

were greatly deficient to the others and to the standard in butter-fat. And the pastures also greatly affect the quality of the milk. One of my meadows would produce from the same cows nearly, if not all out, three times as much butter from a gallon of milk as the other would, and yet the milk from the latter was equally as pure and unadulterated as that from the former; and I think it a most serious matter to brand with the crime of adulteration an honest milk producer, who is at the mercy of the weather, and the animals, and the pastures, one or other of which would be the sole cause of the milk he sold being below the standard."

There must, of course, be some sort of a standard fixed by law, as long as milk is sold, but it should not be set too high, and the finding of a fault in milk delivered should not, necessarily, stamp the vendor as a rogne.

A very opportune paragraph in the French edition of the "Journal" runs as follows:

"The chief guides to the proper quantity of seed to sow for grain-crops are: the quality of the soil, its richness in the elements of fertility, its more or less perfect preparation, the good quality of the seed, the more or less favourable state of the atmosphere at seed-time, and, lastly, the manner of sowing, whether drilled or broadcast. The necessary quantity of seed will vary, in consequence, from 1 1-2 to 2 1-2 bushels, or even 3 bushels, and we believe that it will be always more advantageous to trust to plenty of seed, than to reckon upon the amount of ears produced by tillering."

As we have often, very often indeed, remarked in this periodical, one great cause of the small yield to the acre, in this country, is the absurdly trifling number of bushels sown. In early seasons, when grain can be got in by the end of April, 2 bushels of wheat, 2 1-2 of barley, 3 1-2 of oats may be enough; but as the seed-time approaches the middle of May, an addition of 2 pecks to the acre will prove beneficial.

The long "awns" of the Tartar oat, whether black or white, suggest an increase of seed, as the number of grains in a bushel of this oat must be fewer than the number of grains, in the same measure, of potato-oats, or other short kinds.

We should not in the least fear sowing even five bushels of oats to the "arpent" on some badly prepared land in poor condition that we have seen in this province.

Those who remember our success with increased quantities of seed at Sorel, in 1885, on Senator Guèvremont's farm, will remember how bravely the "poor sand" of that parish responded to the innovation. Twenty-three bushels of wheat to the arpent, without manure, was the yield from 2 1-2 bushels of seed to the arpent. This crop won the first prize for the best arpent of wheat in the parish, and, considering the sandy soil upon which it was grown, it was quite satisfactory to the grower.

MANURE WASTES WHEN WINTER SPREAD.

Parr Day, Clinton Co., N. Y.

I do not see how the advocates of the practice of drawing and spreading manure in the winter can claim that it does not waste as much in the field as it does in the yard. Why, will not the water off of a whole field leach it more than the water from the few square rods of the barnyard? The manure being on top and the lumps projecting up above the snow and being darker than the snow draws the heat, so they thaw out long before the ground is bare. The leaching proceeds and the ground being frozen the water cannot soak in and must run off the surface. As the snow all thaws off several times in the course of the winter the waste in this way must be considerable.

There are almost always one or two rains before the ground thaws out more than 1 in deep, which washes the manure and very little of the sediment lodges in the soil, as it is already full of water. If the manure is properly piled in the yard