuity of \$2.

J. H. Farrington, Milton; B. M. Farrington, West Roxbury; Frank Fisher, South Dedham; M. J. Ellis, Walpole, and many others, exhibited very fine fowls.

FRANCIS ALDEN, *Chairman.*

Dedham, Sept. 28, 1866.



REPORT ON PLOWING.

DOUBLE OX TEAMS.

The Committee report that there were three competitors for the premiums on plowing with double teams, and they make the following awards :—

Sod and Subsoil Plowing—1st premium, Luther Eaton, Dedham, \$10.

2d premium, George O. Farrington, Dedham, \$8.

With any other Plow—2d premium, Whiting & Fales, Dedham, \$8.

For the Committee,

WILLARD P. CLARK, *Chairman.*

Medway, Sept. 28, 1866.

SINGLE OX TEAMS.

The Committee award the first premium, of \$6, to Daniel Sullivan, Dover.

LEMUEL BILLINGS, *Chairman.*

Quincy, *Sept.* 28, 1866.

DOUBLE HORSE TEAMS.

There were six entries—three subsoil plows and three common plows.

Subsoil Plow—1st premium, \$10, to William S. Ware, Needham, Whittemore & Belcher's plow, No. 20. Time in plowing, 42 minutes.

2d premium, \$8, to Luther Eaton, Dedham, Prouty & Mears's plow, No. 85. Time, 36 minutes.

3d premium, \$6, to C. L. Copeland, Milton, Prouty & Mears's plow, No. 84. Time, 38 minutes.

Common Plow—First premium, \$10, to Patrick McNamara, Dover, Whittemore & Belcher's plow, No. 20. Time, 45 minutes.

2d premium, \$8, to H. & A. Blackman, Needham, Nourse plow, No. 73½, deep tiller. Time, 55 minutes.

3d premium, \$6, to William F. Lynch & Co., Dedham, Prouty & Mears's plow, No. 155.

HENRY GOULDING, *Chairman.*

Dover, *Sept.* 28, 1866.

SINGLE HORSE TEAMS.

There were three competitors in this department, but one withdrew, and another did not perform the work within the specified hour. This left but one, who performed his work in a splendid manner, and in every respect worthy of the first premium.

The Committee, therefore, award to C. G. Upham, of Needham, the first premium of \$6, (with Mead's Patent Conical Plow).

For the Committee,

A. T. MESERVE, *Chairman.*

West Roxbury, *Sept.* 28, 1866.

REPORT ON NATIVE WINES, CORDIALS, &c.

The Committee award the following premiums:—

For two bottles of grape wine, 1st premium, \$2, to N. B. Wilmarth, South Walpole; 2d premium, \$1, to same gentleman.

For one bottle of maple syrup, a diploma to Henry Goulding, Dover.

The Club House Conserve Company, of Boston, contributed specimens of their celebrated tomato soup, for which the Committee unanimously award the Society's diploma.

GEORGE VOSE, *Chairman*.

Milton, Sept. 28, 1866.

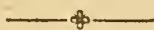


REPORT ON SEEDS.

The Committee award to John Sias, Milton, for forty ears of Rhode Island white corn, 1st premium, \$2.

ROBERT MANSFIELD, *Chairman*.

Needham, Sept. 28, 1866.



REPORT ON STRAW GOODS.

The Committee award the following premiums:—

To Samuel Gilbert, Walpole, a premium of \$8, for best specimen of straw bonnet, of domestic manufacture.

To Samuel Gilbert, a premium of \$5, for best specimen of straw braid.

2d premium of \$3, to L. G. Baker, West Dedham.

For a bonnet made of straw braid, without sewing, by Mrs. Betsey Baker, West Dedham, aged 80 years, the Committee recommend a gratuity of \$2.

M. M. FISHER, *Chairman*.

Medway, Sept. 28, 1866.



REPORT ON LEATHER WORK.

The Committee award the following premiums:—

Fogg, Houghton & Co., South Weymouth, for best specimens of sewed calf boots, 1st premium, \$3, and diploma.

Josiah Reed & Co., South Weymouth, for best specimen of pegged calf boots, 1st premium \$3, and diploma.

Nathaniel Shaw & Co., South Weymouth, for best specimens of nailed thick boots, 1st premium, \$2, and diploma.

Joseph Cheney, South Dedham, for the best express harness, 1st premium, \$2.

Williams & Crocker, Jamaica Plain, for the best buggy harness, 1st premium, \$2.

JOSEPH DAY, *Chairman.*

Dedham, Sept. 28, 1866.



REPORT ON CARRIAGES, WAGONS, &c.

The Committee award the following premiums:—

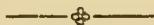
Cushman, Baker & Co., Medfield, for open buggy, 1st premium, \$5.

Sidney E. Morse, South Dedham, for side-spring Brownell wagon, 1st premium, \$5.

Sidney E. Morse, for express wagon, \$2.

SANFORD CARROLL, *Chairman.*

Dedham, Sept. 28, 1866.



REPORT ON WOOD AND IRON.

The Committee award the following premiums:—

To Simeon Richardson, Medway, for tubs, casks, axe-handles, &c., a diploma.

To Master H. A. Pettingill, Dedham, 12 years old, for bird-house, made by himself, a diploma.

To Messrs. J. Warren Tuck & Co., Boston, for specimens of wire flower stands, a diploma.

OTIS CARY, *Chairman.*

Foxboro', Sept. 28, 1866.



REPORT ON BIRDS AND INSECTS.

For several cases of named and classified Insects, constituting the best collection brought to the attention of the Society, the Committee award to Joseph R. Churchill, Dorchester, "Harris's Treatise on Insects," and the Society's diploma.

For several specimens of Birds, stuffed and mounted with great skill and excellent taste, by George E. Brown, Dedham, the Committee award the Society's diploma.

For the Committee,

CARLOS SLAFTER, *Chairman.*

Dedham, Sept. 28, 1866.



REPORT ON AGRICULTURAL IMPLEMENTS AND NEW INVENTIONS.

The Committee on Agricultural Implements and New Inventions report, that the show of agricultural implements was much better than usual, owing, in a great measure, to the enterprise and energy of our friends, Messrs. Parker, Gannet & Osgood, who favored us with a display of goods, in their line of trade, seldom equalled at any Agricultural Fair in any County in the State. The great variety and excellent quality of the articles exhibited by them, added much to the interest and usefulness of our Show, and we feel fully justified in awarding to them a premium of \$6.00,—being the highest allowed by the rules of the Society, for the largest and best collection of agricultural implements. We would, also, recommend a gratuity of ten dollars, to defray their expenses of transportation.

George Coolidge, of Dedham, exhibited "Bailey's Patent Spring Roll, Cog Wheel, Washing and Wringing Machine." This article was on exhibition at our Fair in 1864, and received the award of a diploma, with favorable notice. It also received a gold medal last year from the New England Agricultural Society. So far as we know, it has no superior.

A small machine was also exhibited by Mr. Coolidge, called the "Patent Cog Wheel Champion Wringer." This machine is fastened to the tub by a curved clamp, which we think is a decided improvement. The cog wheels of this wringer have also a new feature, being so constructed that bunches of clothing pass readily between the rolls, separating them widely apart, but without separating the cogs in the least. The effect is to render the wringer easier to operate, with less strain upon the machine or the rolls. Mr. Coolidge also exhibited two sizes of an article called the "Fairy Clothes-Horse," which we judge to be well adapted for the purpose for which they are intended, and destined to come into general use. For the champion wringer and clothes-horse, we award a diploma.

S. S. Burr, of Dedham, exhibited a combined table and bedstead. This was claimed to be a new invention; but of that we feel constrained to express a doubt, as we recollect reading, a long time ago, about an article of household furniture which

“ Contrived a double debt to pay;
A bed by night, a chest of drawers by day.”

But whether wholly new, or only an alteration of and improvement upon something old, the article exhibited had decided merits, and showed evident marks of much ingenuity in its construction. We think it worthy of the attention of all, especially of those who choose, or are obliged from necessity, to do their eating and sleeping in the smallest possible amount of space.

For the Committee,

S. W. RICHARDSON, *Chairman.*

Franklin, Dec. 1, 1866.



REPORT ON LADIES' WORK.

The Committee award the following premiums:—

Miss Julia V. Bacon, Dedham, for beautiful specimens of tatting, \$1; Miss C. J. Reynolds, Sharon, patchwork cushion, 50 cents; Mrs. A. S. Hussey, Roxbury, child's hood, sack and bibb, all very beautiful, \$2; Mrs. L. B. Hudson, Dedham, knitted woollen hose, 50 cents; Mrs. M. A. Higgins, Dedham, opera cape and hose, \$1; Mrs. James P. Clark, Medway, for woollen hose, very fine, and nicely knit, \$1; Mrs. Chloe Clark, Foxboro', white spread, knit in shell work, \$2; Mrs. Mansfield, Wellesley, knitted rug, 50 cents; Mrs. Sally Soule, West Dedham, 80 years old, straw band and flowers, 50 cents; Mrs. E. D. Hawes, South Dedham, crocheted table cover, \$1; Mrs. M. C. Bowman, Jamaica Plain, for beautiful bonnets and dress cap, \$2; Miss Mary A. Sewall, Medfield, beautiful cushion in bead work, \$1, and the Society's diploma; Mrs. P. M. Phillips, South Dedham, very fine paintings, \$3; Miss S. A. Haynes, Dorchester, elegant wax flowers, \$2, and the diploma of the Society; Mrs. Kezia Mason, Medfield, 80 years old, netted tidys, \$1; Mrs. J. W. Waters, Dedham, very nice braided mat, \$1; Mrs. J. C. Washburn, Needham, quilt and lamp mats, \$1; Mrs. Betsey Baker, West Dedham, straw bonnet, made without sewing, \$2; Mrs. G. E. Whiting, Dedham, farmer's wreath, diploma; Miss Amelia M. Clifton, Stoughton, crocheted work, \$1; Miss Jennie Richards,

Dover, child's affghan, \$1; Mrs. Charles Marden, Dedham, wrought sofa pillow covering, 50 cents; Mrs. G. D. Everett, Dover, beautiful cross of card board, a diploma; Miss E. S. Sewall, Medfield, elegant wrought chair back and seat, \$2; Miss Alice Metcalf, Franklin, bouquet of wax flowers, \$2; Mrs. Mary Holbrook, East Randolph, 80 years old, netted tidy, \$1; Mrs. Joseph Fisher, West Dedham, beautiful affghan, \$2; Charles H. Packer, Roxbury, for affghan, \$1.

A woollen bedquilt, over 50 years old, and well preserved, attracted attention by its ancient looks; also a very pretty quilt, of an oak-leaf pattern, and an album quilt adorned with mottoes. A more than usual proportion of the articles contributed, were very beautiful, and much taste and skill was exhibited in their manufacture.

For the Committee,

MISS L. A. CALDER.

Dedham, Sept. 28, 1866.

RECAPITULATION OF PREMIUMS

AWARDED BY THE

NORFOLK AGRICULTURAL SOCIETY,

FOR 1866.

HORSES.		John Bullard,	\$8.00
Luther Eaton,	\$19.00	James McLane,	5.00
Richard Holmes,	14.00	E. S. Rand, Jr.	5.00
B. F. Brown,	10.00	Francis Alden,	4.00
J. T. Howland,	10.00	George E. Metcalf,	3.00
S. W. Stevens,	10.00	John Swett,	3.00
John S. Eldridge,	8.00		
Ira May,	8.00	HEIFERS.	
Addison Boyden,	7.00	Allen, Brothers,	\$3.00
Henry Goulding,	7.00	H. O. Hildreth,	3.00
Chester Clark,	7.00	W. C. Allen,	2.00
M. S. Scudder,	7.00	E. S. Rand, Jr.,	2.00
Henry Jones,	6.00	John D. Ellis,	2.00
C. L. Copeland,	6.00	M. S. Scudder,	1.00
J. D. Bradlee,	6.00		
Henry Bowers,	6.00	SHEEP.	
Samuel Cook,	5.00	John S. Eldridge,	\$19.00
W. F. Lynch & Co.,	5.00	S. P. Mack,	15.00
Merrick Munroe,	4.00		
John Gardner,	4.00	SWINE.	
Frank Nevins,	3.00	R. Richardson,	\$6.00
W. E. Coffin,	3.00	Chester Clark,	6.00
D. T. V. Huntoon,	2.00		
BULLS.		POULTRY.	
F. P. Denny,	\$9.00	B. M. Farrington,	\$4.00
S. P. Mack,	5.00	M. J. Ellis,	3.00
Town of Dedham,	5.00	J. B. Newell,	3.00
John S. Eldridge,	4.00	F. Alden,	2.00
Allen, Brothers,	3.00	E. Wight,	2.00
WORKING OXEN.		Isaac Ellis,	2.00
Daniel Sullivan,	\$6.00	G. W. Halliday,	2.00
S. W. Grant,	4.00	J. H. Farrington,	2.00
George O. Farrington,	2.00	J. Calder,	1.00
		F. Fisher,	1.00
COWS.		PLOWING.	
F. P. Denny,	\$12.00	Luther Eaton,	\$18.00
L. H. Kingsbury,	10.00	Wm. S. Ware,	10.00
S. P. Mack,	9.00	Patrick McNamara,	10.00
W. T. G. Morton,	8.00	George O. Farrington,	8.00

Whiting & Fales,	8.00
H. & A. Blackman,	8.00
Daniel Sullivan,	6.00
Wm. F. Lynch & Co.,	6.00
C. G. Upham,	6.00
C. L. Copeland,	6.00

VEGETABLES.

John Sias,	\$28.00
J. W. Richardson,	7.00
C. G. Upham,	4.00
Denys Zingiebel,	3.00
Thomas Barrows,	2.00
Bradford Farm,	1.00

FLOWERS.

George Craft,	\$13.00
Mrs. G. W. C. Washburn,	2.00
Mrs. H. P. Mackintosh,	2.00

FRUIT.

F. & L. Clapp,	\$64.00
C. F. Curtis,	9.00
Thomas Barrows,	8.00
Walker & Co.	8.00
J. W. Page,	6.00
Mrs. L. Ramsdell,	4.00
A. D. Weld,	4.00
S. M. Weld,	3.00
J. H. Billings,	3.00
Thomas Groom,	3.00
G. W. Palmer,	3.00
A. Talbot,	3.00
J. M. Baker,	3.00
S. E. Morse,	2.00
Edw. Pierce,	2.00
J. H. Carter,	2.00
A. K. Teele,	2.00
N. B. White,	2.00
S. B. Bacon,	2.00
Benjamin Mann,	2.00
William Chatfield,	1.00
W. P. Baker,	1.00

BREAD.

Miss E. S. Sewall,	\$5.00
Mrs. Thomas Payson,	3.00
Mrs. Nathan Longfellow,	3.00
Mrs. Richard Richardson,	2.00

DAIRY.

A. W. Cheever,	\$10.00
Nathan Longfellow,	8.00
Ruel Ware,	6.00
Mrs. John Turner,	5.00
Mrs. C. C. Sewall,	5.00
Henry Bird,	5.00

NATIVE WINES, &c.

N. B. Wilmarth,	\$3.00
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SEEDS.

John Sias,	\$2.00
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LEATHER WORK.

Fogg, Houghton & Co.,	\$3.00
Josiah Reed & Co.,	3.00
Nathaniel Shaw & Co.,	2.00
Joseph Cheney,	2.00
Williams & Crocker,	2.00

STRAW WORK.

Samuel Gilbert,	\$13.00
L. G. Baker,	3.00
Mrs. Betsey Baker,	2.00

CARRIAGES, WAGONS, &c.

Sidney E. Morse,	\$7.00
Cushman, Baker & Co.,	5.00

AGRICULTURAL IMPLEMENTS.

Parker, Gannett & Osgood,	\$16.00
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LADIES' WORK.

See pages 38, 39,	\$33.50
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	\$777.50

TREASURER'S REPORT.



