Agriculture.

Commission Merchants and Farm Produce.

We have often been asked whether it is better for farmers to market their own produce, or trust it to merchants-middle men, as the Grangers call them. This depends on circumstances. As a rule the merchant understands the markets better than the farmer, and can send the produce where it will sell the best. The merchant's business is to buy and sell, and by experience he becomes expert at it. "Every man to his trade" is a good maxim. We have no such fear of merchants as some of the radical Grangers express. They form a very essential part of every business community, and should be encouraged. They are accused of being too sharp and taking the lion's share of the profits. This may be true in some cases, but as a class we have found them as honorable as other folks. Now and then a merchant makes a fortune, but ten merchants fail where one farmer does. When farmers turn merchants the failures are in greater ratio, for a man needs training to become a successful merchant. Farmers' stores, with farmers to manage them, have seldom been a succes

Notwithstanding all this, there are circumstances under which it is better for farmers to save commissions and sell directly to consumers. If one can find a hotel, or a restaurant, or a family, in which he can sell all his butter or produce of any kind, he had better do it. The price is generally better, the trouble little, if any more, and there is no discount. But such opportunities do not come on every farm, and every farmer has not the mercantile tact for availing himself of them. It would be a blessed thing if all farmers would study the laws of trade more than they are wont to do, certainly so far as to keep accurate accounts of their business, and to be acquainted with market prices and supplies, for we verily believe that much of the success of farming depends upon the ability to sell the produce to good advantage.—[Ex.

The American Sweet Chestnut.

This is one of the trees that everyone planting trees of any kind should plant more or less of, as it combines more useful qualities than any other of There is no use here of enumerour native trees. ating these qualities, for they are well known to nearly all. All will admit who have seen it growing in its native habitat, that it is very beautiful, of very quick growth, its wood of great commercial and domestic value, its fruit, or nuts, the best of all. Why, then, is it not planted by everyone everywhere? Simply because it has fallen into disrepute from having been found "hard to transplant" by nearly all who have transplanted it. But this is not really the case, and this reputation has been gained because, as a rule, those who have planted did not have trees of the right kind or size to plant. It is with the chestnut as with many other things in horticulture. We should try and learn something of the thing we wish to do before we undertake it, and thereby save ourselves much cost and labor with no good results.

The chestnut can be transplanted of considerable size if it has been properly handled, and the planting carefully done; but such planting and trees are expensive.

expensive.

The way to do it is this: Procure one-year trees, or two years transplanted, from some nurseryman who makes a business of growing them from seed. They cost but little; if you want but few, they can be sent safely by mail; or, let your nearest nurservman know your wants in winter or early spring, and he will order for you, Plant these small trees on any reasonably dry soil, and cultivate them well, and you will soon be proud of your chestnuts. We have seen them growing finely and producing nuts abundantly on nearly every kind of soil; we have seen them this year of six different sizes and ages, on different kinds of soils, all showing a nice crop of nuts, and one lot only six years from the seed, many of them showing nuts, one of them having twenty-one burs, with three nuts to the bur. And we can say, after thirty years experience with the chestnut, a well known horticulturist finds them just as easily grown, healthy, and hardy, as a horse chestnut. If any of our readers have had a different experience, we would be glad to hear from them.

The Messager Official of Russia says that the wheat crop of that country is generally below an average, except in Esthonia; in some districts it is very poor, and great losses have been suffered from storms and insects.

Too Much Timothy Seed.

"Old Farmer" writes concerning the over production of timothy seed:

"All men engaged in agriculture are of course liable in one way or another to make mistakes—to fall into erroneous practices, and I have for years been convinced that there is more timothy grass seed alone than there ought to be, or than is beneficial to the farmer or his soil. In ripening its seeds, timothy requires similar ingredients to those required in producing wheat—phosphoric acid, a leading ingredient of guano, and of phosphatic manures, being required in ripening the seed of timothy. Nitrogenous ingredients are also received by this crop during the stages of its rapid growth, before the seed matures or the stalks become firm

Timothy is also remarkable for the great abund ance of seed it produces. This fact—its enormous extent of seed production—shows conclusively why it is more exhausting to the soil than most any other crop; at all events, it seems safe to say that on account of the phosphatic elements withdrawn from the soil in maturing its seed, and from a large supply of these elements being required in matur-ing the vast abundance of seed that timothy grass produces, this grass crop, instead of resting the soil—as many farmers assume it to do—really exhausts the ground as rapidly as is done in grow ing wheat; a fact which should be considered by many who seem to make the growing of timothy seed too prominent an object. If the purpose be to rest the soil—to give time for atmospheric influence to disintegrate its more compacted parts, and thereby set free and make available the crop elements which the soil contains—if this be the object desired, peas or turnips are more suitable than timothy. And clover in comparison with timothy is a far better renovator of the soil, from the fact that the clover roots bring fertilizing material from greater depths than other roots pene

In raising a crop of timothy seed, it is probable that the soil is exhausted almost as much as it is replenished by a crop of clover. Hence it is important to guard against exhaustive crops, particularly for old long used soils, whose need is renovation by the addition of nitrogen, which clover, plowed in, supplies, thus bringing the land again into a condition favorable to the raising of wheat.

