

Notes on the Garden and Farm.

Attend to the accumulation of manure by every possible means; let it be gathered as it is made, and stored in good-sized heaps, well covered to preserve its most valuable components from being washed out by the rains; remove all road-scrappings, parings of banks, ditches, and the accumulation of rich earth on the headlands to the compost heaps, mixing them with fresh lime, sea or pit-sand, making them up into pyramidal heaps to throw off the rain.

J. P. Delaplaine of Elm Township, Kansas, recently cut down a cottonwood tree—grown in the open field near the house—14 years old, which measured a little over 14 inches in diameter and proportionally tall. We simply mention this to show what may be done on our prairies in the way of growing timber. Ten acres of land set out in some of our fast-growing varieties of trees will in a few years supply a family with fuel. Cottonwood is not the most valuable timber in the world, but it makes fair fencing lumber and, when seasoned, excellent firewood.

Dirt has its lower uses, and for these everybody should lay by a stock in dry weather, when it can be procured from the road in a fine dry condition. It keeps vermin from all domestic animals, cattle, poultry, colts, which are liable to become infested with them. Sprinkle it on the backs of your steers and cows and see how they enjoy the bath. Put it into boxes where your poultry can wallow in it and witness their daily resort to them as surely as to their feed boxes. If animals are supplied with dirt they will have no vermin; if they get infested with lice apply it every day and it will remove them. The beauty of this remedy is, it is cheap, easily obtained, and there is no danger in its use. If you have no dirt on hand now, remember to put up a few barrels next Summer for Winter use.

The manufacture of sugar from beets is to be tried at West Brookfield, Mass., this season. The milk-condensing factory at that place will be used for the purpose, as the vacuum pans and part of the machinery can be used in the process, while other needed machinery of the most approved kind will be added. The farmers will be paid \$5 per ton for the beets; the factories in Germany pay only \$4, and the factory in California \$4.50.

Dr. Masters showed roots of *Triticum repens* which were found most serviceable in binding the sand together on the sea coast at Dunrobin. Mr. Berkeley remarked at one time it was proposed to utilize the roots of the twitch in the manufacture of paper, but that the experiment had not been successful. Mr. Edgeworth remarked that the twitch formed good food for pigs.

A New Hampshire paper relates that at Newton, in that State, a mad dog, after having been wounded, took refuge in a barn, where some of the hay became soaked with his blood. The hay was fed to a horse, which went mad.

The great error in wheat husbandry consists in this:—Sufficient time is not suffered to elapse between plowing for wheat and seeding to admit of that packing of the soil and that preliminary decomposition of crude vegetable matter which, on most soils, is an indispensable prerequisite to a good wheat crop.

An American journalist writes:—"At a neighbor's, where I happened to be a guest, a servant came rushing in, saying that all the cows had eaten of the green clover brought up (for soiling), and that they were much bloated. My advice was asked, and I directed the cows to be put into the yard, which was only accomplished with difficulty; and I found ten or twelve cows of the best Swiss breed in this same condition: drinking water after eating clover. My water bath was at once resorted to. Everybody, including the lady-guests, went to work with a will pumping and carrying water. I emptied it, a bucket at a time, over the backs of the cows, put some garlic into their throats, and in about half an hour had the satisfaction of seeing all the animals relieved. This is a cheap remedy that is available on every farm. It was published in several German agricultural papers, and I had the satisfaction of hearing that wherever it had been resorted to in time, it had cured the afflicted animals." The above information may be of great value in case of an attack of the bloat, but I have the utmost faith that this remedy will not be needed if dry hay or straw is within reach of the animals as a preventive.

The success which the French have attained in conveying fresh meat in good condition from the River Plate, threatens us with competition from that quarter in the European markets. Much will, however, depend upon the cost of transportation in the steamer which the French have so carefully constructed for the purpose. Whatever rivalry may follow, we most benefit, in a general way, from all improvements in the conveyance of perishable products.

Professor Stewart, of Cornell University, has found, by actual experiment, that one-quarter of an acre well set in clover is sufficient to feed one cow 180 days, if cut and fed her, while if allowed to run on it would not probably last two weeks. Another advantage in the care of milch cows is that they give more milk from the same amount of food, it being found that the walking to and from pasture diminishes the quantity of milk.

HOW TO HARDEN BUTTER.—An English butter maker of large experience, who is now on a visit to this country for the purpose of looking over our cheese and butter dairies, gives the following information concerning a method in practice among the best butter-makers in England, for hardening, or rendering butter firm and solid during hot weather. Carbonate of soda and alum are used for the purpose, made into a powder. For twenty pounds of butter one teaspoonful of carbonate of soda and one teaspoonful of powdered alum are mingled together at the time of churning and put into the cream. The effect of this powder is to make the butter come firm and solid, and to give it a clean, sweet flavor. It does not enter the butter but it acts upon the cream, and passes off with the buttermilk. The ingredients of the powder should not be mixed until required to be used, or at the time the cream is in the churn ready for churning.

Dr. E. Wolff, a German chemist, experimented upon two cows in feeding raw and cooked potatoes with hay and rape-seed cake. Fed on cooked potatoes the cow did not give as large a quantity of milk as when fed on raw potatoes, but the milk made nearly a third more butter. When fed on raw potatoes it required 42 pounds of milk for 1 pound of butter, but when fed on cooked potatoes it required only 27 pounds of milk.

A New York farmer goes wild over Guinea hens. He declares that each one will keep an acre of potatoes clear of bugs, and will answer every purpose of a barometer in predicting storms. He also says that they will not scratch, and lay more and better eggs than the common hen.