C. C. CHURCHILL, *Treasurer, in account with the Norfolk Agricultural Society.*

	DR.	
To balance, Nov. 30, 1865,	\$10.50	
“ cash received from new members,	146.00	
“ “ “ Commonwealth,	600.00	
“ “ “ net proceeds of Exhi- bition, 1866,	1,000.00	
“ “ “ for rent of land,	30.00	
	\$1,786.50	



	CONTRA.	CR.
Cash paid incidental expenses,	\$585.00	
“ premiums,	436.00	
“ salary of Recording Secretary,	50.00	
“ “ of Treasurer,	50.00	
“ interest,	361.47	
Cash in Treasury,	304.03	
	\$1,786.50	

C. C. CHURCHILL, *Treasurer.*

Dedham, Nov. 30, 1866.

PROCEEDINGS
ON THE OCCASION OF THE
EIGHTEENTH ANNIVERSARY
OF THE
NORFOLK AGRICULTURAL SOCIETY,
Thursday and Friday, September 27 & 28, 1866.

The Eighteenth Annual Exhibition of the Norfolk Agricultural Society, was held in Dedham, on Thursday and Friday, September 27th and 28th, 1866. Contrary to the precedent set by other Societies, the weather, which had been unusually threatening, cleared on the morning of Thursday, and during both the days of exhibition it was remarkably fine.

Thursday, the first day, was devoted, as usual, to the reception and examination of contributions. The Horse Department was well represented, there having been more than seventy entries. Prominent among them was the Morgan brood mare of Wm. E. Coffin, Esq., of Dorchester, which took the first premium at the last exhibition, and a fine colt, sired by Trotting Childers, at her side, and also a beautiful one year old Morgan colt, sired by Trotting Childers, owned by the same gentleman, and for which he has already refused an offer of one thousand dollars. Hon. John S. Eldridge, of Canton, also exhibited several fine animals.

The display of Stock, it is conceded, was the best ever made by the Society. The fine Ayrshire herd, with bull, belonging to F. P. Denny, of Brookline, attracted much attention, and splendid animals of the Jersey breed were entered by Dr. W. T. G. Morton and M. S. Scudder, of Needham; Edward S. Rand, Jr., and L. H. Kingsbury, of Dedham; Allen, Brothers, of Medfield,

and others. Fine displays of other breeds were made by the President of the Society, Eliphalet Stone, J. W. Gay and James McLane, of Dedham, S. P. Mack, of Dorchester, and others.

The show of sheep and swine was small, but of excellent quality. Of sheep S. P. Mack, of Dorchester, was the leading contributor. The show of poultry, though good, was not as extensive as at some former exhibitions.

The hall was, probably, never better filled. The display of fruit was far superior to any ever made in the County. Prominent, among other contributions of pears, were those of Hon. Marshall P. Wilder, (100 varieties) not for competition; Walker & Co., of Roxbury, (25 varieties); F. & L. Clapp, of Dorchester, (25 varieties); Eliphalet Stone, of Dedham, (20 varieties); G. W. Palmer, of Milton, (20 varieties); Aaron D. Weld, of West Roxbury, (21 varieties); Charles F. Curtis, of Jamaica Plain, (19 varieties). F. & L. Clapp, of Dorchester, contributed 33 varieties of apples, and several other gentlemen presented fine collections. Grapes were exhibited in variety—the most conspicuous being a large vine of Royal Muscadine, containing eleven bunches, and one of Black Hamburg, nine bunches, sent in by S. W. Bacon, of Walpole, set in tubs. Hon. Marshall P. Wilder, of Dorchester, had nine varieties of Rogers' Hybrids; G. W. Palmer, of Milton, four varieties of Natives; J. M. Baker, of South Dedham, a dish of fine Frontenac and Black Hamburg; N. B. White, of South Dedham, eight varieties; J. W. Richardson, of Medway, seven bunches of Concords; and Charles F. Curtis, of Jamaica Plain, ten plates, containing specimens of Allen's Hybrid, Delaware, Union Village, Diana, Rogers' Hybrid, and other varieties.

The Flower Department was fuller than for many years past; the long stand being completely filled. The principal contributors were George Craft, of Brookline; Eliphalet Stone, of Dedham; H. H. Hunnewell, Mrs. H. P. Mackintosh, and Mrs. William Lyon, of Needham; William Dunbar, of Canton; Miss Sewall, of Medfield, and others.

The show of vegetables was very large, and prominent among the contributions were those of John Sias, of Milton, who had 116 varieties; J. W. Richardson, of Medway, who presented 47 vari-

eties, including eight varieties of potatoes, one of which has yielded 700 bushels to the acre; D. Zingiebel and C. G. Upham, of Needham; N. Smith of Dedham, and others.

Of Agricultural Implements there were very large collections from Parker, Gamett & Osgood, and Whittemore, Belcher & Co., of Boston. Of boots, fine specimens were presented by Josiah Reed & Co., Fogg, Houghton & Co., Nathaniel Shaw & Co., of Weymouth. Carriages from the manufactories of Cushman, Baker & Co., of Medfield, and Sydney E. Morse, of South Dedham, attracted much attention.

The Ladies' Department was well supplied with useful and ornamental articles. A beautiful bouquet of wax flowers, made by Miss Haynes, of Dorchester, was much admired. A finely braided rag carpet, the handiwork of Mrs. J. W. Waters, of Dedham, received many encomiums. Upon this table were placed a very large and finely arranged collection of classified insects, made by Joseph R. Churchill, of Dorchester, and also a very handsome collection of stuffed birds, by George E. Brown, of Dedham. A very fine specimen of a straw bonnet, made by Mrs. Betsey Baker, the original straw braider of the country, and now upwards of eighty years of age, was much admired, and the prize was finally borne off by the President of the Society. Mrs. Sally Soule, of West Dedham, also eighty years of age, had a beautiful fancy specimen of straw braiding, and flower work in straw. There were also many fine specimens of embroidery and crocheting, of which we are unable to make more special mention.

The Plowing Match took place at two o'clock, P. M., on land belonging to Thomas Barrows, situated near the covered railroad bridge. There were thirteen competitors, viz.:—six double horse teams, three single horse teams, three double ox teams, and one single ox team. The ploughing was well done, and afforded much satisfaction to a large number of spectators. The Drawing Match on the Society's grounds followed. The exercises of the day closed with the trial of horses on the track.

On Friday, at 12 o'clock, M., a procession was formed on the grounds, under the direction of Col. John W. Thomas, Sheriff of the County and Chief Marshal of the day, assisted by his Aids, Messrs. C. G. Mackintosh, Thomas Decatur and Horace Mack, of

West Roxbury, and Hiram Gay, Bradford Kinsley and John R. Gay, of Stoughton. Preceded by the Foxboro' Band, which furnished excellent music during the day, the procession marched to the upper hall, where, after a blessing had been invoked by Rev. T. J. Mumford, of Dorchester, the company partook of an excellent collation, which had been provided under the direction of the Committee of Arrangements.

At the conclusion of the dinner, the President introduced the orator of the occasion, Professor Paul A. Chadbourne, of Williams College, who gave an admirable and practical address upon the "Utilization of Labor," an abstract of which may be found on pages 5 to 11.

The following Ode, written for the occasion by Francis P. Denny, of Brookline, a member of the Society, was then sung by the company to the tune of Auld Lang Syne, with band accompaniment :—

If there's a kindly spot on earth,
 Where happiness may come,
 Where peace may dwell, and solid worth,
 It is the farmer's home.
 Then sing the praises of the plow
 Around this festive board,
 And on the farmer's home, ask now,
 The blessing of the Lord.

Here Nature lends her sweetest charms
 To lighten every care ;
 The troubled soul to rest she calms,
 And makes of life a prayer.
 Then sing, &c.

The noisy world, with siren voice,
 May lure the crowd to roam ;
 But O, how full the heart's rejoice
 Within the farmer's home !
 Then sing, &c.

Be not content with folded hands
 To let the world move on ;
 A life of toil thy trust demands,
 Thy duty's never done.
 Then sing, &c.

Be up and doing : plant your flag
 Each day on higher ground ;
 Advance, advance, and never lag
 Till fairer fields are found.
 Then sing the praises of the plow
 Around this festive board,
 And on the farmer's home, ask now,
 The blessing of the Lord.

The President, Hon. Marshall P. Wilder, then spoke as follows :—

FRIENDS AND MEMBERS OF THE NORFOLK AGRICULTURAL SOCIETY:—

By the kind interposition of Him who crowneth our lives with loving kindness and tender mercy, I am here once more to rejoice with you in the prosperity of our Association, and to participate with you in the blessings and privileges of this day. (Applause.) When I last addressed you, one year since, after holding the office of President ever since the organization of the Society, I tendered you my resignation that you might fill the office with one more capable to discharge its duties. But you would not have it so, and here I am to-day to acknowledge your kindness and to perform those duties with such ability as I have. (Applause.) It would be pleasant to recur to that occasion, and the splendid galaxy of talent that was present at the organization of this Society—to trace its progress and the improvement which has taken place in agriculture and the arts in this County since that time; but the occasion would not permit.

You are aware that after having located this, your purchase, our first grounds, the Society was nearly free from debt. We then added about seven acres to our grounds, in the expectancy that a kind friend would bequeath an amount necessary to liquidate the debt incurred. Through unforeseen circumstances, he did not, and the debt remained and has been an embarrassment ever since (to our feelings, not to our operations); and as I have often stated to you, if my life was spared, that debt should be paid. At our last annual meeting the indebtedness of the Society was \$8,500, but by the kind assistance of able solicitors and the generosity of friends, more than \$7,000 have been collected, and, with the resources which we have on hand to-day, the liabilities of this Society will not exceed \$1,200.

It was said of a distinguished statesman that he made an after dinner speech in Philadelphia once, and in alluding to the national debt, said, “The national debt is an honest debt; it must be paid; it shall be paid; I will pay it myself.” (Applause.) But, Ladies and Gentlemen, after the contributions which I have made already, I do not propose to pay this debt myself, but I do propose, if my life is spared until another anniversary, that it shall be paid. And now let me congratulate you upon the great success of this exhibition, and upon the prosperity of our Society. If we have not accomplished all that we could have desired, it certainly has done much to develop the natural resources and talents of our County, and to advance Agriculture and the other industrial arts. And now that war has sheathed his sword, and the rainbow of peace spans the arch of our nation, let us look well to these great sources of national and individual wealth. Never in the history of the world has science so concentrated her fruits, and so rewarded labor and multiplied her blessing on the efforts of mankind. Surely we live in an age of wonders; and no enterprise, however bold, vast, or adventurous, is too great for the present day, whether the building

of the railroad from the Atlantic to the Pacific, the tunnelling of the Rocky Mountains, or the laying of wires through old Ocean's bed, and winding them around the world. Let us, then, keep pace with these great improvements; let us speed on the car of progress,—

“Onward bid it roll,”

until all the arts of rural life and cultivated taste shall reach their final accomplishment; until the blessing of free labor and perfected husbandry throughout our country—our whole country—from the South to the North, from the East to the West, and universal peace and prosperity shall prevail,—

“Till plenty rising from the encouraged plow,
Shall fill, enrich, adorn, our happy land.”

(Applause.)

The speaker then proposed, as the first sentiment of the occasion, “The Ship of State.”

“Foremost, and fearless, and safe,
She rode the dreadful gale,
Yet still she rides on heaving waves,
With steady helm and sail.”

This sentiment called up His Excellency, Governor Bullock, who was sitting at the right of the President.

He rose in response to the call, and was received with applause and three cheers, after which he spoke as follows:—

ADDRESS OF GOVERNOR BULLOCK.

MR. PRESIDENT AND CITIZENS OF NORFOLK:—

I cannot doubt that after we have listened to the learned and excellent address of your orator for the day, the part that remains for me might be best and briefly performed by acknowledging your personal and official courtesy, and by expressing the deep satisfaction which we have all felt in the present exhibition. It ought, indeed, to excite our admiration, if not our surprise, that almost within the sound of the steam whistles of our metropolis, we find ourselves suddenly surrounded, I might say, embowered, by the richest proofs of the beauty, the skill, and the abundance of the agriculture of a whole rural County. It is like coming from a vast babel of workshops, warehouses, and money-changers, to the gardens of the Hesperides; whose work of guardianship over the wedding-apples of Juno was not more classic, and was certainly less beneficent, than yours,—of distributing annually these golden fruits of the soil, alike the emblem and the reward of the marriage of the city and the country. Let us rejoice, that if our State is, in some sense, a continuity of wharves, and counting-rooms,

and workshops, it is also as truly a common field, which capital, and industry, and experiment, are rapidly bringing to the highest perfection of cultivation. These different agencies must support each other.

In some brief remarks made at a similar show in another County, last week, it was my opportunity to allude to the importance of our landed estates in the relations of their value to the value of other property under our system of political economy. And here, on the present occasion, I may call your attention to the importance of pushing the cultivation of the land to its largest capacity, and of keeping the ranks of the agricultural class good and full, if we would preserve the unities and proportions of our present social and political condition as a State.

The statistics of our industry, collected during the last year, and just now published, exhibit an annual production in this State of the value of five hundred and seventeen millions of dollars. This, certainly, is a remarkable result; and when it becomes known in London, it cannot fail to strengthen the confidence already felt there in our securities, which are held by British capitalists in large amounts. Undoubtedly, some little abatement should be made from the force with which these returns would at first strike an unthoughtful person, on account of the exceptional high prices of the raw material consumed at the time in this production. This, for example, is especially true of cotton, leather and wool, which represent our three greatest departments of producing industry. And yet, against this fact we must also place the great rise in the price of labor, which will go far to neutralize that of the raw staples used in our manufactures. So that I fully believe, after a careful examination of Mr. Secretary Warner's volume of statistics, and taking as the present standard what we may reasonably suppose may be the average price of stock and labor for some years to come, that the producing power of Massachusetts is not to be rated much below five hundred millions of dollars. And now here I cull another fact from this book of industries, which I welcome with special pride, and mention for special encouragement. It is the fact, that in the last ten years the productive forces of agriculture in Massachusetts, estimated by their value, have increased even more largely than all the others. In 1855 they were not far from thirty-six millions; in 1865 they were about seventy millions. While the other pursuits have advanced at the rate of about two-fifths increase upon the result shown in the previous decade, agriculture has, in the same period, very nearly doubled. I regard this as the highest proof which the people of the State could have given of their appreciation of the necessity of maintaining the agricultural element as a department and a power in this Commonwealth, where we all know it has heretofore been hard work to maintain it.

We have the fact, then, before us that in Massachusetts, emphatically a commercial and manufacturing community, always destined to be such, and deriving her power in this union of States from being such, while these other capacities and occupations have been augmented with amazing rapid-

ity, agriculture has steadily more than held its own proportion. In our system of the economies of the State, it is highly important that this pursuit should continue to hold its own, advancing equally, at least, with the others. Although it bears to the whole only the proportion of one-seventh, and hardly that, it is, in the great account of industries, a base for all the others. I am speaking of it now only in its connection with the financial relations of the life of a community. And I have the honor to say, that if the agriculture of the State, comparatively small as it appears, were to be allowed to go to decay and ruin, there would follow a disturbance in our whole economical system, which would be felt and deplored from Long Wharf to the banks of the Hudson. You and I have known, Mr. President, how a slight failure in any department of production in one hemisphere has embarrassed the general society of the world. We have seen, within the last twenty-five years, once or twice at least, that a failure of ten per centum in the agriculture of the continent of Europe, small as that per centum is, has given wings of buoyancy and profit to the grain of the United States, all through, from the colossal stacks of Ohio and Illinois, to the little cereal attics of Massachusetts. That small yet grave annoyance and disturbance in the relations of the international exchange of the world, resulting from unpropitious weather, or mischievous insects, or any other causes unseen and unknown, around the Danube or the Caspian, would be intensified and felt through all our sympathetic classes here at home, if, by ignorance, or inattention, the measure and the enterprise of land cultivation in our own State should be permitted to fall essentially below its present rule and standard. The analogies of our experience agree with this expression of belief. The lesser thought oftentimes controls the other thoughts of our life,—the younger and weaker child usually has an influence in directing the destinies of the others,—the smaller interest in the economies of States quite commonly gives direction, and progress, and destination, to the broader and larger. The agriculture of Massachusetts,—the one seventh only of the whole,—always has led, and always ought to lead the rest. Keep *this* sound, and vigorous, and fresh, and enduring, if you would have the rest all powerful and imperishable.

