

September on the Farm.

Is the incoming month to resemble the months departed—are we to have the heat of the past July and August continue through September? From day to day this inquiry is heard from those whose lot has fallen to them to pass their wearisome nights and days in the stifling air of closely built up towns. Well may they long for the free air of the open country, with its hills and living streams, and the leafy shades at all times so pleasant. September has come, rich in her peculiar and appropriate beauty, rich in the fruits she bestows upon man as the reward of industry—gifts bestowed, and at the same time rewards.

In this month we may expect some change in the temperature. The heat of the midday sun may lose little of its intensiveness; for the first fortnight especially this is likely to be our experience, but the nights will have become much shorter and cooler, and evenings and mornings will be pleasant. Though the woods may lose somewhat their green hue, they will be but exchanging it for the bright tints that the fall crowns our forests with in our Canada.

And now to our farm work for September. We may before the month has departed get a slight foretaste of the coming winter—a night's light frost, pinching a few of our more tender garden plants, coloring the corn leaves, warning us to prepare for the coming of weeks and months of incessant frost and snow.

The hurry of harvest is over. We have gathered in our grain. Let us see to it that it is secure—not the grain only; the straw has its value, and that, in our long winters, no trifling one. It requires no small quantity of fodder to support for half a year the live stock of a farm. Well saved straw is better than ill saved hay. If you cannot find room for it under the roof of your barn, let it be well stacked, as carefully as you would the hay itself—the heart of the stack well filled as the stack is building, that no rain may obtain a lodgment in it. Dress the stack a few days after it is built, and it may have settled down; add to the top if necessary, and rope it to keep it from being disturbed by any casual storm.

The sowing of fall wheat is, next to the harvesting of the crop, one of the most important works on the farm. That we may reasonably expect a good return, a suitable soil, well prepared, clean seed of a good quality, and properly sown in favorable weather, are requisite. A suitable soil—not too light, loamy or sandy, not too retentive of water, strong enough to bear a stiff straw and heavy ear, and yet not so stiff as to be bound in a hard mass in drought; such is known as a wheat soil. Other soils may, by the skill and labor of the husbandman, give good wheat crops; wet land can be drained. Stiff clay may be made more friable; suitable tillage and the application of manures may supply much that is wanting.

Grass seed is usually sown in the fall, and when sown on a well prepared seed bed is seldom a failure. As with all other plants, it is of great importance that there be an early germination of the seed, and a vigorous early growth. For this purpose, the wheat ridge, well cultivated and in heart for the fall, is just what is required. Timothy grass is almost exclusively sown here. It generally yields a good crop, and its hay, if to be sold, meets a ready sale. It would, however, be well to consider the advisability of sowing a mixture of other grasses, as is done by the farmers in Britain. By confining ourselves to Timothy only we can never have good pastures.

Top dress meadows and other grass lands as far as your means permit. A heap of composted earth, sods and such matters as are usually suffered

to waste, will, if used for top dressing grass lands, enable them to bear more stock and in better condition. Muck is very useful for such purposes.

“Keep the plow jogging and you will never want corn for your horses.” And not even in spring is it more necessary to follow the advice of the old proverb. Fall plowing prepares the ground to receive the full benefit of the winter's frost and snow, and that is no little gain; and not only is the soil rendered more friable by the frost and more fertile by the ammonia applied to it by the snow, but, in addition, every acre plowed in the fall saves so much spring labor. Fall plowing should be rough and strong—the heavy scores exposed to the frost—not harrowed—the furrows well cut—a free passage opened for the water—all water cuts and mouths of drains cleaned up. Then close up your field—all right for the winter!

Look to your live stock. See that they are well supplied with food and water; never suffer them to fall off in condition. Milk cows, young stock, sheep and pigs pay the farmer when kept in good condition—not otherwise.

Disease of the Wheat Crop—Rust.

We had confident hopes during the earlier summer weeks that the approaching harvest would be at least equal to the preceeding one for the manifold increase of our grain crops. Moisture and heat, the great agents of vegetation, had caused a more than usual growth of stem and leaf, and the bloom gave fair promise. We have been disappointed. We anticipated an average of twenty or twenty-five bushels of wheat, and the threshers give us returns of ten. The heat and moisture have been the means of reducing, not increasing, our yield. The grain has ripened before it had time to arrive at maturity, and it is shrunken; a thin and hungry instead of a plump, heavy kernel. One farmer who had a promising crop had it so shrunken from its repening in four days. The intense heat, and, added to the heat, the rust, have made our plump grain like the tailings from the fanning mill.