A subscriber in Central Canada asks us to inform him "why it is that butter is seldom or never quoted in the weekly reports of the Liverpool markets, whilst tallow, lard, pork, beef and cheese are quoted regularly." In reference to this, we would say that the same absence of quotation in the case of butter has been remarked to us before. Butter does not appear in the quotations of any European market, except in the circulars of particular firms. The cable reports do not give the state of the butter market in Britain. One reason for this, probably, is that American butter, being an article which is not graded, cannot, therefore, be quoted except approximately. If there were a general understanding as to what constituted certain qualities, as in grain or in pork, it might be more possible to attach a price to the different grades. We may remark that butter is quoted daily to New York, and the price in Britain put upon the bulletin of the Provision Exchange there, but nowhere else. Our daily newspapers might, we should think, procure these quotations and publish them, if they saw fit.—*Monetary Times*.

We see it stated that a number of wheat growers in the vicinity of Chatham have formed a combination to hold their grain till the price offered by the local buyers rises to a point which pleases their fancy; and that the buyers, not unnaturally, refuse to advance. We are not told what the price is in either case, and are unable to judge what grievance, if any, the sellers have; but we fear it is the usual story with them, and a very foolish one. The farmer takes upon himself to decide what his wheat should be worth to the dealer, and stubbornly holds out for that figure. He does not, probably, know how the British markets rule, nor look at the prices in Chicago or New York. He gets some fancy about war prices, and is snared by an idea; but he often ends by taking, six months afterwards, a half less than he was previously offered. It is never safe to refuse a fair price. Thousands have been lost to individuals, and millions to the country, by just such folly.—*Monetary Times*.

Cattle Breeding and Feeding in Kentucky, U. S.

Extract from a letter of a correspondent of the *Scotsman*, now on a tour of enquiry to stock-feeding States of America:

Very few steers are fed by their breeders. Stock men and farmers who do not feed many, buy up steers in the fall, when about thirty months old, and feed them in open fields (no shedding here) during winter with Indian corn, and perhaps a little hay or corn fodder, and then graze them all summer, and sell them off as beef in the fall. The more enterprising farmers handle only the best lots, and feed them pretty liberally when they have them. They go round in numbers and select their choice steers in small lots, sometimes as small as twos and threes, and take delivery of them in the fall. The demand for the better class of steers is unusually active this season, already they are almost all bought up at 5 and 5½ cents per lb., or about one cent per pound above the buying prices of last year. When bought lean these finer steers will weigh about 1,300 lb., and during their breeding year they will take on between 400 and 500 pounds. It is expected that this year a little over 6, or probably 6½ cents per pound, may be obtained when the steers are fat, which would make the value of a 1,700 lb. steer from \$105 to \$110, or £21 to £22. The cost of a 1,300 lb. lean steer last fall (at 4½ cents per pound) was \$58, or £11 12s., which would leave a balance of about \$50, for the year's feeding and profit. During the winter of six months (supposing the steer is a year in his feeder's possession) a steer consumes about sixty bushels of Indian corn, worth about \$20; and then the grass he eats during the other six months, if rented, would cost about twelve dollars (two dollars a month). Salt and labor would cost about two dollars, and thus the total cost of the year's feeding (minus incidental expenses), amounts to about \$34, or £6 16s. The profits this year will be larger than for a long time back, and they are not likely to be so large again for some time; that is to say, the buying price is not likely to be so low as it was last year. Farmers generally consider that \$40 a head would pay well for a year's handling. The better class of Kentucky steers—those referred to in the above calculations—would probably dress from 55 to 60 lb. of beef to the 100 lb. of live weight, and thus with carriage, which would add barely half a cent per lb., the cost of their dressed beef in New York would be from 10½ to 12 cents, or from 4½d. to 5½d. per lb.

The demand in Kentucky, as all over America, for improved Shorthorn bulls is growing steadily, and greatly increased attention is likely to be bestowed on the rearing of cattle of good quality. Farmers are beginning to realize better than ever the advantages to be derived from the raising of the best possible class of cattle, and they know that it is by using Shorthorn bulls, and in that way only, that they can convert their inferior herds into animals of good quality. Kentucky farmers do not think that the cost of beef-production will increase very largely for, at any rate, ten or fifteen years, but they think that by that time there will be ten improved steers for every one at the present day. They think the exportation trade will bring about great improvement in the general cattle stock of the country, by creating a reliable and profitable outlet for the better quality of beef.

The number of sheep in Kentucky in 1876 was 683,600, and their assessed value barely 11s. a head. The flocks are mixed and inferior. A number of good Southdowns have been imported within the past few years, but it is a pity to see such an inferior class of sheep occupying so rich a country. In the same year hogs numbered over a million and a half, and were valued at £1 2s. a head. Berkshires predominate.

The cost of keep to the "General Cab Company" of Paris, taking one horse with another, may be given as follows, taking the year 1875 as a sample: Oats, 10d.; maize and beans, 5½d.; straw, 3d.; and hay, 3d.; making in all, 1s. 9½d. a day, or £2s. 6½d. a week. The price, of course, varies in different years, and in 1874 it was only 1s. 8½d. a day, but it is not likely there will be much decrease, though Col. Wolf is hopeful that the admixture of maize with the oats will enable him to effect a saving. Maize has now been in general use as a partial substitute for oats during more than a twelvemonth, and he asserts that his horses do very well upon it. In many of the stables sawdust has been substituted for straw, and here too a considerable saving may be confidently looked for.