But beyond the financial and economical considerations which connect the success of agricultural occupations with the general success of a State, by ligaments that can never be safely sundered, there are political and social necessities which are equally obvious and important. This has been more sensibly felt and acknowledged in Great Britain, where almost the same proportion of persons is engaged in cultivating the land as in Massachusetts. Mr. Burke, after referring to the time in the history of Rome, when the country tribes were thought more respectable than those of the city, exultantly attributed the steady resistance, the fortunate issue and sober settlement of all the English struggles for liberty, to the fact that the landholders, of every degree, had at all times been in close union with the other great interests of the country, and had been allowed to lead and mod-

erate all the rest. The same fact has held true in our own country, in the war of the Revolution, and in the late war of the Rebellion. In the recent struggle of arms for the existence of the Government, when great cities faltered and sent forth huge shadows of distrust and despondency, the inhabitants of the rural districts bathed in the light of hope and promise, and the country interests and the country influences were on the side of war, and expenditure, and freedom. Nor can I conceive that such will ever fail to be the fact in every rural section whose people are under the mastery of religion and intelligence. There is something in the steadiness of well-educated agricultural communities, in their surroundings, in their better opportunities for reflection and conviction, in their more calm and equable life, in the habitual religiosity and serenity of their occupation, in their local attachments, which no other classes have so strongly, which are a nursery of character, and which isolate the owners and cultivators of the land from the mere rage for money-getting that afflicts the intenser industries of the State,—there is something, which I need not define or explain, but which anchors these men and their families to just and enduring conceptions of their relations to their God, their race, and their country. If they constituted the only class, I allow there would be a deficiency of enterprise and a stationariness which would be fatal to public progress, as the homogenousness of the communities of China has abundantly illustrated. But as a particular interest or class in the midst of others, as a balance-wheel and checkmate to all the others, they are essential to a free, enlightened, and independent Commonwealth. It is, therefore, in this sense and this relation to the life of the State, that I characterize the agricultural population of Massachusetts by applying to them the often repeated words of the poet :—

“ A bold peasantry, their country’s pride,
Which once destroyed, can never be supplied.”

But, then, we come back again to the fact,—which challenges my urgency of the absolute necessity of keeping full, and well educated, a landed class in Massachusetts,—that in the spread and development of the other interests this has come now to be only one sixth or one-seventh, numerically, in the grand whole. I accept the fact. The agricultural class is not even one sixth in numbers in Great Britain, where its power transcends every thing which the world beside can show. It is not necessary that it should even be proportionately larger than it now is in our own Commonwealth, if only its genius and capacity shall keep pace with the other departments. But that the class shall exist, and be fostered, and be educated up to the highest standard of every other class, and that it shall retain, as a minority in numbers and interest, as great a power as it now has with the majority,—this is a State, public, political, social necessity, as it should also be a State pride, and, if need be, a State cost out of the Treasury. In common politics a well supported minority is often as essential as the majority for public

stability and safety. In the industrial classes of a State this is always so. A profound French writer (M. Guizot) has attributed the failure of the earlier civilizations to the fact that in each of them some one element of industry and success prevailed exclusively, or so greatly as to overpower all the others. Let us attend to the minority interest of agriculture in this Commonwealth—let us give to it the largest beneficence of legislation; let us throw over it and around it all the graces, and attractions, and usages of the most advanced stages of social life; let us unite all our hopes and all our fortunes with it, if we would escape the fate of these other and earlier civilizations. For, be assured, fellow-citizens, while the spirit of commerce and manufactures is perhaps the greatest instrument of the widest improvement, and culture, and power, so long as other co-ordinate elements of improvement exist beside it, yet example and theory alike justify the belief, that with its complete preponderance would commence an era of stationariness or decline in the State. I do not, by any means, criticise or underestimate the intense commercial spirit of our State and our time; it has given vitality, and force, and enthusiasm to our marches in the irrepressible procession of American progress; but, nevertheless, let wise and good-hearted politicians, and all public teachers, and all liberal legislators, and all forecasting philanthropists, protect and strengthen every policy, every influence, and every scheme of education, which shall form a salutary check to the exclusive tendencies of the commercial spirit. The agricultural class will be the only bulwark of this public safety.

Mr. President, I rejoice in the indications which are apparent here and all over Massachusetts, that there is no antagonism of disposition between these producing classes of our society. I behold, every where, from the ends of the Capes to the border lines of New York, the unity of labor and the union of laborers. They are all one, in one cause. I meet here, to-day, the members of this useful and prosperous Society of Norfolk, sitting and rejoicing under the presidency of one (the Hon. Marshall P. Wilder) who has applied the results of well-earned commercial fortune to the development of the capacities of the earth, so largely and so liberally, that in every household and at every fireside in America, where the golden fruit of summer and autumn gladdens the sideboard or the hearthstone, his name, his generosity, and his labors are known and honored. I meet here, as I meet at every Exhibition in the State, those coming from commerce and the factory, and the workshop, who apply the wealth of the other classes to the wealth of yours, in contributing to these shows of the stock, and the crops, and the fruits, which make our agricultural exhibitions brilliant and memorable. If they are fancy-farmers, let us welcome their co-operation all the more gladly, for they are doing more than any other equal number of men in the State, by experiment and by expenditure, to improve the stock of horses and cattle, to test the power of the land to yield its great wealth of crops, to grace the parlor and the kitchen with all which the soil can furnish of profit, and beauty, and fragrance. I welcome those who are

called fancy farmers, because they are helping to make attractive the tie of destiny, and success, and honor, which connects the agricultural class with all the other classes of Massachusetts. God speed them all!

The speech of Governor Bullock was received with enthusiastic cheers. Letters, regretting their absence, were then read from Ex-Governor Andrew, Professor Agassiz, and others, after which, brief speeches were made by Oliver Warner, Professor Chadbourne and Rev. T. J. Mumford. Calls were made for Ex-Governor Boutwell, Lieut. Governor Claffin and Edward L. Pierce, Esq., all of whom were present at the dinner, but they had left the hall. The exercises at the table were then concluded, and the company adjourned to the horse track, where the races concluded the Fair.

It is universally conceded that the Exhibition was one of the most satisfactory ever held by the Society. The shows of stock and of fruit were by far the best ever given in the County, and the interest of the other departments was well maintained. The receipts were over three thousand dollars, being by far the largest amount ever realized at any Exhibition of the Society, and ensuring the entire extinction of the debt before the close of the present year.

The dinner on Friday was one of the most interesting features of the Exhibition, and the admirable speeches of the President and Governor Bullock were listened to with the deepest interest and attention. Much regret was expressed at the enforced absence of Ex-Governor Andrew and Professor Agassiz, both of whom had promised to attend, but who were detained by imperative engagements.

For the universal good order that prevailed through the two days of Exhibition, great credit is due to the Chief Marshal and to Deputy Sheriff Rufus C. Wood, of Canton, who acted as Chief of Police. We should fail in our duty, did we not recognize the value of the services of the Committee of Arrangements, and especially of the Chairman, Col. Eliphalet Stone, who was untiring in his efforts to ensure the success of the Show, and provide for the comfort of visitors. The arduous nature of the service which Col. Stone has rendered the Society for many years, merits substantial recognition on the part of all those interested in its prosperity.

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1 8 6 6 .

—◆—
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Crooks, George A.
Pickering, Asa 3.

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Arnold, John B.
Arnold, Joseph A.
Blake, Joseph H. D.
Bowditch, Ebenezer C.
Bradford, E. S.* 1866
Chace, George
Dow, Charles H.
Dyer, Isaac
Dyer, Joseph
Fogg, Charles M.* 1854
French, George G.
French, Charles* 1861
French, Jonathan
Hollingsworth, E. A.
Hollis, Caleb
Hollis, David N.
Hollis, John A.
Hollis, Josiah
Howard, J. G.
Ludden, Miss Carrie F.
Ludden, Joseph T.* 1862
Lock, W. F.
Mausfield, John
Mansfield, Warren
Morrison, Alva
Niles, Daniel H.
Penniman, Ezra* 1866
Perkins, Oliver,
Potter, Edward
Rand, William T.
Randall, Apollos* 1863
Stetson, Amos W.
Stoddard, A. A.
Stetson, Caleb
Thayer, Ebenezer C.
Thayer, Hezekiah* 1854
Thayer, Sylvanus
Vinton, Thomas B.
Wainwright, Peter
Wainwright, Wm. L.

Wales, George
Wild, Hiram
Willis, G. W.* 1852 43.

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Amory, James S.
Amory, William
Appleton, William, Jr.
Babeock, George
Bartlett, James
Bird, Jesse* 1856
Blake, George Baty
Blaney, Henry
Bramhall, William
Brown, Joseph T.
Churchill, Wm.* 1857
Craft, Miss Emeline H.
Craft, Charles* 1864
Craft, George
Craft, Samuel* 1856
Corey, Elijah
Corey, Timothy
Dane, John* 1854
Dane, John H.
Denny, Francis P.
Ferris, Mortimer C.
Fisher, Francis
Frazar, Amherst A.
Griggs, George
Griggs, Thomas
Griggs, Thomas B.
Henshaw, Samuel* 1863
Hill, M. F.
Howe, Frank E.
Howe, James Murray
Howe, John
Jameson, William H.
Kellogg, Charles D.
Lawrence, Amos A.
Parker, Edward G.
Parker, M. D.* 1863
Parsons, Thomas
Sampson, George R.
Shaw, G. Howland
Stearns, Charles, Jr.
Stearns, Marshall

Thayer, John E.* 1857
Trowbridge, John H.
Turner, John N.* 1864
White, Henry K.
Williams, Moses B. 46.

CANTON.

Abbott, Ezra
Ames, Frank M.
Billings, Uriah
Billings, William
Bray, Edgar W.
Brewster, Ezra S.
Capen, Ezekiel
Capen, Samuel* 1863
Chapman, Oliver S.
Crane, Albert
Deane, Francis W.
Deane, Oliver
Downes, George* 1861
Downes, George E.
Draper, Thomas
Dunbar, Elijah
Dunbar, James
Dunbar, Nathaniel
Dunbar, William
Eager, Edward R.
Eldridge, John S.
Endicott, John* 1855
Endicott, Charles
Everett, Leonard* 1852
Fenno, Jesse
French, Charles H.
French, Thomas* 1862
Fuller, Daniel
Guild, Horace
Hall, John
Howard, Lucius
Huntoon, Benj.* 1864
Huntoon, Mrs. Benjamin
Kinsley, Lyman
Kollock, Jeremiah
Lincoln, Frederic W.
Lord, William P.
Mansfield, William
McIntosh, Adam

McIntosh, Roger S.
 McKendry, William
 Messinger, Vernon A.
 Messinger, Virgil J.
 Morse, William
 Robley, Robert C.
 Shepard, James S.
 Spare, Elijah
 Spaulding, Corodon
 Stetson, Joseph
 Sumner, James T.
 Sumner, George F.
 Tilt, Benjamin B.
 Tucker, Edmund
 Tucker, Ellis
 Tucker, Jedediah
 Tucker, Nathaniel, Jr.
 Tucker, Phineas
 Tucker, William
 Ward, Samuel G.
 Wentworth, Edwin
 Wentworth, Nathaniel
 White, Elisha* 1865
 White, Nathaniel S.
 Wood, Rufus C. 64.

COHASSET.

Beal, Solomon J.
 Beal, Mrs. S. J.
 Doane, James C.
 Johnson, William B.
 Sobier, William D.
 Souther, Laban* 1860
 Tower, Abraham H. 7.

DEDHAM.

Adams, Benjamin H.
 Alden, Abner
 Alden, Francis
 Alden, George* 1862
 Alden, Leonard
 Alden, Samuel F.
 Ames, William
 Babcock, Samuel B.
 Bacon, Silas D.
 Bailey, Benjamin H.
 Baker, David A.
 Baker, Joel M.
 Baker, Obed
 Baker, Timothy
 Baker, William
 Balch, Benj. W.* 1858
 Barrows, Edward
 Barrows, Thomas
 Bartlett, Alden
 Bates, Martin

Bean, Albion* 1860
 Bestwick, Frederick L.
 Bickner, Samuel R.
 Bosworth, Isaac C.* 1866
 Boyden, Addison
 Boyden, Benjamin
 Brooks, Edward C.
 Bryant, Austin* 1851
 Bullard, Elijah
 Bullard, John* 1852
 Bullard, Lewis
 Bullard, William
 Bullard, William, 2d
 Burgess, Ebenezer
 Burgess, Ebenezer P.
 Burgess, Edward P.
 Capen, Charles J.
 Capen, Oliver* 1865
 Carroll, Sanford
 Chase, James M.* 1860
 Chickering, Horatio
 Churchill, Chauncey C.
 Clapp, Edward
 Clapp, Nathaniel
 Clark, Joseph W.
 Clarke, Horatio
 Clarke, Mrs. Horatio
 Cleveland, Ira
 Cobb, Jonathan H.
 Coburn, Mrs. Chas., Jr.
 Colburn, Allen
 Colburn, Nath'l* 1853
 Colburn, Waldo
 Coolidge, George
 Cormerais, Henry
 Cox, John, Jr.
 Crane, Ebenezer P.
 Crane, Joseph
 Crane, Mrs. Susan
 Crocker, Amos H.
 Crossman, Charles B.
 Cushing, Henry W.
 Curtis, George F.
 Damrell, Wm. S.* 1860
 Daniell, Ellery C.
 Davenport, George
 Day, Joseph
 Day, Lewis
 Deane, John* 1864
 Dixon, Rufus E.
 Doggett, John* 1857
 Donahoe, Patrick
 Downing, James
 Drayton, John* 1856
 Duff, John
 Dunbar, Thomas, Jr.
 Eaton, John

Eaton, John Ellis* 1854
 Eaton, Luther
 Edson, Mrs. E. G.* 1860
 Ellis, Calvin F.
 Ellis, Charles
 Ellis, Colburn* 1864
 Ellis, George* 1855
 Ellis, Merrill D.
 Ellis, Oliver
 Endicott, Augustus B.
 Everett, George
 Everett, Mrs. Hepzibah
 Fairbanks, Wm.* 1863
 Fales, William
 Farrington, Chas.* 1859
 Farrington, George O.
 Farrington, Jas.* 1864
 Farrington, Mrs. James
 Farrington, Jesse* 1857
 Farrington, Jesse
 Farrington, John B.
 Field, William
 Fisher, Albert
 Fisher, Alvan* 1863
 Fisher, Alvan, J.* 1863
 Fisher, Amory
 Fisher, Ebenezer S.
 Fisher, Freeman* 1860
 Fisher, James R.
 Fisher, Joseph
 Fisher, Joshua
 Fisher, Thomas
 Fleming, Douglas
 Fogg, David S.
 Foord, Enos* 1861
 French, Abram
 French, Charles
 French, George M.
 Fuller, George
 Gardner, John
 Gay, Ebenezer F.
 Gay, Mrs. Hannah S.
 Gay, Jeremiah W.
 Gay, Lusher* 1855
 Gay, Mrs. A. M.* 1866
 Gay, Wm. King,* 1859
 Gleason, Daniel
 Gould, George
 Green, Elisha
 Guild, Calvin
 Guild, Francis
 Guild, Henry
 Harnden, Harvey* 1863
 Hartshorn, Richard D.
 Henck, John B.
 Hewes, Hannah E.
 Hildreth, Henry O.

