

AGRICULTURAL.



HARVEST HYMN.

[The following beautiful lines written by Harriet McEwen Kimball, of Portsmouth, N. H., were sung at the last annual Harvest Festival of the Amesbury and Salisbury Agricultural and Horticultural Association.]

O, happy day, returned once more,
With golden plenty still replete!
As though she never gave before—
Earth pours her treasure at our feet!

And ne'er did ruddier fruits fulfill
The rosy prophecies of May,
Ne'er did the rugged lands we till
Yield sweeter corn or flowers more gay.

Not one among the many here
Who prune the tree, or plow the soil,
But has some share in Nature's cheer—
Some liberal recompense for toil.

Yet none his choicest stores may boast
Of flowers, or fruits, or garnered grain;
For labor of his hands were lost,
Unblest by Heaven's refreshing rain.

Oh, thanks to God! whose love abides
And scatters bounties everywhere;
Who in the heart of nature hides
The germ of His unfailing care.

More rich than Autumn's robe of leaves
Should be the garments of our praise,
And ampler than her ample sheaves
The charities that crown our days.

More fragrant than the meadow's breath
The incense of our souls should rise;
From Life's rude alters wreathed by Faith
With borrowed bloom from Paradise.

Oh, clearly, then, could we behold
In flowers that fade, and fruits that fall,
Sweet hints, which earthly gifts unfold,
Of treasure stored in Heaven for all.

[From the Country Gentleman.]

WINTER PROMPTINGS.

The bleak winds and storms of sleet or snow, prevailing at this season of the year, have a monitory voice for the farmer, bidding him prepare for months of inclement weather—to make no delay in completing his arrangements for the thrift and comfort of his domestic animals, and the proper carrying on of all the farm work allowable in winter. Every season has for him its appropriate and varying work—and this, though less stirring and seemingly less important than seed-time and harvest, is one that calls for constant attention and labor.

Considerations of economy as well as humanity, should induce to the shelter of domestic animals from the colds and storms of winter. Less food is required to sustain in a thriving condition, the animal properly protected. The vital heat must be kept up to a certain point—about 100°—and this is done by the food consumed—one use of which has been compared to fuel burned in the animal organism to sustain the required temperature. A sheltered position tends to keep up the animal heat, while exposure reduces it, or rather renders more food or fuel requisite for its support. An equable temperature is more healthy—the most hardy animal suffers if exposed to a winter storm—it loses in health and condition. The moisture may rapidly evaporate, but every drop of water thus passing off takes with it a portion of the vital heat of the animal.

Stables are very generally provided for horses, and by some farmers for cows and working oxen, but it is the exception rather than the rule, to afford comfortable shelter for all domestic animals. It is, however, as important in the one case as the other. No one who has observed the superior economy of shelter over exposure in the matter of feed and thrift of stock, will ever neglect this provision. Where permanent barns and sheds, furnishing ample room, are not already erected, temporary structures of boards, poles or rails, and straw, which will keep off many a bitter blast and driving storm, may be put up at a trifling cost to the farmer. And open yards may be rendered quite comfortable in the milder weather, by such an arrangement of the buildings as will shut off the prevailing winds and give free admission to the sunshine.

All sheds and yards should have a supply of feed-racks or mangers, even if the cattle are mainly fed in their stalls. It is not the best policy to confine them entirely thereto; they may have the range of sheltered yards a portion of each dry day, unless extremely stormy. Water should be provided convenient of access, so that all may take what they wish and when they desire it. When springs or streams may not be brought in, it is an excellent plan to provide cisterns for the water from the barn roof, and a full supply of excellent water may thus be secured.

As to feeding, the kinds of fodder, regularity in supply, etc., etc., we will not here remark, as we lack space to do justice to their importance.

But a word on manures, and then we will leave the barn and yards, though it is the place most frequented by the farmer in winter. Even at this season much can be done towards increasing the quality and quantity of manure. The stables should be kept well-littered, and the pig pens supplied with the raw

material for the young porkers to manufacture. Dry muck, coarse grass and straw, leaves from the wood, and like vegetable refuse of an absorbent nature, will add much to the stock of fertilizers for the farm. Enough of these should be mixed with the stable dung to prevent its "heating" when thrown into the yard, as well as to take up the liquid portions while under the stock. Especially is this first caution important in regard to the dung of horses, from its rapidly fermenting character. No farmer who studies true economy, will suffer any fertilizer to waste, while his reasonable care may save.

