



Agricultural Department.

THE NECESSITY FOR USING RIPE SEED.

Twenty-five years ago, when the Meshanock was the potato, by careful selection, and by planting only the blossom-ends, we increased its earliness fully a week, the yield being quite uniform in size, and free from blemishes. For twelve years we made no change of seed, and kept the standard good. This was accomplished by setting aside a certain portion of the crop, from which the seed was to be selected. That from which the seed was again to be saved was carefully sorted, and the balance planted for market. Thus we always had seed that could be depended on.

The same plan was adopted with seed corn. None but the ripest and fairest ears were saved for seed; and this, again, was sorted carefully, the selections being used for the seed crop, and the rest planted for marketing. So the best of any given variety of grain may be selected by throwing it across a barn floor from side to side. The heaviest and plumpest seeds will fly farthest, and if saved and passed through a sieve that will retain only the largest grains, these may be sown for the seed crop, and the rest for marketing. Thus, in a few years, you may have crops of superior excellence, and at comparatively light cost. But in no case must any seed be gathered until it is fully ripe; for as surely as like produces like, so surely will immature seed depreciate the quality and diminish the vigor of the plant, until it finally becomes a prey to every disease, or climatic conditions unfavorable to growth; and it perhaps eventually dies out entirely, to be supplanted by something new.

Take wheat, for instance. If perfectly ripe, the starch and gluten is in its best state for being absorbed by the young plant, giving it vitality and vigor; and the bran, or skin outside, will retain its shape for a considerable time. If the seed be unripe or shrunken, the plants come up weak, and never become as vigorous as they should.

There is no doubt but a great deal of trouble from the attacks of insect depredators arises from this lack of vigor in the growing plant; and this is essentially true as respects its ability to resist fungus attacks and other diseases.

Up to about thirty years ago, grain was not harvested until ripe. Then came the mania for harvesting wheat while in the dough state. The evil increased until the reaction came, and now this species of insanity has pretty nearly run its course. It is true that the bran on wheat so cut will be thin and light; and it is as true that the wheat will be soft and the flour sticky.

The bran from ripe wheat is thin and tough, and from unripe wheat is dry and brittle. Ripe wheat grinds freely, and, when ground, is soft and elastic in the hand, and gives off a pleasant smell. The flour absorbs, and continues to absorb water freely upon being mixed and kneaded, and the loaves of bread, when baked, are light, moist and soft.

Unripe wheat, when ground feels dry, and is more like meal. It lacks the pleasant odor of ripe wheat, absorbs but little water when kneaded—for, the granules being hard, the water lies around it rather than in it, and when baked, the loaf is dry and hard.

Therefore in saving seed grains, it is the wisest economy never, under any circumstances, to save for sowing any but the most thoroughly-ripened samples.—*Chicago Tribune.*

TREES FOR SHADE AND ORNAMENT.

For a list of trees to set along the borders of a street in a city or village, or along the highways in the country, I would rank the first the Sugar or Rock Maple (*Acer saccharinum*). It is a noble-looking tree when fully grown and makes a dense shade, so acceptable in a hot day to man or beast. The only objection to its being popular for this purpose is its slow growth. Most people are impatient to have on the start a tree that will grow up, like Jonah's gourd, in a single night; and will discard this for some quick-growing kind—like Poplars or Cottonwood, for instance—forgetting that, while these quick-growing trees, like some fast people, grow, flourish, and have their day, the Hard Maple continues to grow and rear its stately head and stand as a monument to the memory of him who in his wisdom transplants it.

Next to the Maple I would place the White Elm (*Ulmus Americana*). This is sometimes called the Weeping Elm, and is really a beautiful tree, and perhaps more universally used for street purposes in the Northern States than any other single variety. I

need not here give a description of this magnificent tree, as you are all undoubtedly acquainted with its habits and growth. A row of trees alternately Maple and Elm have a very pleasing effect. Next in order comes the White Ash (*Fraxinus Americana*). This tree is not as large in its growth as the two former, but excels them in the rapidity of its growth, and makes an excellent shade-tree; its main and only objection being its habit of dropping its leaves in early fall. The Linden, or more commonly-known Basswood (*Tilia Americana*), makes a beautiful shade-tree; but its tendency to sucker or sprout makes it objectionable to many. Yet I would advise its culture, on account of its beautiful foliage and fragrant blossoms.