- Holmes, Edw. B.* 1865
 Houghton, William A.
 Howe, Elijah, Jr.
 Howe, Francis* 1860
 Howe, Josiah D.
 Hoyle, Mark C.
 Inches, Martin B.
 Jackson, Marcus B.
 Johnson, Edwin* 1856
 Keyes, Ebenezer W.
 Keyes, Edw'd L.* 1859
 Kingsbury, Lewis H.
 Kingsbury, Moses
 Lamson, Alvan* 1864
 Lynch, Mrs. A.
 Lynch, Wm. F.
 McLane, James
 Mann, Henry A.
 Mann, Herman* 1851
 Mann, Samuel C.* 1864
 Mann, Wm. H.* 1864
 Marden, Charles
 Marsh, Francis
 Marsh, Martin* 1865
 Marsh, Mrs. Martin
 Mason, William
 Mason, Wm. H.* 1861
 Matthews, Nathan
 Mercer, Miss Mary
 Metcalf, George E.
 Mitchell, Francis N.
 Morgan, John
 Morse, Curtis G.
 Morse, John* 1861
 Morse, John L.
 Morse, Otis
 Motley, Thomas* 1864
 Murray, Daniel
 Noyes, Nathaniel
 Norris, Andrew J.
 Onion, Henry
 Onion, Joseph W.
 Otis, Benjamin A.
 Page, Frederick A.
 Patterson, Albert C.
 Paul, Mrs. Ebenezer
 Phelps, Timothy
 Phillips, Nathan
 Phillips, Mrs. P. M.
 Quincy, Edmund
 Rand, Edward S.
 Rand, Edward S., Jr.
 Rice, John P.
 Richards, Abiathar
 Richards, E. M.* 1865
 Richards, Henry White
 Richards, J. F.* 1852
 Richards, Lewis A.
 Richards, Mason* 1866
 Richards, Reuben* 1855
 Richards, William B.
 Rodman, Alfred* 1853
 Russell, Charles
 Russell, Ira
 Sampson, E. W.* 1867
 Scanlan, David
 Scott, Joel* 1858
 Shaw, Charles B.
 Sherman, Charles B.
 Sherwin, Thomas
 Sigourney, Henry H. W.
 Slafter, Carlos
 Smith, Edwin
 Smith, Henry
 Smith, John N.
 Smith, Lyman
 Smith, Nathaniel*
 Smith, Nathaniel
 Smith, Thomas
 Smith, Zebina* 1864
 Spear, Henry F.
 Stimson, Jeremy
 Stone, Eliphalet
 Sumner, Mirick P.
 Sumner, Wm. R.* 1860
 Sutton, Enoch* 1853
 Taft, Ezra W.
 Thomas, John W.
 Thompson, Rob't* 1854
 Tower, William B.
 Tubbs, Benj. H.* 1854
 Van Brunt, G. J.* 1863.
 Vose, George H.
 Wakefield, Thomas L.
 Wales, Sam'l Jr.* 1860
 Washburn, Alex. C.
 Waters, Joseph W.
 Weatherbee, Comfort
 Weatherbee, Jabez
 Weatherbee, Jesse
 Weatherbee, John E.
 Webb, Moses E.
 Webb, Seth, Jr.* 1862
 Welch, Stephen
 Weld, Joseph R.
 Welcome, Jacob H.
 White, John* 1852
 Whiting, Hezekiah
 Whiting, Horace
 Whiting, Margaret M.
 Whiting, Moses
 Whiting, William
 Whitney, S. S.* 1855
 Wight, Danforth P.
 Wight, Ebenezer
 Williams, G. W.* 1861
 Wilson, John F.* 1853
 Wilson, Reuben S.
 Winslow, Alfred N.
 Winslow, George
 Wood, Mrs. Amos
 Woods, Wm. G.* 1863
 Worthington, E. 257.

DORCHESTER.

- Abbott, William E.
 Adams, Benjamin W.
 Atherton, Samuel
 Austin, William R.
 Bachi, Ignatius C.* 1859
 Bacon, Charles H.
 Baker, Edmund J.
 Baker, Walter* 1852
 Baldwin, Enoch* 1860
 Barnes, Parker.
 Barry, Michael O.* 1858
 Bass, Seth B.
 Beal, Alexander
 Billings, Lemuel
 Bispham, Eleazer J.
 Blanehard, Charles F.
 Bradlee, James B.
 Bradsteet, Samuel
 Branhall, Cornelius
 Breck, Henry, Jr.
 Brewer, Darius* 1854
 Briggs, Franklin
 Brooks, Noah* 1852
 Brooks, Williams B.
 Brown, Augustus
 Browne, George M.
 Capen, Aaron D.
 Capen, Samuel J.
 Capen, Thomas W.
 Carlton, Mary A.
 Carlton, Martha G.
 Carruth, Charles
 Carruth, Nathan
 Carter, Josiah H.
 Childs, Nathaniel R.
 Churchill, Asaph
 Clapp, Amasa
 Clapp, Edward B.
 Clapp, Frederick
 Clapp, Frederick A.
 Clapp, Lemuel. 2d
 Clapp, James H.
 Clapp, John P.
 Clapp, Richard* 1862
 Clapp, Thaddeus* 1861
 Clapp, William* 1859

Clapp, William C.
 Cleveland, S. H.* 1856
 Cobb, Moses G.
 Codman, John
 Codman, Robert
 Copenhagen, A. W.* '66
 Crane, Nathaniel
 Curtis, Ebenezer
 Cushing, Abel
 Cushing, Benjamin
 Davis, Barnabas
 Dearborn, Axel
 Denny, Daniel
 Denny, Daniel, Jr.
 Doody, Dennis
 Dorr, James
 Downer, Samuel
 Flynn, Thomas
 Follansbee, Isaac W.
 Foster, William H.
 Fowler, M. Field
 French, Benj. V.* 1860
 French, Mrs. B. V.
 Gardner, Henry J.
 Gilbert, Samuel, Jr.
 Gleason, Moses* 1856
 Gleason, Roswell
 Gleason, Sarall* 1854
 Grew, Henry
 Groom, Thomas
 Hall, Oliver
 Hall, Samuel
 Hammond, Horatio
 Harding, William
 Harding, Mrs. Wm.
 Hardy, Alpheus
 Hartshorn, Lewis E.
 Hathaway, Nicholas
 Haven, John A.
 Haynes, Edward, Jr.
 Hewins, John C.
 Hickey, Timothy
 Hickey, William
 Holbrook, Nathan
 Holmes, Ebenezer
 Hooper, Franklin Henry
 Hooper, Robert C.
 Hooper, Robert C., Jr.
 Houghton, George A.
 Howe, Charles
 Humphrey, Henry
 Hunt, Charles
 Igoe, Patrick
 Jacobs, Benjamin
 Jones, Nahum
 King, Edward* 1866
 King, Franklin

Lee, James, Jr.
 Leonard, Joseph
 Liversidge, S.* 1852
 Liversidge, Thomas
 Mack, S. P.* 1866
 McAnliffe, Daniel
 Marshall, William
 May, John J.
 Means, James H.
 Mears, John
 Mears, John, Jr.
 Miller, Erasmus D.
 Minot, John* 1861
 Moseley, Flavel
 Murphy, Timothy
 Nazro, John G.
 Newhall, Cheever
 Newhall, John M.
 Nott, Gordon H.
 Payson, Thomas
 Perrin, Augustus W.
 Peters, Henry H.
 Pierce, Chas. B.* 1857
 Pierce, Henry L.
 Pierce, Jesse* 1856
 Pierce, Lewis
 Pierce, Robert
 Pierce, William* 1853
 Pierce, Wm. B.* 1858
 Pierce, William P.
 Pope, Alexander
 Pope, William, Jr.
 Pratt, Laban
 Preston, Edward
 Preston, John* 1856
 Preston, John
 Prince, William G.
 Prouty, Lorenzo
 Rice, George Woods
 Richardson, George
 Richardson, William H.
 Rideout, Asa
 Robie, John
 Robinson, Mrs. D. A.
 Robinson, Eli W.
 Robinson, John H.
 Robinson, Stephen A.
 Ruggles, Edward H. R.
 Safford, Nathaniel F.
 Seudder, Horace* 1851
 Snell, Stephen D.
 Southworth, Consider A.
 Spear, Daniel
 Spear, Luther
 Spooner, John P.
 Sumner, Clement
 Swan, James

Temple, Hannaniah
 Temple, William F.
 Thayer, Benjamin W.
 Thompson, Joshua P.
 Tileston, Edmund P.
 Tileston, Samuel
 Tolman, Eben'r* 1863
 Tolman,* William
 Train, Enoch
 Tremlitt, Thomas* 1858
 Trull, John H.
 Trull, Mrs. J. H.
 Trull, John W.
 Tuttle, Joseph
 Vose, B. C.
 Vose, Robert
 Vose, Robert, Jr.
 Washburn, Allen J.
 Webster, Charles W.
 Welch, John H.
 Welch, Mrs. J. H.
 Whipple, John L.
 Wilder, Marshall P.
 Wilder, Mrs. M. P.* '54
 Williams, S. B.* 1854
 Withington, Wm. C.
 Woodman, James
 Worthington, Wm.* '57
 Worthington, Wm. F.
 Wright, Edmund
 Wright, Mrs. Edmund
 Wright, Otis * '65 192.

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Adams, John
 Allen, Jared
 Allen, Timothy
 Bacon, Aaron
 Bacon, Mary S.
 Baker, Jabez
 Barden, Calvin
 Battelle, John
 Battelle, John E.
 Battelle, Mary D.
 Battelle, Rachael A.
 Battelle, Ralph
 Beatie, Thomas
 Bigelow, Calvin A.
 Bigelow, Mrs. C. A.
 Bigelow, Mrs. Abraham
 Bigelow, William A.
 Bliss, Linus
 Bliss, Mrs. Linus
 Chickering, Daniel
 Chickering, George E.
 Chickering, Otis
 Chickering, Samuel

Clevelend, William
 Dunn, Theodore
 Fearing, Perez L.
 Gannett, William W.
 Gay, Francis G.
 Goulding, H. Emeline
 Goulding, Henry
 Jones, Hiram W.
 Jones, Alice J.
 Jones, J. L.
 Jones, Lucy
 Lyman, Miss Frances L.
 Mann, Daniel* 1859
 Mann, Daniel F.
 Mann, Elbridge L.
 Mann, Hollis
 Mann, S. J. B.
 Newell, Benjamin
 Newell, Mrs. Benjamin
 Newell, Jesse
 Newell, Josiah B.
 Perry, Elijah
 Perry, Mrs. Mehitable
 Richards, Calvin
 Richards, Mrs. Calvin
 Richards, Jennie A.
 Richards, Lucy M.
 Richards, Luther
 Rogers, Wilbor J.
 Sanger, Ralph* 1860
 Sawin, Benjamin N.
 Sawin, Frank W.
 Sawin, Mary A.
 Shumway, Amos W.
 Shumway, Amos W., Jr.
 Shumway, Hannah
 Shumway, John W.
 Shumway, Sarah G.
 Smith, Abner L.
 Smith, Charles H.
 Smith, Mary W.
 Tisdale, William
 Upham, Martha F.
 Upham, Walter W.
 Wall, Patrick
 Wilson, Ephraim
 Wilson, Mrs. Ephraim
 Wilson, Miss N. D. 71.

FOXBORO'.

Aldrich, H. D.* 1854
 Belcher, Lewis W.
 Burr, Simeon
 Capen, James
 Carpenter, Daniels
 Carpenter, Erastus P.
 Carpenter, James E.
 Carpenter, Oliver

Cary, Otis
 Cobb, Elias G.
 Dickermn, Lemuel
 Dixon, Sarah O.
 Fisher, Albert
 Foster, James W.
 Guild, Freedom* 1862
 Hersey, David
 Hodges, Alfred
 Kingsbury, Joseph
 Leonard, Mrs. E. S.
 Leonard, James F.
 Leonard, Samuel B.
 Leonard, Sanford
 Pettee, David
 Pettee, Joseph G.
 Pettee, Simon E.
 Shepard, J. M.* 1866
 Sherman, Job
 Smith, Silas
 Sumner, Mrs. A. M.
 Sumner, Charles C.
 Torrey, Martin* 1861
 Wyman, David 32.

FRANKLIN.

Adams, Albert
 Adams, Peter
 Adams, Ward* 1865
 Atwood, Shadrach
 Atwood, Mrs. Ruth* '62
 Baker, David P.
 Bullard, Piam
 Chapman, Elisha P.
 Daniels, Adams
 Daniels, Albert E.
 Daniels, Charles F.
 Daniels, Mrs. Charles F.
 DeWitt, Archibald* '59
 DeWitt, Mrs. Mary Ann*
 1865
 Fisher, Herman C.
 Fisher, Maxey* 1865
 Fisher, Walter H.
 Fisher, Mrs. Walter H.
 Fisher, Walter M.
 Green, Henry M.
 Green, Martin
 Harding, Lewis
 Hills, Theron C.* 1862
 Knapp, Alfred
 Metcalf, Alfred G.
 Metcalf, Alfred H.
 Metcalf, Erasmus B.
 Metcalf, Erastus L.
 Metcalf, Whiting
 Metcalf, William
 Miller, John W.

Miller, Philip W.* 1860
 Morse, George W.
 Morse, Joseph
 Nason, George W.
 Ray, Francis B.
 Ray, Mrs. Francis B.
 Ray, Joseph G.
 Ray, James P.
 Richardson, John W.
 Richardson, Stephen W.
 Rockwood, E.* 1864
 Rockwood, Nathan
 Sargeant, A. D.
 Scott, Saul B.
 Thayer, Davis, Jr.
 Wadsworth, Joseph H.
 Wales, Otis, Jr.
 Whiting, Joseph
 Whiting, Joseph M.
 Whiting, Wm. E. 51.

MEDFIELD.

Adams, George F.
 Allen, Noah
 Allen, William C.
 Baker, Joseph H.
 Balch, Albert
 Barney, Thomas L.
 Bigelow, Andrew
 Bullard, John E.
 Carson, Joseph
 Chenery, William
 Cheney, Nathaniel H.
 Cheney, Seth
 Curtis, Daniel D.
 Cushman, Jacob R.
 Davis, George
 Ellis, Caleb
 Ellis, George W.
 Ellis, John
 Ellis, Samuel
 Fisher, Hinsdale
 Fisher, Mrs. Mary L.
 Fisher, Mary E.
 Fisher, Sarah H.
 Fisher, Wm. Quincy
 Fiske, George
 Fiske, Isaac
 Hamant, Caleb S.
 Hamant, Charles
 Hamant, Daniels, Jr.
 Hamant, Daniel D.
 Harding, Nathan
 Hartshorn, Jos'ph* 1866
 Hartshorn, Warren
 Hewins, William P.
 Jones, John P.
 Janes, Walter* 1867

Morse, Eliakim
 Morse, Joel
 Morse, Miss Lucy
 Parker, A. B.
 Partridge, Mrs. E. A.
 Partridge, Henry, Jr.
 Richardson, Simeon
 Roberts, Mrs. Helen M.
 Roberts, Robert
 Salisbury, Wm.* 1857
 Sewall, Charles C.
 Sewall, Edward U.
 Shumway, Benjamin F.
 Smith, George M.
 Stedman, Cyrus* 1865
 Thayer, Elijah
 Turner John A.* 1863
 Turner, J. Addison
 Wetherell, Harlus W.
 Willard, Gibson 56.

MEDWAY.

Adams, Edward
 Adams, Elisha
 Adams, Lyman
 Adams, Wyman
 Barber, George* 1851
 Barber, Thomas
 Boyd, William B.
 Bullard, John, Jr.
 Cary, Gilman
 Carey, William H.
 Clark, James P.* 1865
 Clark, James W.
 Clark, Maria F.
 Clark, Willard P.
 Crosby, George* 1859
 Daniels, James Willard
 Daniels, Paul
 Daniels, Mrs. Paul
 Daniels, William
 Ellis, James H.
 Fisher, Milton M.
 Fuller, Asa M. B.
 Harding, Theodore
 Henderson, William
 Hurd, Julius C.
 Ide, Jacob
 Kingsbury, Gilbert
 Lovell, Asahel P.
 Lovell, Zachariah
 Lovering, Warren
 Mann, James
 Mason, Horatio
 Mason, Miss Matilda G.
 Metcalf, Luther
 Morse, Asa D.

Partridge, Clark
 Partridge, George
 Richardson, Elisha F.
 Richardson, Jeremiah D.
 Richardson, Joseph L.
 Richardson, Moses
 Richardson, Richard
 Slocumb, C.* 1861
 Stevens, Daniel G.
 Walker, John S.
 Walker, Timothy
 Wheeler, Abijah R. 47.

MILTON.