What is wheat rust? Whence does it come? Can we guard against it? The latter question is now brought practically before us. The genus rust comprehends numerous fungi, all parasites attaching themselves to different plants, feeding on them and thereby, in the cases of many of them, injuring them greatly, and in some instances totally destroying them. As a parasite, it is classified with smut and bunts, though it is a distinct genus. The attacks of rust are confined at first to the leaves of the plants, and, while it is so, little injury is done, but it is a serious matter when the germ is attacked. That which was designed to nourish the germ is then diverted from that for which it was designed—drawn away by the parasite for its own nutriment, and the grass, deprived of its necessary food, becomes lean and shrivelled. Red wheat is comparatively safe from the attacks of rust. White wheat is very subject to them. It is more difficult to guard against rust than against smut. The vitality of the spores (seed) of smut may be destroyed by pickling or steeping in some preparation the seed wheat to which they have adhered. Of the spores of rust so many fall to the ground that no preparation of seed wheat is a preventative against their growing again on the same soil. The only remedy is rotation of crops.

If rust proceed from spores, why is it that it is only some years that it is known to grow injurious parasites? As the seeds of certain diseases of mankind are known to exist at all times in some localities, and only to be epidemic under certain atmospheric influences, so it is said that the spores

of rust are in the atmosphere, or perhaps in the soil, unperceived till such time as the state of the atmosphere, as it has been this year, is favorable to their germination. Farmers dread foggy or damp, moist weather at the time of the filling and maturing of the grain.

Are Potatoes Poisonous?

In the *Housekeeper's Manual*, by Mrs. Stow and Mrs. Beecher, the following paragraph appears:—The potato, nutritive and harmless as it appears, belongs to a family suspected of very dangerous traits. It is a family connection of the nightshade and other ill-reputed gentry, and sometimes shows strange proclivities to evil; now breaking out uproariously, as in the noted potato rot, and now more covertly in various evil affections. For this reason scientific directors bid us beware of the water in which potatoes are boiled, in which it appears the evil principle is drawn off; and they caution us not to shred them into stews without previously suffering the slices to lie for an hour or so in salt and water.

What next is to be put under the ban and its use forbidden. Those wiseacres, the vegetarians, forbid the use of animal food, in toto, not content with the old prohibition of pork, which allowed man to eat other flesh. Another class would interdict the growing of barley, because from it are brewed malt liquors said by them to be death-dealing beverages. In corn is contained the principle of alcohol, awaiting the distilling process. How many headaches, how much nervousness and even hysteria have been asserted to be breaking in a chest of tea we know not, but alarmists have pronounced them to be there.

'Tis true rot has affected the potato, nor has its virulence wholly ceased, but has not wheat, the staff of life, been scourged by rust, blight, mildew, and its properties as a healthy food seriously affected, as well as its yield decreased? We select the wheat as the most valuable of our breadstuffs, but every plant designed for the use of man is liable to disease.

The potato, it is true, belongs to the same family as the nightshade. Solanum comprehends many varieties, one at least poisonous, but it does not necessarily follow that the potato is unfit for human food. The element that in the nightshade makes it poisonous may not exist in the potato, or, if it does, its injurious property may be neutralized by other elements so as to render it innocuous.

But the best proof of the potato not being poisonous is that it has been used as an article of human food in the Old World and the New since its first introduction into Britain in the time of Queen Elizabeth—in some places the principal food, and in no instance with fatal effects. It has been cooked in a greater variety of modes than almost any article of food, and there has never been an authenticated case of its proving deleterious to the human constitution. But we are told to “beware of the water in which potatoes are boiled.” We have not, we confess, had any knowledge of potato soup, but whether injurious to the health or not, it would hardly be very agreeable to the palate, though it might be little worse than the water in which some other vegetables are boiled.

Canadian Barley.

The Americans are becoming a beer-drinking people. The ale and porter from some of our Canadian breweries are becoming known in American cities, and, we may add, the more they are known the better they are liked. The brewers of the States are all doing a larger business than

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