For a quick-growing tree for street purposes, rightly managed, I would not discard the Soft Maple, White or Red (*Acer dasycarpum* and *Acer rubrum*). These trees have received considerable abuse for a few years past—I begin to think unjustly; and they have been required to take a back seat in some localities, for their tendency to breed or harbor the borer, a pest that is destroying them in great numbers. And here let me record another little item of observation and experience. I have never yet, in a single instance, seen a tree of this species that was in any manner afflicted with the borer that was standing where it first grew from the seed; or, in other words, had never been transplanted. With these trees the sap begins to circulate very early in the spring, as soon as the frost leaves the ground, just the time we begin to transplant. Now, in my opinion, the trouble lies in the act of taking up the tree. In most instances, after the operator has dug around the tree and cut off its roots to loosen it, he takes hold of the body of the tree and weaves it back and forth in such a manner that it has a tendency to loosen or break the inner bark of the wood, about two feet from the ground; which in time produces decay, and the borer commences his depredations. In most if not quite all trees which I have examined I have found that decay and the borer commenced at that point; hence my conclusions. It is a subject well worthy of our investigation, for I dislike very much to have so worthy a tree 'go to the bad' through no fault of its own.

There is another quick-growing tree that I would like to mention in this connection—that is the Box Elder or Ash-leaved Maple (*Acer negundo*). From what I have seen of it in my grounds, I think very favorably of it. Its main objection, so far, is its very rapid growth; hence its tendency to grow crooked or sprawling, as it were, being in a measure top-heavy while young, and apt to bend over and remain so unless straightened and tied up. I have it on trial.

The foregoing comprises my list of street and highway trees. I have purposely left out the Poplars and Willows, as I consider none of them worthy for that purpose. You will also perceive that I have left out our native Oaks and Hickories. Not that I consider them unworthy, by any means; but from the fact of the difficulties attending their transplanting. If any of you are so fortunate as to have any of them growing on the line of your streets or highways, or upon your lawns, or even in your door-yard, however small it may be, please let them remain, and not cut them down, except for a cause, for it will take years to replace them, however rapid they may be in growing.—*By F. S. Lawrence, in "Report of Wisconsin State Horticultural Society."*

REGULARITY IN FEEDING.—It is very comfortable in cold weather to sit by a warm fire. Many who have the care of stock dislike to leave warm quarters, and cling to the fireplace, letting half hour after half hour pass by, while the hungry stock are shivering and hungering for food and water. In thus waiting for food and water, an animal loses flesh rapidly. Brutes are the best time-keepers in the world. They know the very minute their food should be supplied, and are disappointed if it does not come. The stock breeder, therefore, should see that regularity and promptness prevail in the care and management of stock. Their various wants should have attention at the very minute daily. If hired men will not be prompt in taking care of stock, if they don't sympathize with brutes in winter, they ought to be discharged and more humane men employed in their places. The poor brutes do suffer severely in winter. Even in warm barns and stables they can hardly keep warm in cold weather, but if left out of doors, exposed to storms and cold, their sufferings are intense, and they should be fed with the regularity of clock work, and fed all they can eat, and they will require at least one-third more food to keep up animal heat than they would if kept in the stable. All stock should have shelter. It is cruel to leave it exposed to the rigors of winter without shelter.—*Rural World.*