Adams, John
 Adams, Samuel
 Amory, Francis
 Arnold, John, Jr.*
 Babcock, Josiah* 1863
 Babcock, Lemuel W.
 Babcock, Samuel
 Baldwin, Edward
 Beal, Jonathan
 Bradlee, John D.
 Breck, Charles
 Breck, Charles E. C.
 Brooks, John W.
 Bunton, Jesse
 Churchill, Jos. McKean
 Cook, Samuel
 Copeland, Charles L.
 Copeland, Lewis
 Cornell, Walter
 Cunningham, C. Loring
 Cunningham, Francis
 Curtis, Daniel T.
 Davenport, Edwin
 Davenport, Lewis
 Davenport, Nathaniel T.
 Davis, William H.
 Dow, John R.
 Dudley, Benjamin F.
 Emerson, Joshua
 Fenno, Rufus P.
 Ferry, George S.
 Ferry, William M.
 Forbes, John M.
 Forbes, Robert Bennett
 Garrett, George E.
 Hall, George W.
 Hinkley, Thomas H.
 Hobson, Miss Martha J.
 Houghton, Jason W.
 Hunt, Charles K.
 Hunt, George
 Kent, George W.
 Pierce, Edward L.

Pope, Ebenezer* 1853
 Raymond, George
 Richards, Reuben A.
 Robbins, James M.
 Rodgers, O. T.* 1859
 Rogers, H., Jr.* 1855
 Rotch, Benjamin S.
 Rowe, Joseph* 1856
 Ruggles, Philemon
 Sias, Eliphalet
 Sias, John
 Slone, Charles* 1859
 Thayer, Jason
 Thompson, Geo.* 1857
 Todd, Robert M.
 Tucker, Elijah
 Tucker, Mrs. Elijah
 Tucker, Timothy* 1864
 Twombly, Josiah F.
 Vose, George
 Wolcott, J. Huntington
 Webster, Joseph R.
 West, Henry
 White, Benjamin 67.

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Alden, Otis
 Avery, Jonathan
 Ayling, Isaac
 Beless, Thomas
 Bowers, Henry
 Blackman, Henry
 Blackman, Augustus
 Buck, Charles
 Buck, Miss F. P. H.* '55
 Buck, Miss Mary M.
 Bullen, Ichabod* 1858
 Cooper, Samuel
 Daniell, George K.
 Darling, George F.
 Dewing, Warren
 Eaton, George E.
 Eayrs, William C.
 Emmons, Charles P.
 Flagg, Solomon
 Flagg, Wm.* 1861
 Gardner, Elbridge
 Goss, Daniel J.
 Gray, James
 Harmon, Charles H.
 Harmon, Cyrus
 Harris, John* 1858
 Harris, John M.
 Harvey, Stephen F.
 Holland, John
 Hollis, Elisha P.
 Howland, George

Hubbard, G. G.* 1856
 Hunnewell, Horatio H.
 Hunting, Israel
 Kimball, Benjamin G.
 Kimball, Mrs. Betsey G.
 Kimball, Daniel* 1862
 Kingsbury, Lemuel
 Kingsbury, Lauren
 Kingsbury, Thos.* 1859
 Kingsbury, William A.
 Knapp, A. P.
 Longfellow, Geo. J.
 Longfellow, Nathan
 Longfellow, Wilber F.
 Longfellow, Fannie E.
 Lovewell, Charles B.
 Lyon, Mrs. Julia A.
 Lyon, Edward
 Lyon, William
 Mansfield, Charles H.
 Mansfield, John
 Mansfield, Robert
 Mansfield, Mrs. Robert
 Mansfield, William
 McCrackin, John
 McIntosh, Mrs. H. P.
 Mills, John
 Mills, Matthias
 Morton, Otis, Jr.
 Morton, William T. G.
 Newell, Artemas
 Newell, Mrs. Martha S.
 Noyes, Josiah
 Peabody, Ezekiel
 Phillips, Freeman
 Pierce, William
 Pierce, William, Jr.
 Pierce, Mrs. Harriet
 Revere, George
 Robinson, Henry
 Sawyer, John
 Sawyer Otis* 1855
 Scudder, Marshall S.
 Seagrave, Saul S.
 Shaw, George W.* 1852
 Shaw, John W.
 Snelling, Nathaniel G.
 Stedman, Francis
 Stedman, Mrs. F. F.
 Stedman, William M.
 Stone, David
 Stone, Henry L.
 Sumner, Lewis
 Sumner, Samuel B.
 Upham, Cyrus G.
 Ware, Dexter* 1851
 Ware, Reuben

Ware, Althea
 Ware, Ruel
 Ware, William S.
 Washburn, G. W.
 Webber, Aaron D.
 Welles, John
 Whitaker, Edgar K.
 Williams, Silas G.
 Wood, Henry 97.

QUINCY.

Adams, Charles Francis
 Adams, Ebenezer
 Bartlett, Ibrahim* 1853
 Bass, Josiah
 Bass, Lewis
 Baxter, Daniel
 Baxter, Elijah
 Baxter, Mrs. George
 Baxter, George L.
 Beale, Geo. W.* 1851
 Beals, Nathaniel H.
 Billings, Lemuel
 Brackett, Lemuel
 Brigham, Josiah
 Carr, John J.
 Curtis, Noah* 1856
 Eaton, Jacob F.
 Emmons, Nathaniel H.
 Fellows, Ensign S.
 Frederick, Eleazer
 Glover, H. N.* 1863
 Green, John A.* 1861
 Greenleaf, Daniel
 Greenleaf, Thos.* 1854
 Horton, Lloyd G.
 Miller, Charles E.
 Morton, William S.
 Munroe, Israel W.
 Newcomb, James
 Newcomb, John B.
 Quincy, Josiah* 1864
 Richards L.* 1852
 Robertson, Joseph W.
 Rodgers, Clift
 Savil, John
 Spear, Charles A.
 Stetson, James A.
 Thayer, G. F.* 1864
 Torrey, William
 Walker, William
 White, Nathaniel* 1867
 Willard, Solomon* 1861
 Williams, Francis 43.

RANDOLPH.

Alden, Ebenezer
 Alden, Horatio B.

Belcher, Allen A.
 Belcher, J. White
 Buck, Nathan,* 1853
 Burrill, David
 Cordley, Christopher M.
 Cushing, Abner L.
 Holbrook, Caleb S.
 Holbrook, Elisha
 Jordan, John T.* 1865
 Leeds, Joseph* 1858
 Maguire, James
 Maguire, James F.
 Mann, Ephraim* 1863
 Mann, Seth, 2d
 Niles, Jacob
 Snow, Zenas* 1857
 Stevens, Richard
 Tower, Isaac
 Turner, Royal W.
 Turner, Seth
 Wales Apollos
 Wales, Ephraim* 1855
 Wales, John, 2d
 Wales, Jonathan* 1862
 Whitcomb, Alfred W.
 White, Adoniram
 White, Jairus
 White, Jonathan 30.

ROXBURY.

Adams, Thomas
 Andrews, Alfred A.
 Appleton, Charles T.
 Bacon, William, Jr.
 Bartlett, Henry* 1860
 Blake, S. Parkman
 Bowditch, Azell
 Bowditch, Azell C.
 Bray, Charles F.
 Brigham, Joseph L.
 Brown, Andrew J.
 Bryant, Charles W.
 Bufford, John H.
 Chadwick, Joseph H.
 Chandler, John G.
 Clarke, John J.
 Codman, Henry* 1853
 Copeland, B. F.* 1863
 Copeland, Chas.* 1853
 Copeland, Franklin
 Cotting, Benjamin E.
 Crawshaw, Joseph
 Crosby, Benjamin H.
 Davis, Gilman
 Dearborn, H. A. S.* '51
 Ellis, Charles* 1860

Ellis, Charles M.
 Eustis, William
 Fisher, Warren
 Fiske, George A.
 Ford, Seth H.* 1863
 Francis, Eben'r* 1858
 French, Jonathan
 French, Mrs. J.
 Fuller, H. Weld
 Fussell, John
 Gardner, Francis
 Gray, Henry D.
 Guild, Frederick
 Guild, Henry
 Guild, James
 Ham, Joseph
 Hendee, Charles J.
 Hewes, John M.
 Hewins, Whiting* 1855
 Hickling, Charles
 Huckins, James
 Huckins, James W.
 Hustin, William R.
 Keene, James
 Kidder, Frederic
 King, William S.
 Kingsbury, William B.
 Kittredge, Alvah
 Lee, William Raymond
 Lemist, Edwin
 Lewis, Daniel
 Lewis, Franklin H.
 Lewis, Samuel S.
 Lowell, John A.
 Mann, Benjamin
 Mathes, Albert R.
 McBurney, Charles
 McIntosh, William H.
 Merrill, John J.
 Monroe, George H.
 Oakley, Frank F.* 1865
 Paine, Joseph P.
 Parker, Augustus
 Parker, George J.
 Pickering, Henry W.
 Pike, Charles S.
 Putnam, Allen
 Rich, Naphthali D.
 Ritchie, James
 Robinson, J. P.* 1863
 Ropes, Joseph S.
 Sargent, Epes
 Shed, Henry P.
 Simmons, D. A.* 1860
 Skinner, Elias
 Sleeper, John S.
 Stevens, Amos

Stone, Ebenezer W.
 Sturgis, James
 Thacher, Thomas, Jr.
 Thwing, Supply C.
 Tolman, James
 Trescott, Elijah, Jr.
 Tucker, Daniel
 Vinson, Cornelius M.
 Walker, Samuel* 1860
 Ware, Leonard
 Way, Samuel A.
 Weston, Lycurgus B.
 Whiting, Wm. (Montrose
 Avenue)
 Williams, A. D.* 1863
 Williams, Aaron D., Jr.
 Williams, David W.
 Williams, Mrs. D. W.
 Williams, Dudley
 Williams, G. Foster
 Williams, G. H.* 1862
 Williams, S.* 1852
 Williams, Thomas B.
 Wilson, Granville W.
 Winslow, Edward
 Wiswall, Samuel
 Wolcott, John W. 109.

SHARON.

Blackman, E. H.
 Bullard, Benjamin
 Clark, Edwin R.
 Cobb, Warren,
 Cobb, Mrs. Warren,
 Cobb, Miss Ella M.
 Drake, Asahel S.
 Drake, Mrs. Asahel S.
 Drake, Ellis D.
 Gay, George W.
 Hewins, Elijah* 1857
 Hewins, Lemuel D.
 Johnson, Lucas
 Johnson, Otis
 Lothrop, Howard A.
 Mann, George R.
 Mann, Mrs. George R.
 Maun, William R.
 Mann, Mrs. William R.
 Mann, Miss M. Ella
 Mann, Miss E. Mary
 Mann, George H.
 Morse, Harvey
 Morse, Lewis W.
 Morse, Mrs. Lewis W.
 Morse, Edward L.
 Randall, Macey, Jr.
 Sanger, John M.

Smith, Lewis
 Turner, Calvin
 Warren, Charles H. 31.

STOUGHTON.

Anderson, E. S.
 Atherton, James
 Atherton, William
 Belcher, Orin
 Belcher, Wm. S.* 1862
 Bird, Henry
 Capen, Samuel
 Clapp, Lucius
 Clark, Chester
 Curtis, Samuel W.
 Drake, Philip H.
 Gay, Cyrus H.
 Gay, John M.
 Gay, Lemuel* 1866
 Gay, Mace
 Gay, Nathaniel
 Goldthwait, Daniel A.
 Hill, James
 Hodges, Leonard
 Hodges, Samuel W.
 Hodges, Mrs. S. W.
 Littlefield, Charles
 Porter, Lather
 Porter, Robert
 Porter, Robert, Jr.
 Porter, Uriah C.
 Porter, Theron M.
 Porter, John M.
 Southworth, Amasa
 Southworth, Asahel
 Sumner, Francis C.
 Swan, Elisha
 Talbot, Newton
 Thayer, S. Lysander
 Tucker, Wales
 Wales, Nathaniel 36.

WALPOLE.

Allen, Jeremiah
 Allen, Lewis
 Bacon, Samuel W.
 Bacon, William
 Bird, Charles
 Bird, Francis W.
 Boyden, Horatio
 Clap, Edmund W.
 Clap, Samuel G.
 Clap, Warren
 Clarke, Mrs. Betsey M.
 Clarke, Henry S.
 Clarke, Truman
 Conant, George

Cram, Jerome B.
 Ellis, James
 Ellis, Joseph* 1851
 Fuller, James R.
 Gilbert, Samuel
 Gould, John A.* 1861
 Gray, H. Fannie
 Gray, Smith
 Gray, Mrs. Smith
 Gray, William H.
 Guild, Charles
 Hartshorn, Charles
 Hartshorn, George
 Hawes, Joseph* 1849
 Hyde, George B.
 Lewis, Willard
 Mann, John
 Mann, Lowell
 Merriek, John M.
 Neale, Benjamin
 Page, William A.
 Pierce, Shadrach S.
 Plimpton, C. G.* 1864
 Plimpton, H. M.
 Polley, Edmund
 Scott, James G.
 Shepard, E.
 Smith, Metcalf
 Stone, Ebenezer
 Thompson, Edwin
 Wilmarth, Naaman B.
 Wilmarth, Elizabeth F.
 Wilson, Edwin 47.

WEST ROXBURY.

Allen, Stephen M.
 Andrews, Edward R.
 Andrews, Mrs. E. R.
 Arnold, Joseph
 Austin, Arthur W.
 Austin, Miss Florence
 Austin, William Percy
 Bacon, Daniel C.* 1856
 Bacon, Francis E.
 Bacon, William B.
 Bailey, Luther C.
 Balch, George H.
 Balch, Joseph* 1849
 Balch, Joseph W.
 Banfield, Everett C.
 Billings, Joseph H.
 Billings, Mrs. Joseph H.
 Billings, Miss Jennie
 Billings, Miss Mary
 Blake, John J.
 Blake, William
 Blackman, George

Bond, George William
 Bowditch, J. Ingersoll
 Bradford, S. D.* 1865
 Bradish, Levi J.
 Brewer, Charles
 Brewer, Otis
 Brown, Benjamin
 Browne, Horace E.
 Butters, J. A. C.* 1856
 Cabot, Stephen
 Cary, Isaac H.
 Cass, Aaron
 Cass, Francis W.
 Cass, Henry W.
 Crosby, Albert
 Comins, Linus B.
 Cowing, Walter H.
 Curtis, Joseph H.
 Curtis, George S.
 Curtis, Charles F.
 Dabney, Chas. W., Jr.
 Davis, Francis
 Dixwell, John J.
 Draper, Abijah W.
 Dudley, Henry
 Dudley, Ephraim M.
 Eldridge, Oliver
 Ellis, Francis D.
 Emmons, John A.
 Enslin, William
 Evans, William
 Farrington, Eben'r T.
 Gilbert, Luther
 Gooding, George
 Gould, Joseph D.
 Greenough, David S.
 Hall, Alfred B.
 Hall, David P.
 Hall, William D.
 Head, Charles D.
 Head, Francis C.
 Henchman, Nath'l H.
 Hewins, Charles A.
 Howland, J. T.
 Hunt, Harrison G.
 Keith, William* 1859
 Lamb, Reuben A.* 1858
 Lawrie, Andrew B.
 Low, John J.
 Mackintosh, Charles G.
 Mackintosh, J. S.
 Manning, Charles
 March, A. S.* 1854
 March, Andrew S.
 McIntosh, William
 Meserve, Andrew T.
 Meserve, Isaac H.