In-doors, the cold prompts us to look to the supply of fuel—and there ought always to be at least six months supply on hand. Let sled and axe be ready; do not wait until heavy snows shut up the woods, or compel us to dig through huge drifts to make our way there.—We are not certain of "good sledding" if we wait—let us improve what we have all the more lively. If the wood is desired to grow again, cut all clean at once, then shut out all browsing animals, and the new crop will start with an even growth, and soon cover the land with a thrifty young forest.

Lastly, why not have a farmer's club in every neighborhood? They are important aids to the farmer in gathering information upon his chosen vocation. We must learn from each other—must associate together for our mutual advancement. There is no class or profession which makes less use of the principle of association than the farmer, and none to which it can be of more practical benefit. Individual experience is thus thrown into a common stock, exchanged without loss, and to the general benefit.

To Promote Fertility in Fruit Trees.

Every orchardist must have observed that some fruit trees of superior quality and of luxuriant growth, are yet slow in coming into a bearing state, and are afterwards inconstant. This is the case, especially with the pear tree. Let us note down some of the methods proposed for remedying this evil:

An abundant and rapid flow of sap, tends to the growth of new wood and leaves, rather than to the formation of fruit-buds. Whatever checks this flow, will excite the production of flower-buds. For example, select a vigorous evergreen which has thus far shown no cones, and transplant it, and next year it will be covered with seed-vessels. So it is often with fruit trees. The check thereby given to the growth of roots and branches, causes the organizable sap to accumulate in the branches, and directs it to the formation of fruit. Hence it is, that formal root pruning is sometimes practised. As this process is described in nearly all fruit manuals, we will only remind the reader that it should be practised only in fall or winter. Mr. Rivers of England, as nearly everybody knows, no sooner catches any of his dwarf pears napping, than he lifts them from the ground and sets them back again. Fruit bearing is quite sure to follow.

Ring the branches, is another method.—This consists in taking out a circular section of bark, about an inch wide, on several branches of the tree. The effect of this is to prevent the return of elaborated sap from the tops of the branches to the limbs and roots below, and almost always produces the formation of fruit-buds. This practice is not to be generally commended; it robs the lower portions of the tree of the proper food, and renders the girdled branches useless afterwards.

Bending the branches downward is another and better method. This impedes both the ascent and descent of sap, and causes its accumulation all along the branches in the form of fruit buds. Who has not observed that a crooked apple-tree often bears better than a perfectly straight one? And with a flat, spreading head, better than a pyramidal one? Hence we see the wisdom of the practice common among nurserymen, of removing the central branches of young apple trees. This bending down of the branches should be done in June or July, while the shoots are most flexible.

Training the branches to a wall or trellis, is another method. The slight compression of the ligatures, and the bending of the branches, causes a check of the flow of sap, and so induces fruitfulness.

A New Recipe for Making Bread.—A new kind of bread, known as the Aerated Bread, says a Wall street paper, is now made in London, in the manufacture of which no fermentation is used. The process consists in forcing ready prepared carbonic acid, by means of suitable machinery, into the water with which the dough is prepared, then mixing the flour, water and salt together, in a highly condensed atmosphere. From the mixing apparatus the dough is received into the baking pans, and passed into ovens without being touched by the hands. By this means the constituency of the flour is left both unchanged and uncontaminated—the loaf being accordingly absolutely pure bread. If the attempt succeed, it will supply a great desideratum, as the medical profession have pronounced fermented bread injurious to a large class of individuals.

Corn and Cob Meal.—A correspondent of the Ohio Cultivator, who has fed not less than 5000 bushels, mostly ground in the Little Giant Mill, states with great confidence his conclusion that cob meal is the safest and cheapest feed that is raised in Ohio. Cattle that cost him \$18 per head in the fall, brought him \$45-68, after consuming only about 12 bushels, 70 lbs. in the ear per bushel, ground and cooked. Grinding and cooking, he affirms, doubles its value.

[From the San Francisco Herald.]

Clear Molasses from Sorghum.