Many of our best farmers who do not overstock their pastures, frequently allow large quantities of timothy to go to seed in pasture fields; which must take much virtue out of the land to ripen the seed, the greater part of which is wasted. True, the dry stakes are left on the land, in which there is about the same value as in any other dry straw. The seed also drops to the ground, some of which grows; but by far the greatest bulk is lost.

Clean Cereal Food.

While ingenuity seems almost to have exhausted itself in devices to secure the entire purification of the grain of wheat before it is ground into fine flour, it is strange that so little care is taken with other grains in the preparation for bread making. Even wheat designed for "Graham" flour is rarely cleansed as it ought to be, and it is notorious that for this kind of flower the lower grades of wheat are commoly used. When it comes to rye and buckwheat, and especially to corn, we may say that they are, as a rule, ground in their filth, original and acquired, and so come to the table for human food. Wheat must be cleansed to make white flour. This whiteness is a prime element in the price, and therefore of main consequence to the miller. The cleanliness or otherwise of other flours and meals is not so manifest to the eye of the purchaser, and the millers handle them as though it made no difference what is ground up with the grain. This fact is known to many, and prevents them from eating what they would other wise regard as wholesome and agreeable food The extent to which this disregard of cleanliness concerning an important class of our food materials is carried, is so great that it is often detected by the taste, and people who are fond of bread made from the coarse meals are given a disgust towards them which endures through life.

It is difficult to designate a remedy for an evil like this, so far as the people of towns and cities are concerned; but farmers carrying their own "grists" to mill can inaugurate the reform by insisting upon the thorough cleansing of all grain before grinding. If they will do this they will establish a standard and secure a general use of the proper apparatus in all custom mills, which will extend in time to merchant mills, and be a wonderful boen to all bread eaters.

Plants Protecting Themselves.

There are few things more unsightly in small gardens than any sort of dead litter or leaves; hence it is no uncommon thing for the old leaves to be cut and trimmed as closely as possible off plants. After the past severe frosts a good many of the leaves of plants look, and are, in fact, sere or dead. The result is that the next frost after they are thus bared of their natural covering passes through the next tier of more tender leaves, and the plants are cut through to the heart and die. Such has been the fate of many, while those that have been left undressed are safe and sound beneath a heavy natural thatch of dead leaves, placed in the best possible position for affording the most powerful protection. Thus, by observing nature's ways, our plants would often be much safer.

Not a few plants have their roots literally frozen through from similar causes. Dead fallen leaves are nature's covering for the roots to keep them warm. We remove all these, and allow the frost to reach the roots, and then marvel much at the plants suffering in consequence. In cases where dead litter must be removed for appearance, the best substitute for it may often be found in a topdressing of loose rich compost, or even in keeping a loose surface on the soil itself. It cannot be too eften repeated that a loose surface on bed or border works toward the presrvation of uniformity of In summer it temperature throughout the year. keeps the earth cool, in winter it keeps it warm; and it is in the extremes, more than any actual amount of heat or cold, that injures or kills either the roots or tops of plants. What, leaves or a loose surface is to the roots of plants, the dead or dying top is to their stems and branches, and hence the importance of leaving those natural protectors where nature placed them until all danger is gone.

Tree Culture on Waste Lands:

Hitherto the abundance of natural timber in this country has made it easy to dispense with timber culture, and for the most part our land owners have taken little interest in such slow growing crops. This state of things, however, is rapidly passing away. The demand for spocial woods for manufacturing purposes is steadily and rapidly increasing, while the natural supply is diminishing and must ultimately become quite inadequate. Meantime there are millions of acres of land suitable for timber culture and for nothing else, except poor pasturage, that our land owners are allowing to lie waste and idle for lack of a little forethought, and too frequently our would be thrifty farmers will risk their surplus means in wild cat speculations, promising but never yielding large and speedy returns, when the same money spent in planting timber would soon covert their worthless swamps and stony places into valuable properties.

A correspondent tells of a piece of land that was planted with walnut twenty-three years ago. This land was flooded every Spring and Summer, and was unfit for any ordinary cultivation. The trees are now from sixteen to twenty inches through, and have been sold for \$27,000. No particulars are given as to the cost of planting the grove or the amount of attention it has had during the years of growth. There can be little doubt, however, that the investment was small in comparison with the return, and the land would have otherwise remained entirely unproductive. To the contrary, the timber crop was so much clear gain. It is clear that our national resources might be enormously increased by a similar utilization by timber culture of lands which are now left unused and unproductive; and the planters would find their groves a surer investment for the security of their family possessions than any savings bank deposit.—[Scientific American.

A syndicate of Toronto cattle dealers is said to have contracted with the Allan and Dominion Lines of steamships for space for twenty thousand cattle for the ports of Liverpool, London, Bristol and Glasgow. The prospects of the cattle trade must have brightened very much of late to warrant anyone entering into any such an agreement.

THE VALUE OF A SPARROW.—English sparrows are declared to be very useful little creatures in more ways than one. It has been discovered that they are very fond of Canada thistle seeds, and eat them with such avidity that in some places, where the sparrows are numerous, not a single seed can be found in the thistle down that is very plentiful there. Notice—Strive to see if this is true.