Minot, George R.
 Morse, Charles
 Morse, Robert M.
 Motley, Miss A. Lathrop
 Motley, Charles D.
 Motley, Thomas
 Motley, Mrs. Thos.
 Motley, Thomas L.
 North, George G.
 Orange, Thomas
 Page, Joseph W.
 Page, Kilby
 Palmer, William* 1860
 Parkinson, John* 1866
 Pearce, John
 Pratt, John C.
 Pritchard, Jeremiah
 Richards, Edward
 Richmond, Thomas T.
 Robeson, William R.
 Rodman, Samuel W.
 Russell, Geo. R.* 1866
 Sampson, Charles* 1859
 Seaverns, Thomas W.
 Shaw, Francis G.
 Shaw, Quincy A.
 Smith, Alvin
 Slocumb, William H.
 Smith, Humphrey
 Smith, Joseph M.
 Smith, Melancthon
 Spaulding, Solomon R.
 Spooner, Wm. H., Jr.
 Stevens, S. W.
 Sturgis, Russell
 Swett, Samuel W.
 Taft, Reed
 Taylor, H. B.* 1861
 Ticknor, Wm. D.* 1864
 Tolman, Ebenezer W.
 Townsend, David
 Tufts, James* 1859
 Watt, Robert
 Watt, Lizzie
 Watt, Marion J.
 Weld, Aaron D.
 Weld, Mrs. A. D.
 Weld, Aaron D., Jr.
 Weld, Miss A. K.
 Weld, Francis M.
 Weld, J. Gardner
 Weld, Richard H.
 Weld, Stephen M.
 Westcott, Stephen
 Whytal, Thomas G.
 Whytal, Mrs. Thos. G.
 Williams, B. P.* 1856

Williams, George H.
 Williams, Henry H.
 Williams, Moses
 Williams, Moses B.
 Williams, N. D.* 1852
 Willson, Edmund B.
 Wing, B. F.
 Woodward, Chauncey
 Woodbury, Joseph P.
 Worley, B. W.
 Young, Calvin
 York, John 148.

WEYMOUTH.

Blanchard, Nathaniel
 Burrill, Ansel
 Fifield, Noah
 Howe, Appleton
 Humphrey, Ebenezer
 Humphrey, L.* 1857
 Hunt, A. N.* 1864
 Hunt, Elias
 Jones, James
 Kingsbury, F. A.* 1860
 Loud, Joseph, Jr.
 Loud, John W.
 Nash, Abner P.
 Nash, Erastus

Nash, Stephen W.
 Porter, Thomas B.
 Richards, Elias
 Shaw, Nathaniel* 1860
 Shaw, Theron V.
 Tirrell, Albert
 Tirrell, James* 1865
 Tirrell, Wilson
 White, James
 White, Thomas 24.

WRENTHAM.

Aldrich, Artemas
 Barnard, Alfred
 Blakesly, Hubbard
 Cheever, Alonzo W.
 Cheever, Mrs. Eliza R.
 Cheever, Otis G.
 Clap, Harvey E.* 1863
 Clay, Nehemiah
 Cowell, William W.
 Dupee, Erastus
 Everett, Edmund T.
 Everett, Melatiah* 1858
 Faxon, Francis G.
 Fisher, Calvin, Jr.
 Fisher, Hiram B.
 Fisher, Silas P.* 1865

Ford, J. T.
 Ford, Peter
 Fuller, Chauncey G.
 Gassett, Henry, Jr.
 Grant, George
 Grant, Robert P.
 Grant, Whiting
 Hawes, Benj.* 1867
 Holbrook, George E.
 Ide, Edwin S.
 Jepson, William A.
 Larkin, Lyman B.
 Mann, Howard
 Parker, Ebenezer B.
 Pond, Handel
 Pond, Jabez E.
 Pond, Lucas
 Pond, Mrs. Lucas
 Proctor, Thomas
 Robinson, Joel H.
 Sayles, Caleb W.* 1863
 Starkey, Gardner H.
 Stone, Curtis
 Sturdy, James H.
 Trowbridge, Henry
 Ware, Asa
 White, James A.
 Wiggin, James S. 44.

MEMBERS RESIDING OUT OF THE COUNTY.

Balch, Wesley P., Boston
 Copeland, R. McCleary, Boston
 De Reynoso, Bernard
 Edmands, J. Wiley, Newton
 Ellis, David, Cambridge
 Goddard, Thomas, Boston
 Gould, George, Newton

Hollis, John W., Newton
 Minot, George W., Boston
 Slade, Robert, Boston
 Smith, George W., Boston
 Tappan, Lewis W., Boston
 Wheeler, Lewis, Cambridge 13.

Members admitted, 1,558

Members deceased, 225

THE
EIGHTEENTH ANNUAL
CATTLE SHOW AND FAIR

OF THE
Norfolk Agricultural Society

WILL BE HOLDEN

AT DEDHAM,

ON

Thursday and Friday, September 27 and 28, 1866.

 The Trustees invite the Agriculturists, Mechanics, Manufacturers, Horticulturists, and Ladies of the County, to join their endeavors to render it worthy of the patronage of the Commonwealth, and creditable to themselves.

B O S T O N :
WRIGHT & POTTER, PRINTERS, 4 SPRING LANE.
1 8 6 6 .

NORFOLK AGRICULTURAL SOCIETY.

Rules and Regulations.

It is understood that all premiums will be restricted to articles grown or manufactured in the County, unless otherwise specified in the premium list. Essays and Agricultural Implements being excepted from this rule, will be open to general competition.

 *Committees are prohibited from awarding gratuities, other than diplomas, unless specified in the premium list.*

 *No object or article will be entitled to a premium, unless it possesses point of superiority; and the Committees are prohibited from awarding premiums, if, in their opinion, the articles or objects are not deemed worthy.*

Any gentleman, not a member of the Society, entitled to a premium of five dollars or upwards, and any lady, not a member of the Society, entitled to a premium of two dollars or upwards, shall receive the amount exceeding the sum of five dollars or two dollars, respectively, and may thereafter become a member.

All animals and articles intended for exhibition and premium—bread and butter excepted—must be on the ground at or before 12 o'clock on Thursday, the first day of the Exhibition, to be entitled to any premium. Animals will not be allowed to be removed from the pens before 3 o'clock on Friday, the second day, and all other articles not until 5 o'clock, without the permission of the Committee having them in charge.

In order to extend liberal encouragement to citizens of the County living remote from the Society's grounds in Dedham, a sum—not exceeding fifty dollars—will be appropriated for compensation of travel to the owners of all such neat cattle, swine and sheep, as have been brought or driven more than five miles—reckoning the distance from whence they came to the place of exhibition—and receive no premium. Only one travel will be allowed to the same person. Payment will be made at the rate of ten cents per mile, for a yoke of oxen or steers; eight cents

per mile, for each bull, cow, heifer, or yearling ; ten cents per mile, for each boar, sow or litter of weaned pigs ; and eight cents for each flock of sheep. But no such payment shall be made for any animal, or animals, which, in the judgment of the Committee appointed to examine them, are not of a superior character and worthy of exhibition, or have not been entered in accordance with the rules and regulations of the Society.

The animals, while on the ground, will be fed at the expense of the Society.

No person serving on any of the Committees shall have a vote in any case, when he shall be personally interested as a competitor.

All other Entries for premiums must be made in writing, and shall be placed in the hands of the Recording Secretary, on or before the 15th of November.

Premiums awarded, and not called for on or before the last Wednesday in March following, will be considered as given to the Society, in aid of its funds.

After the objects for exhibition are arranged, they will be under the exclusive charge of the Superintendents, and cannot be removed *without* their consent.

The Trustees have carefully revised and approved of the following list of *premiums*. The respective Committees, appointed to award the same, are required to enforce a strict conformity to all the rules in relation to Entries and Certificates.

In the appointment of *Committees*, the Trustees will seek for the most judicious and skilful individuals in the various towns in the County, *to award the premiums* ; but should they fail to secure the aid of the ablest and most experienced men in the above capacity, they will rely upon the forbearance which, they believe, will be generously extended towards sincere and unwearied efforts.

As it will become the duty of the Society to make to the Legislature an exact report of its doings, the Trustees deem it of the highest importance that earnest and persevering efforts be made by the citizens of every town in the County, to bring out the results of their skill and industry.

MARSHALL P. WILDER, *President*.

HENRY O. HILDRETH, *Secretary*.

LIST OF PREMIUMS

FOR THE YEAR 1866.

[SUCCESSFUL COMPETITORS MAY RECEIVE THEIR PREMIUMS IN PLATE
OR MONEY, AT THEIR OPTION.]

FARMS.

EXPERIMENTS AND IMPROVEMENTS THEREON.

MANAGEMENT AND IMPROVEMENT OF FARMS.

For the best managed Farm, taking into view the condition of the buildings, fences and orchards, the cultivation of the lands, the care and management of the stock, the quantity, quality and preservation of the crops, the expenses incurred and the improvements made during the year, with a detailed statement of the whole, to be rendered on or before November 15th, \$25; second best, \$20.

Competitors must give notice of their intention to the Secretary, on or before June 15th. Farms entered for premium will be viewed by the Supervisory Committee, as they shall deem expedient, between June 20th and September 20th. Any farm offered for inspection, without being entered for a premium, will be viewed and reported by the Committee, if seasonable application be made to the Chairman.

PERMANENT IMPROVEMENTS.

IMPROVING MEADOW AND SWAMP LANDS.—For the best experiment in reclaiming wet meadow or swamp lands, by drainage or otherwise, on not less than one-half acre, with statement, in detail, of the previous condition and produce of the land, the method and expense of the experiment, and the produce at the present time, \$8; second best, \$4.

UNDER-DRAINING LAND.—For the best experiment in under-draining land, not less than forty square rods, regard being had to the char-

acter of the soil and subsoil, the method, extent, expense and result of the experiment, \$10; second best, \$5; third best, French's Drainage.

OLD PASTURE AND UNIMPROVED LANDS.—For the best conducted experiment in renovating and improving old pasture lands and lands hitherto lying waste, on not less than one acre, with or without plowing, with a statement of the previous condition of the land, and of the method, expense, and result of the experiment, \$8; second best, \$5; third best, Flint's Dairy.

TURNING IN CROPS AS MANURE.

For the most satisfactory experiment of turning in crops as a manure, either *green or dry*, on not less than *one-half acre of land*, a detailed account of the whole process, expense and result to be given in writing, \$6.

EXPERIMENTS IN SUBSOIL PLOWING.

For the best experiment, on not less than one acre of land, of the effect of subsoil plowing, to be determined by the difference in the value of crops, raised on equal portions of equally manured land, of like quality, one-half of which having been subsoil plowed, and the other half plowed in the usual manner,—statements of the depth of plowing in each instance, together with all the particulars of culture, required, \$8; second best, Burr's Vegetables.

FEEDING AND FATTENING STOCK.

COMPARATIVE VALUE OF CROPS AS FOOD FOR CATTLE.—For the best experiment upon a stock of cattle, not less than four in number, to ascertain the relative value of the different kinds of fodder used, with a statement in detail of the quantity and value of the same, as compared with English hay, the experiment to be made in the three winter months, \$12; second best, Stephens' Farmer's Guide.

FEEDING OF MILCH COWS.—For the best experiment in the feeding of milch cows, by soiling, stall feeding or pasturing, with a detailed statement of the comparative advantages of either method, regard being had to the saving of manure, comfort of the animals and produce of the dairy, \$12; second best, \$8; third best, Flint's Dairy.

FATTENING CATTLE.—For the best experiment in *feeding* cattle, with a statement in detail of the process, expense and result, \$5; second best, Flint's Grasses.

FATTENING SWINE.—For the best experiment in *feeding* swine, with a statement in detail of the process and result, \$5; second best, Flint's Dairy.

HAY.

For the largest quantity and best quality of English hay per acre, produced on any farm in the County, regard being had to the character of the soil, the mode and cost of cultivation and making, \$5; second best, Flint's Treatise on Grasses.

CRANBERRY VINES.

For the best experiment in transplanting Cranberry Vines, or in growing them from seed, on not less than one-eighth of an acre, which shall be in the most flourishing and productive state, on the 10th of September, \$6; second best, \$3; third best, Eastwood's Cranberry Culture.

Competitors will be required to give an exact statement of the process, expense and result of the experiment.

GRAIN AND ROOT CROPS.

GRAIN CROPS.

For the best experiment in raising *Wheat*, a premium of \$10; second best, Flint's Grasses.

For the best experiment in raising *Rye*, *Oats* or *Barley*, each, a premium of \$10; second best, each, Flint's Grasses.

For the best experiment in raising *Indian Corn*, a premium of \$10; second best, Flint's Dairy.

For the best experiment in raising *White Beans*, *Millet* or *Buckwheat*, each, Bridgeman's Young Gardener's Assistant.

Samples of each kind of Grain, not less than a half-bushel, properly labelled, must be exhibited at the Show. The quantity of the crop to be ascertained by weight, as follows:—Corn and Rye, 56 pounds each to the bushel; Barley and Buckwheat, 48 pounds each; Oats, 32 pounds; Wheat, 60 pounds.

ROOT CROPS.

For the best experiment in raising *Potatoes*, Burr's Vegetables; second best, McMahon's American Gardener.

For the best experiment in raising *Sugar Beets*, *Carrots*, *Parsnips*, *Mangold-Wurtzel*, or *Ruta Baga*, each, Burr's Vegetables; second best, each, McMahon's American Gardener.

For the best experiment in raising *Onions*, Burr's Vegetables; second best, McMahon's American Gardener.

For the best experiment in raising *Flat Turnips*, Burr's Vegetables ; second best, McMahan's American Gardener.

Samples of Roots, not less than one bushel, properly labelled, must be exhibited at the Show. The quantity of the crops, which must be on not less than one-quarter of an acre, shall be ascertained by the weight of the Roots—freed from dirt and without tops—as follows:—Potatoes, Sugar Beets, Mangold-Wurtzel and Ruta Bagas, 60 pounds ; Carrots, 55 pounds ; Onions and Flat Turnips, 50 pounds ; Parsnips, 45 pounds to the bushel.

Experiments will be viewed by the Committee between July 1st and September 20th.

Claimants for premiums must render to the Chairman of the Committee, on or before November 15th, a written statement of the character and previous condition of the land, its present value, and the taxes upon it ; the kind, quantity and value of manure used ; the quantity and cost of seed sown ; the labor and expense of cultivating and harvesting the crop ; and the quantity, quality and value of the crop. In awarding premiums, regard will be had to all these circumstances, and to the area of the ground in cultivation.

VEGETABLES.

For the best experiment in raising *Squashes*—one-half dozen of each variety to be exhibited at the Show—Burr's Vegetables ; second best, Thomas' Rural Affairs.

For the best experiment in raising *Cabbages*—not less than six heads to be exhibited at the Show—Burr's Vegetables ; second best, Thomas' Rural Affairs.

MIXED CROPS.

For the best experiment in cultivating mixed crops of Grain and Vegetables, in alternate portions, or of different roots, in alternate rows, Harris' Treatise on Insects ; second best, Burr's Vegetables ; third best, French's Drainage. The experiment must be made on not less than half an acre of land, and a detailed statement of the mode of culture, expense and product must be rendered on or before November 15th.

PLOWING MATCH.

DOUBLE OX TEAMS. *With Sod and Subsoil Plow.* For best performance in plowing *sward* land, at least one-eighth of an acre, eight inches in depth, \$10 ; second best, \$8 ; third best, \$6.

With any other Plow. Same conditions. Best, \$10 ; second best, \$8 ; third best, \$6.

DOUBLE HORSE TEAMS. *With Sod and Subsoil Plow.* Same conditions. Best, \$10; second best, \$8; third best, \$6.

With any other Plow. Same conditions. Best \$10; second best, \$8; third best, \$6.

SINGLE OX TEAMS. *With any Plow.* For the best performance in Plowing Sward Land, at least one-eighth of an acre, six inches in depth, within an hour, \$6; second best, \$4; third best, \$2.

SINGLE HORSE TEAMS. Same conditions. Best, \$6; second best, \$4; third best, \$2.

NOTE.—A DOUBLE TEAM will consist of two yokes of oxen, with or without a driver; or a team of one yoke of oxen and a horse, with or without a driver. SINGLE TEAM, one yoke of oxen or one pair of horses, without a driver. Competitors must own their teams and plows, and enter the same in their own names. Plows must be held and teams driven by their owners, or by persons stably in their employ. Notice to compete must be given to the Secretary on or before the Wednesday previous to the Exhibition. In awarding premiums, one hour will be allowed for the performance of the work, regard being had to the width and depth of the furrow slice, and the evenness, ease and quiet with which the work is performed.

ARBORICULTURE.

FRUIT TREES.