THE BEST BREED OF FOWLS.—The question is often asked: "Which is the best breed of fowls?" That question will never be answer-

ed to the satisfaction of all fowl breeders, because there are so many different opinions on this subject. One man has bred light Brahmas, and he thinks he cannot be excelled; another has the dark Brahma, and he thinks that breed the best; while another likes the Leghorn, or some other breed, above all others. It depends on what your object is, whether eggs alone, fowls for market, or both fowls and eggs. Very large fowls are unprofitable as layers, if the eggs be sold, because their eggs are so large. A dozen small eggs will sell for as much as a dozen large ones, as eggs are eggs whether small or large. As layers only, the different varieties of Leghorn and Hamburg fowls, probably cannot be excelled. But for dressed, market poultry, the light and dark Brahmas are unsurpassed; and as layers they are considered by many to be in the first class, and even the best of all breeds; but it will not cost so much for feed to produce one hundred eggs from some of the smaller birds, as from the larger ones. For general use it is safe to say, that the light Brahmas stand at the head of the list of dunghill fowls.—*N. Y. Observer.*

HOUSE PLANTS.—Most of our plants are injured by too much heat. For a general collection of house plants it is not best to allow the thermometer to be above seventy, and if they could be kept in a room where the thermometer would usually not range much above sixty-five it would be the better. In the night-time fifty is high enough. Give a little fresh air every fine day, and all the sunlight attainable. An effort should be made to give moisture to the atmosphere for our own good as well as the health of the plants. This can be done in various ways by evaporating water, but when plants are in a separate apartment, like a little greenhouse, it can be done more conveniently and effectually, although this separate apartment be only a bay-window, with glass-doors, separating it from the living-room. In this water can be kept by syringing, and a moist atmosphere preserved. The temperature with this arrangement can be kept lower than would be comfortable in the living-room, and the plants are saved from dust and many evils which we manage to endure and live, but which generally prove too much for the plants.

SHEEP ON A FARM.—Sheep are undervalued by the mass of landholders, as a means of keeping up the fertility of the soil and putting money into the pockets of the farmers. The moment one begins to talk of sheep husbandry, the listener or reader begins to look for wool quotations alone when there is talk about the profits of farming. Sheep on a farm yield both wool and mutton. They multiply with great rapidity. They are the best of farm scavengers, "cleaning a field" as no other class of animals will. They give back to the farm more in proportion to what they take from it than any other animal, and distribute it better with a view to future fertility of the soil. Prove this. There is no need of proof to those who have kept sheep, and know their habits and the profits they yield. To prove it to those who have not had the experience, it is necessary they should try the experiment, or accept the testimony of an experienced shepherd.—*N. Y. Herald.*

HOW TO TAKE CARE OF A HORSE TEAM.—The treatment of horses is an art, and but little understood generally, and where understood not always practised, so that our horses are pretty well abused animals. This is not only wrong, but a loss, and a considerable one. Treat a horse well always, from colthood up, and it is remarkable how much labor may be got out of him. Treat him, first, kindly; never overfeed him, particularly with grain. Have a warm ventilated stable for him, soft and dry. Feed him regularly; keep him clean; and never overstrain him, not even once. He will then be a servant for you for a long time. You will get from a quarter to a third more time and labor out of him, and this the same horse already practised and broke to your hand not needing to be renewed in the young horse that is to supply, prematurely, his place.—*Dumb Animals.*

TREASURY DEPARTMENT WHITEWASH.—The receipt for whitewashing sent out by the Lighthouse Board of the U. S. Treasury Department has been found by experience to answer on wood, brick and stone nearly as well as oil paint and is much cheaper. Slake a half bushel of unslaked lime with hot water, keeping it covered during the process. Strain it, and add a peck of salt, dissolved in warm water; three pounds of ground rice put in boiling water and boiled to a thin paste; one half-pound powdered Spanish whiting, and a pound of clear glue, dissolved in warm water; mix these well together, and let the mixture stand for several days. Keep the wash thus prepared in a kettle or portable furnace, and when used put it on as hot as possible with either painter's or whitewash brushes.

The editor of the *New England Farmer* says he has fed many bushels of apples to his cows and young cattle the past season. In case of choking, the animal is turned loose in the yard, and, if relief is not obtained at once by mov-

ing around, he uses a spoonful of soft soap to a quart of warm water and pours a little down her throat followed by a gentle hand rubbing on the outside of the neck near the seat of the trouble. Sometimes two or three doses were required; usually one was sufficient.