We notice a discussion going on in some of the interior papers relative to the best manner of obtaining clear molasses from the Sorghum, or Chinese sugar cane. Considerable experience with sugar canes, of almost every possible variety, enables us to narrate a process, which we think, will give the desired result without recourse to steaming or any other extra process. In order to make good molasses, the juice of the cane should run directly from the mill to the first boiler, their being four separate boilers placed in range over a quick hot fire which is fed from under the fourth or last boiler, and made to pass under all by means of a flue leading to the chimney, which should be erected behind the first boiler. These kettles or cauldrons are named in order to simplify matters. The first one, or that which receives the juice from the mill, is called the "first great copper," the next in line is termed the "second great copper," the third in order is named the "first teach," (pronounced tache), and the last or that in which the boiling process is completed, is known as the "second teach." The size of these several boilers is proportioned to the amount of juice, or cane liquor, to be operated upon, and differ in size from each other, growing gradually smaller from the first great copper to the second teach, on account of the loss in vapor, scum, etc. The second-copper should be one quarter less than the first, the first teach one quarter less than the second copper, and the second teach one-quarter less than the first teach. Before the canes are ground, a quantity of water should be placed in each cauldron and a quick, hot fire put under them. As soon as liquor enough has been ground to supply the great copper, it should be let into it, and the moment it becomes hot, fine quick lime should be thoroughly mixed with the liquor, in the proportion of about one quart of lime to every two hundred gallons of the liquor. The effect of the lime is to clarify and purify the liquor, which then throws up a thick, slate-colored scum, which makes excellent nourishment for horses and mules. After the scum has ceased to rise to a considerable extent, the liquor is then bailed or laded into the second copper, where it is exposed to a more active heat. A tub is placed between the second copper and the first teach to receive the scum for those two cauldrons, which scum yields the best quality of rum. When the liquor ceases to give scum in the second copper, it is laded into the first teach, under which a still hotter fire exists, and the scum again forced to rise. The same process is repeated to the second teach, where the liquor is boiled to the consistency of sugar, and is then laded out into broad, shallow wooden coolers, so that the sugar will not lie deeper than two and a half or three inches in the cooler with a great exposure of surface. While cooling, a wooden paddle is used to stir it gently, by passing the paddle through it from one end to the other, until the whole mass has been exposed to the action of the atmosphere. This stirring is repeated two or three times while the cooling is going on. The time consumed in boiling two hundred gallons of the liquor in this way, is about three quarters of an hour, and each boiling is termed a "strike." By the time the next strike is ready to come off, the sugar in the cooler will have acquired a surface hard enough to bear it, so that each strike makes a separate layer in the cooler. At the expiration of twenty-four hours, and not before, the sugar is taken from the cooler with clean, bright spades, and placed in hogsheads, the lower heads of which are bored with ten or twelve holes of an inch in diameter, and stalks of the cane, long enough to reach the whole length of the hogshead, placed in the holes, but not so as to fill them up. The hogsheads are then placed on beams, below which is the molasses cistern, to catch the drippings from them. The cane stalks act as conductors for the molasses which percolates through the sugar. If the sugar be clayed the molasses will be of a thin, inferior quality, unfit for any use but distillation. If the above process be followed we feel quite confident that there will be no difficulty in making as good sugar, molasses and rum as can be obtained from Porto Rico.

Save the Leaves.—If Brother Jonathan were as saving of manures, as John Bull is, he would be a better farmer. No one knows until he has seen it, how careful English and European farmers and gardeners are of everything which can be converted into manure.—And this is one ground of their superiority in agriculture.

Now, let us repeat what we have often said, that few things are more valuable for fertilizing purposes, than decayed leaves. They are hardly inferior to barn-yard manure.—Gather them up, now, this very month of November, before they are covered by snow.—They are abundant everywhere, lying in heaps and windrows in the forest, and by the roadside, and by the fences in every yard. The wood-lot should not be stripped clean of them; but doubtless every farmer's land contains more of them here and there, than he can find time to cart home. Gather them up, by raking, or by sweeping with a large birch broom. Stack them and pack them in the large wagon, adding side-boards as high as convenient; you will hardly get too heavy a load. Cart them home, and use them for compost in the stable-yard; use them to protect tender grape vines and shrubs, and plants in winter. Strawberry patches will fairly sing for joy under such a feathery blanket. By all means save the leaves, and use them.