APPLE ORCHARD. For the best Apple Orchard, of not less than *fifty trees*, which shall have been set out at least five years, and which shall be in the best and most thriving condition in 1866, \$8; second best, Downing's Fruits and Fruit Trees.

PEAR TREES. For the best engrafted or budded standard Pear Trees, set out at least five years, and which shall be in the most thriving condition in the autumn of 1866, not less than *twenty-five trees*, \$8; second best, Downing's Fruits and Fruit Trees.

For the best engrafted or budded Pear Trees on Quince roots, with same conditions, and not less than *fifty trees*, \$8; second best, Downing's Fruits and Fruit Trees.

PEACH ORCHARDS. For the best Peach Orchard, of not less than *fifty trees*, which shall be in the most thrifty bearing condition in the autumn of 1866, \$8; second best, Downing's Fruits and Fruit Trees.

For the Peach Orchard, of not less than *fifty trees*, grown from pits planted since 1859, on the spot where the trees stand, which shall be in the best condition in 1866, \$8; second best, Downing's Fruits and Fruit Trees.

SEEDLING APPLES OR PEARS. For the best variety of *new Seedling Apples or Pears*, of decidedly superior quality, *one dozen specimens* to be exhibited, together with a history of the origin of the tree, a description of the growth, and its bearing character, \$8; second best, Downing's Fruits and Fruit Trees.

SEEDLING PEACHES. For the best variety of *Seedling Peaches* of decidedly superior quality, and worthy of general cultivation—one dozen specimens to be exhibited two years in succession—together with a history of its origin, a description of its growth, and the bearing character of the tree, \$5; second best, Barry's Fruit Garden.

NOTE.—Notice of intention to compete to be given to the Secretary on or before September 1.

FOREST TREES.

For the best plantation of Forest Trees, of either of the following varieties, viz.: White Oak, Yellow Oak, Locust, Birch, White Ash, or Walnut, Scotch Larch, Norway Spruce, Pitch, White and Norway Pine, or other varieties, not less than three years old, and not less than one thousand trees,—entries to be made to the Secretary previous to June 10th,—a premium of \$15.

For the best plantation, containing not less than five hundred trees, Emerson's Shrubs and Trees of Massachusetts.

ORNAMENTAL PLANTING. To any individual or society, regard being had to the number of persons associated, for the largest number and best growth of ornamental trees, not less than fifty, which shall have been planted in a public square or on the roadside at least two years—first premium, \$10; second do., Emerson's Shrubs and Trees of Massachusetts.

HEDGES.

For the best *Live Hedge Fence*, not less than five hundred feet in length, \$5; second best, Warder's Hedges.

For the best *Evergreen Hedge*, of Hemlock or Norway Spruce, not less than four hundred feet in length, \$5; second best, Warder's Hedges. Premiums to be awarded in 1870.

HORTICULTURE.

FLOWERS.

For the best collection of cut flowers, \$4; second best, \$3; third best, \$2. For the best bouquets, or tastefully arranged baskets of flowers, not less than four, \$4; second best, \$3; third best, \$2. For the best collection of named gladiolus in spikes, \$4; second best, \$3; third best, \$2. For the best collection of new seedlings in spikes, \$3; second best, \$2. For the best new seedlings, \$1. For the best collection of Japan lilies, \$3; second best, \$2. For the best new seedling, \$1. For the best collection of pompon dahlias, \$2; second best, \$1. For the best new seedling, \$1. For the best collection of double zinnias, \$2; second best, \$1.

A statement in writing of the sorts contributed, and the contributor's name, will be required.

Gratuities, in publications, to the amount of \$10, may be awarded at the discretion of the Committee.

FRUITS.

For the best collection of fifteen varieties of Apples, twelve specimens of each variety—first premium, the Wilder Plate, valued at \$25; second do., Harris' Treatise; third do., \$4; fourth do., \$3; fifth do., Barry's Fruit Garden.

For the best collection of twenty-five varieties of Pears, twelve specimens of each variety—first premium, the Wilder Plate, valued at \$25; second do., \$8.

For the best collection of ten varieties of Pears, twelve specimens of each variety—first premium, \$10; second do., \$5.

For the best collection of *Peaches*, not less than twelve specimens of each variety—first premium, \$3; second do., \$2; third do., Cole's Fruit Book.

For the best collection of *Plums*, not less than twelve specimens of each variety—first premium, \$3; second do., Thomas' Rural Affairs.

APPLES. For the best collection of the following varieties not less than twelve specimens of each:—Baldwin—first premium, \$2; second do., \$1. Rhode Island Greening—first premium, \$2; second do., \$1. Gravenstein—first premium, \$2; second do., \$1. Hubbardston Nonesuch—first premium, \$2; second do., \$1. Roxbury Russet—first premium, \$2; second do., \$1. Porter—first premium, \$2; second do., \$1. Tolman Sweet—first premium, \$2; second do., \$1. For any other variety—first premium, \$2; second do., \$1.

PEARS. For the best collection of the following varieties, not less than twelve specimens of each:—Bartlett—first premium, \$2; second do., \$1. Beurre d'Anjou—first premium, \$2; second do., \$1. Urbaniste—first premium, \$2; second do., \$1. Merriam—first premium, \$2; second do., \$1. Louise Bon d'Jersey—first premium, \$2; second do., \$1. Vicar of Winkfield—first premium, \$2; second do., \$1. Duchesse de Angouleme—first premium, \$2; second do., \$1. Seckle—first premium, \$2; second do., \$1. Onondaga—first premium, \$2; second do., \$1. For any other variety—first premium, \$2; second do., \$1.

GRAPES. For the best exhibition of *Foreign Grapes*—first premium, \$4; second do., \$3, or \$3 in publications, at the discretion of the Committee.

For a new variety of *Native or Seedling Grape*, equal or superior to the Isabella, ripening in this County in the open air, by the *middle of*

September, prolific and suitable for the table, first premium, \$20 ; second do., \$10.

For the best exhibition of *Native Grapes*—first premium, \$2 ; second do., \$1. Delaware—first premium, \$2 ; second do., \$1. Diana—first premium, \$2 ; second do., \$1. Rogers' Hybrid—first premium, \$2 ; second do., \$1. Concord—first premium, \$2 ; second do., \$1. Any other variety—first premium, \$2 ; second do., \$1.

QUINCES. For the best exhibition of Quinces, not less than a peck, \$2.

CRANBERRIES. For the best collection of Cranberries, not less than four quarts, \$3 ; second best, \$2 ; third best, Eastwood's Cranberry Culture.

GARDEN.

For the best VEGETABLE GARDEN, regard being had to the variety, excellence and quantity of the products thereof, and the mode and expense of cultivation, Burr's Vegetables ; second best, Bridgeman's Young Gardener's Assistant.

Entries must be made before the 10th of June, and an exact statement rendered before the 1st of November.

GARDEN VEGETABLES.

For the best collection and variety of GARDEN VEGETABLES, regard being had to the quantity as well as quality exhibited, \$10 ; second best, \$5 ; third best, \$4 ; fourth best, \$3 ; fifth best, \$2 ; sixth best, \$1. \$20 in agricultural publications, may also be awarded, at the discretion of the Committee.

POTATOES. For the best new variety of *Seedling Potatoes*, superior to any kind now in cultivation, a premium of \$10.

For the largest and best collection of *Potatoes*, not less than a *peck* of each variety, a premium of \$3 ; second best, \$2.

SEEDS.

For the best sample of ears of Seed Corn, not less than forty in number—first premium, \$2 ; second do., \$1.

For the best collection of Onion, Carrot, Beet, Parsnip, and Ruta Baga Seeds—first premium, \$3 ; second do., \$2.

For the best 10 pounds of Timothy, Redtop, and Clover Seed, \$1.

For the best sample, one pack each, of Wheat, Rye, Barley and Oats, \$1.

ANIMALS.

All animals to be entered in the name of the owner, who must have had them in his possession, at least six months before the Exhibition.

All animals, entered in accordance with the rules and regulations, will be fed, during the Exhibition, at the expense of the Society.

No animal, entered in one class, except working oxen and draught horses, will be allowed to compete for a premium in another, under a different entry.

For any animal worthy of the first premium, having received a similar one at any previous Exhibition, a diploma, certifying the rank of such animal at the present Exhibition, shall be awarded instead of a premium.

A diploma may also be awarded, at the discretion of the several Committees, for any animal, worthy of exhibition, from without the limits of the Society.

CATTLE.

For the best BULL, one year old and upwards, of either Jersey, Durham, Devon, Ayrshire, Hereford, Kerry, or other foreign stock—in each class, \$5; second best, \$3.

For the best Grade or Native BULL, \$3; second best, \$2.

For the best BULL CALF, under one year old, foreign or native stock, \$3; second best, \$2.

COWS. For the best Cow, three years old, or upwards, foreign stock, of either class, each \$5; second best, \$4; third best, \$3.

Grade, \$5; second best, \$4; third best, \$3.

HEIFERS. For the best Heifer, two years old and under three, foreign stock, of either class, each \$3; second best, \$2; third best, \$1.

Grade or Native, \$3; second best, \$2; third best, \$1.

For the best Heifer, one year old, of any stock, \$2; second best, \$1.

MILCH COWS. Three years old and upwards. For the best Milch Cow, without regard to breed, each, \$8; second best, \$6; third best, \$4; fourth best, \$2.

For the best Milch Heifer, less than three years old, without regard to breed, each, \$6; second best, \$4; third best, \$2.

A written statement of the quantity and quality of Milk and Butter, and of the manner of feeding the animals in the last two classes shall be required. If no butter is made, the statement must give the quantity and weight of the milk, the quality of the last calf, and the time when it was dropped.

HERDS OF MILCH COWS. For the largest and best herd of Milch Cows—not less than six—kept on any farm in the County, and exhibited at the Show, regard being had to the breed, age, and milking prop-

erties, with a written statement thereof—first premium, \$12; second do., \$8; third do., \$6.

NOTE.—No competitor for the premiums offered for herds shall be allowed to offer the same animals for any premium of a different class.

WORKING OXEN. For the best yoke, four years old and upwards, \$6; second best, \$4; third best, \$2.

STEERS. For the best yoke, well broken, three years old and under four, \$4; second best, \$3; third best, \$2.

For the best yoke, well broken, two years old and under three, \$3; second best, \$2.

NOTE.—For Oxen or Steers, and also for Herds of Milch Cows, bred and raised by the exhibitor, twenty per cent. additional. In testing the strength, docility and training of Working Oxen, the load shall not be less than 3,000 pounds for oxen of five years old and upwards; and not less than 2,500 pounds for oxen under five years old. In testing the character of Steers, as the Committee may direct, special regard will be paid to their docility and proper training.

TOWN TEAMS. For the largest and best team, of not less than ten yokes of Oxen or Steers, from any city or town in the County, first premium, \$12; second best, \$8.

FAT CATTLE. For the best beef animal fattened by the exhibitor, within the County, regard being had to the manner and expense of feeding—of which a written statement will be required—first premium, \$8; second do., \$6.

SWINE.

For the largest and best collection of Swine—first premium, \$12; second do., \$8.

BOARS. For the best Boar, not less than six months old, \$6; second best, \$4.

SOWS. For the best Sow, not less than six months old, \$6; second best, \$4.

WEANED PIGS. For the best litter, not less than four in number, and not more than six months old, \$6; second best, \$4.

FAT HOGS. For the best Fat Hog, regard being had to breed, age and feeding, \$6; second best, \$4.

NOTE.—No competitor for the largest collection of Swine will be allowed to offer the same for any premium of a different class.

SHEEP.

For the largest and best lot of Sheep, \$10; second best, \$8.

For the best lot of Lambs, bred by the exhibitor, \$8; second best, \$5.

For the best Ram—Cotswold, Leicester, Oxford Down, or South Down—not less than one year old, \$5; second best, \$3.

POULTRY.

For the best collection of not less than three fowls, either Shanghai, Black Spanish, Dorking, Poland, Bolton Gray, Guinea, or Bantam, each variety, \$2; second best, \$1.

TURKEYS. For the best collection, \$3; second best, \$2.

GEESE. For the best collection, \$3; second best, \$2.

DUCKS. For the best collection, \$3; second best, \$2.

PIGEONS. For the best collection, \$2; second best, \$1.

NOTE.—Poultry must be entered on the first day of the Exhibition before 12 o'clock, to be entitled to a premium.

HORSES.

In awarding the premium on Roadsters, the general good qualities—such as style, action, constitution and enduring properties—as well as speed of the animals, will receive special consideration.

In testing the speed of horses, each animal—four years old and over—will be required to draw a carriage weighing, with driver included, not less than 350 pounds.

It is understood that horses which have heretofore been classed under the head of “Thoroughbred and part Thoroughbred,” may compete as Roadsters, or in any other class.

Colts and Fillies will compete in separate classes, as heretofore, the premiums being the same for either sex.

No Stallion will be entitled to a premium without a guarantee of his remaining for service in the County six months.

In testing the strength, docility and training of Draught or Team Horses, the load shall not be less than 2,500 pounds for a single horse, and 3,500 pounds for a pair of horses.

Every entry for premium must be made before 12 o'clock of the first day of the Exhibition, and the Stock must be present the second day on or before 9 o'clock, A. M.

It must be distinctly understood that premiums will not be awarded to any animal that does not, in the opinion of the Committee, possess decided merit and a sound constitution.

CLASS A.—ROADSTERS.

1st Division.—Stallions.

For the best Stallion, 4 years old and upwards, a premium of . \$10 00
 2d best “ “ “ “ . 7 00

2d Division.—Pairs in Harness.

For the best pair of Roadsters, a premium of . . . \$10 00
 2d best “ “ “ . . . 7 00

3d Division.—Harness Horses.

For the best Gelding or Mare, a premium of	\$8 00
2d best “ “ “	6 00
3d best “ “ “	4 00
4th best “ “ “	2 00

CLASS B.—HORSES OF ALL WORK.

1st Division.—Stallions.

For the best Stallion, 4 years old and upwards, a premium of .	\$10 00
2d best “ “ “ “	7 00

2d Division.—Brood Mares.

For the best Brood Mare, with a Foal at her side, a premium of	\$7 00
2d best “ “ “ “	5 00

3d Division.—Colts and Fillies.

For the best 3 years old, a premium of	\$5 00
2d best “ “	3 00
best 2 years old, “	5 00
2d best “ “	3 00
best 1 year old, “	5 00
2d best “ “	3 00

4th Division.—Horses in Harness.

For the best Gelding or Mare, a premium of	\$6 00
2d best “ “ “	4 00

CLASS C.—FAMILY HORSES.

1st Division.—Stallions.

For the best Stallion, 4 years old and upwards, a premium of .	\$10 00
2d best “ “ “ “	7 00

2d Division.—Brood Mares.

For the best Brood Mare, with a Foal at her side, “ .	\$7 00
2d best “ “ “ “ “	5 00

3d Division.—Colts and Fillies.

For the best 3 years old, a premium of	\$5 00
2d best “ “	3 00
best 2 years old, “	3 00
2d best “ “	2 00
best 1 year old, “	3 00
2d best “ “	2 00

4th Division.—Carriage Horses 15 to 16 hands high.

For the best pair of Carriage Horses, a premium of . . .	\$10 00
2d best “ “ “	7 00

5th Division.—Buggy or Chaise Horses.

For the best Buggy or Chaise Horse, a premium of	.	.	.	.	\$8 00
2d best “ “ “ “	.	.	.	.	6 00
3d best “ “ “ “	.	.	.	.	4 00

6th Division.—Saddle Horses.

For the best Saddle Horse, a premium of	.	.	.	.	\$6 00
2d best “ “ “ “	.	.	.	.	4 00
3d best “ “ “ “	.	.	.	.	3 00

7th Division.—Ponies.

For the best matched Ponies, a premium of	.	.	.	.	\$6 00
2d best “ “ “ “	.	.	.	.	4 00
best single Pony, “	.	.	.	.	3 00
2d best “ “ “ “	.	.	.	.	2 00

CLASS D.—DRAUGHT OR TEAM HORSES.

1st Division.—Single Draught or Team Horses.

For the best Draught Horse, a premium of	.	.	.	.	\$7 00
2d best “ “ “ “	.	.	.	.	5 00

2d Division.—Pairs of Draught or Team Horses.