The *American Chemist* says that a Western farmer discovered many years ago that wood could be made to last longer than iron in the ground. Time and weather, he says, seem to have no effect upon it. The posts can be prepared for less than two cents a piece. This is the recipe: Take boiled linseed oil and stir into it pulverized charcoal to the consistency of paint. Put a coat of this over the timber, and, he adds, there is not a man who will live to see it rot.

DOMESTIC.

As the sun gets more powerful, the plants in the greenhouse and windows should be looking at their best. During cold nights a thin cloth or newspapers thrown over house-plants, will protect them from being chilled.

Insects must be looked after, else they will soon over-run the plants. Fumigate at least once a week, to kill the green fly, selecting a time when the house is not too moist. To destroy the red spider, it is only necessary to sprinkle the plants thoroughly once or twice every week. Mealy bugs must be destroyed by hand-picking.

A good receipt for apple bread is the following:—Weigh one pound of fresh juicy apples; peel, core, and stew them into a pulp, being careful to use a porcelain kettle or a stone jar, placed inside a kettle of boiling water; mix the pulp with two pounds of the best flour; put in the same quantity of yeast you would use for common bread, and as much water as will make it a fine, smooth dough; put it into a pan, and place it in a warm place to rise, and let it remain for twelve hours at least. Form it into rather long shaped loaves, and bake in a quick oven.

BREAKFAST PUFFS.—Beat two eggs very light, adding to them one quart of sweet milk, and gradually creaming into it sifted flour and a little salt, until it is of the consistency of waffle batter. Bake quickly in tin puff pans.

CALF'S LIVER BROILED.—Cut the liver into thin slices, wash it, and let it stand in salt and water for half an hour to draw out all the blood. Season with salt and pepper, and broil, basting frequently with butter. Either fried or broiled liver is more delicate if, after it is cut in slices for cooking, it is parboiled in salt and water.

RICHMOND BATTER CAKES.—Two cupfuls of sifted flour and one of cornmeal, three eggs beaten separately, made into a batter with buttermilk or sour milk, in which a tea-spoonful of soda has been thoroughly dissolved. Pour upon a greased griddle from a spoon, and allow the cakes to have the thickness of good buckwheat cakes.

MOUNTAIN GINGERBREAD.—Beat until creamed and perfectly light half a pound of butter and a quarter of a pound of sugar. Add to this one tea-spoonful of cinnamon, cloves, and allspice mixed, and about one-fourth of the flour, which is a quarter of a pound altogether. Whisk six eggs very light, and stir in by degrees. Mix together half a gill of new milk and three gills of molasses, and stir in slowly. Add gradually the rest of the flour, and beat all well but lightly together. Add one table-spoonful of saleratus prepared as in the following recipe, and one pound of raisins, seeded and chopped. Bake in square or round tins, in a moderate oven.

RICE WAFFLES.—One cupful of rice boiled done, three cupfuls of flour, three eggs, one tea-spoonful of soda, and a piece of lard or butter the size of a walnut. The ingredients must all be prepared separately, for negligence on the part of a cook will prevent the success of any recipe. Be sure to beat your eggs very light. See that every particle of soda is thoroughly dissolved, and that after it is added the baking be not long delayed, lest the effervescing properties of the soda be destroyed, and consequently the cakes heavy. This batter may be used in waffle-irons, or else baked like flannel cakes upon the open griddle.

INDIAN PUDDING.—An inexpensive pudding can be made of Indian meal in this way:—Set one pint of milk on the stove. When it boils, add four table-spoons meal, wet in a little cold milk, and a little pinch of salt. Let it boil ten minutes, then pour it into the bowl you are going to bake in, and add one quart of cold milk (this cold milk added is what makes the pudding juicy, and ignorance of this is what spoils so many Indian puddings), one tea-spoon good cinnamon, sweeten with molasses or brown sugar to taste, and one egg, taking care not to add it when the mixture is too hot, or the egg will be cooked, and the pudding ruined. If you want it a little extra, add one half tea-cup of raisins. Put it in the oven, having it as hot as for bread.