Report of the President of the D. A. and M. Society.

TO THE GOVERNOR AND LEGISLATIVE ASSEMBLY OF THE TERRITORY OF UTAH.

GENTLEMEN:—We are happy to say that through the encouragement your honorable body has seen proper to afford us through your appropriations, and the ready and persevering exertions of the people of this Territory; we have arrived to a greater perfection in agriculture and manufactures, than could have been expected, in our isolated position in these mountains.

Our soil is much diversified, our bench land has been greatly improved by irrigation, and the low land that was counted as useless, is now, by ploughing and flooding through the winter, becoming the most productive.

Much of our land has been severely taxed, by raising successive crops of wheat, for the past 8 or 10 years, and we would recommend the change to crops of corn and roots, that the farmers may continue to reap the full reward of their toil.

The soil is well adapted to the raising of roots, particularly beets, carrots, and potatoes; we have raised carrots to the amount of one thousand bushels to the acre, in fact, our soil is remarkably productive of all kinds of vegetables and grain, producing of wheat from 40 to 60 bushels to the acre, surpassing in quality and quantity, that of any of the eastern States, and we would here take advantage of the present opportunity, of suggesting the importance of attention to our seed wheat, to prevent the prevalence of smut. Experience has proven that lime and salt will entirely remove the evil, so detrimental to the interest of the farmer, and the community generally.

We have been also quite successful, throughout the Territory, in raising the sugar cane, and have thus relieved ourselves of a heavy outlay, formerly expended upon the imported articles of sugar and molasses.

We have great encouragement in the culture of grasses, much of our marshy land that has been considered entirely useless, now affords a superior quality.

In fruit raising, great pains have been taken to import the best quality of grafts and seed, and our success in this respect has been highly extolled by good judges, and the numerous visitors that annually traverse our Territory, from the east and west; our success in this department was particularly referred to, in a letter to this board, from the President of the United States Agricultural Society, in which he says, "You have succeeded much beyond my expectations."

The southern part of our Territory is well adapted to cotton growing. Thirteen hundred pounds of the best quality of cotton has been raised this year to the acre. The raising of hemp has also been attended with good success throughout the Territory.

In respect to our stock, we have been to considerable expense in importing the best breed of horses, for action and strength, and probably no Territory of so recent a date as our own, can boast of a greater variety or better quality, than the horses of this Territory.

Our cattle are good, we have obtained from the east some of the best Devon, Durham, and other good breeds which are rapidly increasing and improving through the Territory, greatly to be attributed to the superior quality of our mountain grasses, which without the aid of grain, produces the best quality of beef.

We have a so the choicest selection of the best blooded sheep from the United States, we have the Cotswold, Leicester, Southdown, French Merino, and Saxon, which are well adapted to this climate, both for wool and mutton, and will well repay the raisers.

In relation to our manufactures, we are as well supplied with mechanics from the United States and Europe, as any part of the world, at our late fair, was presented most excellent specimens of woolen and cotton fabrics, including cassimeres, satines, linseys, flannels, shawls, etc., of excellent colors, with a large amount of fabrics of finer textures, such as laces, etc., exceeding any previous exhibition in this Territory, showing a very evident advancement in this department of industry.

The introduction of improvements in machinery to these valleys, had added much to the convenience and wealth of the Territory, and in the manufacture of nails, and other heavy materials of transportation, saving our community the immense sums formerly expended for these articles, brought from the States.

In relation to the natural resources of our mountainous region, its mineral resources form no small share of its wealth.

Though there has been no discovery of gold or silver in the eastern portion of our Territory, yet those which to us are of much greater importance, are continually developing, coal, iron, copper, lead, and many mineral dyes and paints, have been discovered, much to the advantage of our growing Territory.

The accompanying report of the Treasurer, (postponed,) will exhibit the financial condition of the society, all of which is respectfully submitted.—Signed,

EDWARD HUNTER,

President of the D. & A. M. Society.

G. S. L. City, U. T., Dec. 26, 1860.

Water for Fowls.—A writer in the English Agricultural Gazette recommends that a piece of steel be kept constantly in the water to which fowls have access. Iron rust, he says, is an excellent tonic. A roll of brimstone is also recommended to be kept in the water.