For the best pair of Draught or Team Horses, a premium of	.	.	.	.	\$7 00
2d best “ “ “ “ “ “	.	.	.	.	5 00

D A I R Y .

B U T T E R .

For the best produce of BUTTER, on any farm within the County, for four months, from the 20th of May to the 20th of September,—a sample of not less than twenty pounds to be exhibited,—*quantity* as well as *quality* to be taken into view, with a statement of the number of cows, and a full account of the manner of *feeding* them, and the general management of the milk and butter—first premium, \$10; second do., \$8; third do., \$5; fourth do., \$4.

NOTE.—It will be seen that these premiums are offered for the best produce on the Farms, and not simply for the best specimens exhibited. Competitors will therefore be required to keep an account, and render a statement of the entire produce within the time mentioned. Each lot must be numbered, but not marked; any public, or known mark, must be completely concealed, nor must the competitors be present at the examination.

For the best box of Butter,—not less than 12 pounds,—first premium, \$5; second do., \$3; third do., Flint's Treatise on Dairy Farming.

NOTE.—*Butter must be presented only on the morning of the second day, before 9 o'clock.*

CHEESE. For the best lot of Cheese,—not less than forty pounds,—with a written statement of the whole process of making—first premium, \$5; second do., \$3; third do., Flint's Treatise on Dairy Farming.

B R E A D .

For the best loaf of Wheat and Indian, of not less than two pounds weight—first premium, \$3; second do., \$2.

For the best loaf made of Unbolted Wheat, which has been grown in the County, of not less than two pounds weight—first premium, \$3; second do., \$2.

For the best loaf of Rye and Indian, of not less than four pounds weight—first premium, \$3; second do., \$2.

For the best loaf of Wheat Bread, of not less than two pounds weight—first premium, \$3; second do., \$2.

For the best specimens of each or any of the aforementioned kinds of bread, made by any young woman under eighteen years of age, an additional premium of twenty-five per cent.

The bread presented for premium must be made on the first day of the Exhibition, by some member of a family, in whose name the entry shall be made, and to whom the premium shall be awarded. The bread shall be made without the use of saleratus or other alkaline substance, and baked in the oven used by the family, and be presented *only on the second day of the Exhibition, before 9 o'clock in the morning.* A written statement of the process of making the bread must accompany each entry, but no name or mark shall be put on the loaves, except the number of the entry in the Committee's book.

The names of contributors shall not be known to the Committee, and no person shall serve on the same if any member of his family shall be a competitor.

HONEY.

For the best specimen of Honey in the comb, not less than six pounds, Longstrath on the Honey Bee; second best, \$1.

MANUFACTURES.

AGRICULTURAL IMPLEMENTS.

For the largest and best collection, \$6; second, \$4.

For any new or improved Plow, which on trial shall be found best adapted for the thorough pulverization of old plowed land, a premium of \$6.

NEW INVENTIONS. For any new invention of decided superiority and usefulness to the farmer, a premium or gratuity, at the discretion of the Committee.

DOMESTIC MANUFACTURES.

FANCY ARTICLES—including Needlework, Crochetwork, Shellwork, Millinery, Drawings, Paintings, &c.

For such articles in this department as may be deemed worthy, a sum, not exceeding fifty dollars, shall be appropriated, to be paid in premiums or gratuities, proportioned to the cost and value of the article, at the discretion of the Committee.

NOTE.—It should be understood that, in this department of Ladies' work—while other things will receive due consideration—the premiums are intended SOLELY FOR NEWLY MADE articles which are really useful or particularly beautiful. For well made garments of any kind; for stocking knitting of wool, cotton or silk; or bonnet and cap making; for all articles for children's wear well made or tastefully embroidered; for neat and thorough mending, patching, and darning; for drawing, designing, or painting in oil or water colors; for models in plaster, wood, or marble, &c.

Any article well and tastefully wrought, offered by children under twelve years of age, will receive particular attention.

MANUFACTURES OF STRAW. For the best specimen of *Straw Bonnets*, wholly of domestic manufacture, \$8; second best, \$5.

For the best specimen of *Straw Braid*, of domestic straw, not less than 100 yards, \$5; second best, \$3.

MANUFACTURES OF CLOTH, FLANNELS, HOSE, &c. *Cotton Cloth.* For the best specimen of Cotton Cloth, of any description, not less than twenty-eight yards in quantity, a premium or gratuity, at the discretion of the Committee.

Woolen Cloth. For the best specimen of Woolen Cloth, of any description, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

Cotton and Woolen Mixed. For the best specimen of Cotton and Woolen Cloth of any description, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

Flannels. For the best specimen of Flannel, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

For the best specimen of Cotton Flannel, not less than twenty yards in quantity, a premium or gratuity, at the discretion of the Committee.

For the best pair of Woolen Blankets, a premium or gratuity, at the discretion of the Committee.

Hosiery, &c. For the best specimen of Woolen Hose, a premium of \$1.

For the best specimen of Woolen Half Hose, a premium of 50 cents.

For the best specimen of Cotton Hose, a premium of 50 cents.

For the best specimen of Cotton Half Hose, a premium of 25 cents.

For the best specimen of Worsted Hose, a premium of \$1.

For the best specimen of Worsted Half Hose, a premium of 50 cents.

For the best specimen of Sewing Silk, not less than one pound, a premium of \$2.

For the best specimen of Knitting Yarn, not less than one pound, a premium of \$1.

For the best specimen of Spool Thread, not less than one pound, a premium of \$1.

For the best Fleece of Wool, a premium of \$1.

For the best dozen seamless Grain Bags, a premium of \$1.

For the best specimen of neat and thorough mending, patching, or darning of garments, hose, &c., a premium of \$1.

For the best specimen of covered bonnet wire, \$3.

COUNTERPANES. For the best Counterpane—regard being had to quality and expense of materials—first premium, \$3; second do., \$2.

CARPETINGS, RUGS AND FLOOR CLOTH.

For the best "Common" Ingrain 2-ply Carpeting;

do. do. "Fine" do. do. do.

do. do. "Superfine" do. do. do.

do. do. "Common," "Fine," or "Superfine" Ingrain 3-ply Carpeting;

do. do. Brussels Floor Carpeting;

do. do. Tapestry do. do.

do. do. Velvet Carpeting;

For each of these descriptions of Carpeting, a premium or the Society's diploma, at the discretion of the Committee.

NOTE.—Ingrain 2-ply Carpeting will be judged by the comparative merits of pieces of similar weight; or disregarding weight, by the quality of color, the taste of shading, and evenness in spinning and weaving.

For the best piece of Stair Carpeting, the Society's diploma.

For the best Hearth Rug, the Society's diploma.

For the best specimen of painted Floor Cloth, a premium or the Society's diploma, at the discretion of the Committee.

NOTE.—Any articles in either of the foregoing departments, which shall have been manufactured in THE FAMILY of the person presenting it, will receive the particular consideration of the Committee, and, if worthy, a suitable premium.

GLASS, EARTHEN, STONE AND WOODEN WARE. For the finest collections and best specimens of articles in each of these departments, a premium or gratuity, at the discretion of the Committee.

BRASS, COPPER, TIN, IRON AND BRITANNIA WARE. For the finest collection and best specimens of articles in each of these departments, a premium or gratuity, at the discretion of the Committee.

CABINET WORK. For the best specimen of Cabinet Work, a premium or the Society's diploma.

IRON FENCING, GATES AND POSTS. For the best specimens of each—regard being had to cost and utility, as well as ornament—a premium or gratuity, at the discretion of the Committee.

STOVES. For the best Farmer's Cauldron Stove;

do. do. Cooking do.
do. do. Parlor do.

—a premium of \$2 each.

HORSE AND OX SHOES. For the best set of Horse and Ox Shoes, a premium of \$1.

For the best specimens of Horse Shoes *for meadow lands*, a premium of \$1.

INDIA RUBBER GOODS. For the finest collection of India Rubber goods, a premium or gratuity, at the discretion of the Committee.

BRUSHES, COMBS, HATS, CAPS AND GLOVES. For the finest collection and best specimens of each of these articles, a premium or gratuity, at the discretion of the Committee.

LEATHER, AND ARTICLES MANUFACTURED THEREFROM.

For the best specimen of Thick Boots, a premium of, . . \$2 00

do. do. Calfskin, do. . . 3 00

do. do. Thin Boots, other
than Calfskin, do. . . 2 00

do. do. Kipskin, do. . . 2 00

do. do. Thick Brogans, do. . . 1 00

do. do. Fine Brogans, do. . . 1 00

do. do. Ladies' Boots, do. . . 1 00

For the best specimen of Upper or Sole Leather, or Morocco, a premium or gratuity, each, at the discretion of the Committee.

For the best single Carriage Harness;

do. do. double do.

do. do. Cart Harness—a premium or gratuity, each, at the discretion of the Committee.

For the best Riding Bridle, a premium of, . . . \$1 00

do. do. do. Saddle, do. . . . 2 00

do. do. Carriage or Cart Whip, a premium of, . . . 1 00

CARRIAGES, WAGONS, CARTS, &C.

For the best specimen of Family Carriages, for one horse or for two horses;

For the best Covered Wagon;

do. do. Open do.

do. do. Farm do.

do. do. do. Cart;

For the best Farm Wheelbarrow—either a premium or gratuity, at the discretion of the Committee.

JELLIES, PRESERVES, PICKLES AND KETCHUPS. For the finest collection and best specimen of each, made of articles of domestic growth, a premium or gratuity, at the discretion of the Committee.

NATIVE WINES, CORDIALS, &c. For the best specimen of Wines from cultivated wild grapes, not less than two bottles to be exhibited, \$2; second best, \$1.

For the best specimen of Wine or Cordial from currants, blackberries, raspberries, or elderberries, not less than two bottles to be exhibited, each, \$1.

NOTE.—It is to be understood that all articles presented for premium, in each of the foregoing departments, except Agricultural Implements, shall have been manufactured or produced within the County, and by the person presenting them. Also, that in every case, the Examining Committee shall have the right to substitute the Society's diploma for a premium or gratuity, or to give it where no premium or gratuity has been offered, at their discretion.

All discretionary premiums or gratuities shall be proportioned to the actual value and utility of the articles.

Articles in either of the above departments, contributed to the exhibition by persons not resident in the County, shall receive suitable attention from the Committee, and, if worthy, be awarded the Society's diploma.

MISCELLANEOUS.

AGRICULTURAL LABORERS.

For a certificate—signed by his employer, and countersigned by any two of the Trustees residing nearest to the applicant—of the superior qualifications of any man or youth, in the employment of any member of the Society for a period next preceding, of not less than two years, attesting the industry, integrity, respectful demeanor and general good habits, during the time, of the bearer of such certificate, a premium of Membership of the Society and a diploma.

CABINET OF INSECTS.

For the largest and best collection of Insects found within the County, beneficial or injurious to vegetation, properly arranged and classified, to be exhibited on the Society's tables, at the next annual fair, one copy of Harris' Treatise on Insects.

AGRICULTURAL ESSAYS.

For the best Essay on the relative importance and value, as sources of profit, of the various grasses, or cereal, fruit or vegetable crops, a premium of \$10.

For the best Essay on the relative importance and value, as sources of profit, of the breeding and raising of the different classes of farm stock, a premium of \$10.

For the best Essay on the fattening of cattle, swine or sheep, detailing the process and expense of the same, a premium of \$10.

FOREST TREES. For the best Essay on the raising and cultivation of Forest Trees, a premium of \$10.

INSECTS. For the best Essay on the destruction of Insects injurious to vegetation, such as *Curculio*, *Borer*, *Canker-Worm*, *Caterpillar*, *Cut-Worm*, *Squash-Bug*, *Striped-Bug*, *Rose-Bug*, &c., &c., a premium of \$10.

PRESERVATION OF WINTER FRUIT. For the best Essay on the preservation of Apples and other Winter Fruits, \$10.

PRESERVATION OF VEGETABLES. For the best Essay on the preservation of Vegetables, a premium of \$10.

AGRICULTURAL EDUCATION. For the best Essay on Agricultural Education, a premium of \$10.

FARM ACCOUNTS. For the best Essay on a system of Farm Accounts, a premium of \$10.

For the best Essay on Domestic Poultry, \$10.

For the best Essay on Fences for Farms, uniting economy, strength and appearance, a premium of \$10.

For the best Essay on the extermination of Weeds and Plants destructive to crops, a premium of \$10.

For the best Essay on the preservation and application of Liquid Manure, a premium of \$10.

For the best Essay on the introduction of new Fruits or of new articles of Field Culture, a premium of \$10.

For the best Essay on the value and application of Phosphate of Lime, or any fertilizer of the soil, a premium of \$10.

For the best Essay on Bees and Structure of Hives, with particular reference to feeding Bees, and guarding against the spoliation of the Bee Moth, a premium of \$10.

For the best plan for a Barn and Barn Yard, with regard to the keeping of the Hay, the comfort of the Cattle, the ease and convenience of tending them, and the making and preserving the Manure, a premium of \$10.

These premiums will not be awarded unless the Essays offered shall, in the judgment of the Committee appointed to decide upon them, be deemed worthy of an award, without reference to their comparative merit.

FARM BUILDINGS.

For the best planned house and out-buildings—regard being had to the cost and economy of labor—the house to be warm, well-lighted and ventilated, with a cellar protected from frost and vermin, and the whole not to cost over \$1,800—to be examined by the Committee on Farms—a premium to be adjudged by said Committee.

FORM FOR STATEMENT OF CROPS.

[In pursuance of authority delegated to the Board of Agriculture, by Chapter 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.]

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?

What was the crop of 1865?

What manure was used, and how much?

What is the nature of the soil?

When, and how many times plowed, and how deep?

What other preparation for the seed?

Cost of plowing and other preparation?

Amount of manure, in loads of thirty bushels, and how applied?

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?

Competitors for premium are particularly requested to make any statements or suggestions not elicited by the above questions, and which may be valuable as contributions to agricultural information.

REMARKS.

Signed by

Competitor.

From actual measurement, I hereby certify that the land which the above crop of _____ covered, contained _____ rods, and no more.
Acting Surveyor.

I hereby certify that _____ appointed for that purpose by
 the Committee on _____ crop, appeared before me, and took oath
 that he has ascertained the weight of the above crop, according to the regu-
 lations of the State Board of Agriculture, on the _____ day of
 and that it was _____ pounds.

Justice of the Peace.

In ascertaining the amount of crop, any vessel may be used, and the weight of its contents once, multiplied by the number of times it is filled by the crop.

To ascertain the amount of a corn crop, any vessel containing not less than a bushel of ripened ears may be used, and the weight of the contents of one of said vessels taken, and the number of vessels or baskets full noted. The weight of its contents once, multiplied by the number of times it is filled by the crop of ripened ears, shall be considered the gross weight of harvested corn in the ears. One of said vessels full of ripened ears, of the average quality and condition of the crop, shall be kept to December 1st, and weighed in the ear, and also after it is shelled, and the amount of merchantable shelled corn, as well as the amount of shrinkage thus ascertained.

The certificate shall state the weight of all crops only in a merchantable state.

In measuring the land any competent person may be employed, whether a sworn surveyor or not.

In ascertaining the amount of a hay crop, entered for premium, the measurement of the hay in the barn may be employed.

Committees on Crops, either of themselves or by vote of the Society to which they belong, are authorized to select such number of crops from those entered as may, in their judgment, be entitled to the premiums offered, and apply the foregoing rules to these crops only;—but in all cases as many crops shall be examined under these rules, as there are premiums offered, if the number of entries comes up to the number of premiums.

RULES OF MEASURE.

Practised and adopted by the State Board of Agriculture.

Wheat, Potatoes, Sugar Beets, Mangel Wurtzel, Ruta-Bagas, White Beans and Pease,	60 lbs. to the bushel.
Corn, Rye,	56 “ “
Oats,	32 “ “
Barley, Buckwheat,	48 “ “
Cracked Corn, Corn and Rye and other meal, except Oat, and English Turnips,	50 “ “
Parsnips,	45 “ “
Carrots,	55 “ “
Onions,	52 “ “







