

sufficiently dry the leaf previous to its being rolled up for sale; the extra labor being well repaid in the increased price obtained.

As the present law permits farmers to sell roll and twist only, no cut (which latter must be left to regular licensed factories), it would be well to bear in mind that rolls of handsome, uniform size, and of uniform weight, always command a good price; whereas rolls of all shapes and sizes, or badly made up, do not sell at all.

A carefully selected leaf for the outside wrapper, of a glossy bright color, goes far to make it saleable, while the fillers (or inside leaves) should be stripped of all stem, and rolled as dry as possible without breaking; any stem left rots the whole tobacco and makes it smoke bitter and strong; and what may at first seem as a loss in the stripping of all its coarse stems, will soon be discovered to be a gain; the tobacco will keep better, smoke decidedly sweeter, and the product of the farmer who exercises these precautions is sure to be sought after, and as I said before, the trouble repays itself in commanding a better price.

I now come to another important point—the size and weight of the rolls; the most saleable is the half pound roll, although a fair percentage of quarter pound and one pound rolls are always in demand. A little extra weight should be allowed on each roll, for the moisture soon evaporates and they lose their weight.

Well made *torquette* or twist of ten to the pound also commands ready sale, but unless these are properly made of choice leaf and uniform size, they are best left alone.

The price varies as to quality from 13 cts. to 18 cts. per pound for large lots, and retail from 18 cts. to 25 cts. for good quality; although in some instances extra fine grade brings as high as 30 cts.: the figures above quoted including duty.

Tobacco grown in the county of Joliette, more especially at St Jacques, where the soil is evidently better adapted to tobacco cultivation than any part of this Province, commands a better price than tobacco from other districts; though I have seen some splendid specimens from other districts; notably from L Assomption.

There is no reason, if Canadian tobacco is properly handled, why it should not come into general use and take the place of the American leaf, which is now so largely consumed in this country.

Our farmers have a bright prospect before them. I trust they will profit by the opportunity afforded them, and make the tobacco industry take front rank—a position which can be easily obtained, by giving the cultivation of the weed their earnest study and care.

B. GOLDSTEIN.

Montreal, April 2nd 1881.

The Illustrated Scientific News.

ONE of the handsomest of publications is the ILLUSTRATED SCIENTIFIC NEWS, published by Munn & Co., New York. Every number contains thirty-two pages, full of engravings of novelties in science and the useful arts. Ornamental wood work, pottery, vases and objects of modern and ancient art are finely shown.

The March number contains, among various other subjects illustrated, a full description of the manufacture of paper hangings, with engravings how the deceptive curve is produced in casting the ball by the baseball pitcher, his attitude, how he holds and handles the ball, all fully illustrated. The number before us also contains engravings of Capt Eads' proposed ship railway across the Isthmus, and a novel hydraulic railway locomotive.

In addition to all this it contains many valuable recipes for artisans and housekeepers.

This publication will be found instructive and entertaining to all classes, but will be best appreciated by the most intelligent. Published by Munn & Co., 37 Park Row, New York, at \$1 50 a year, and sold by all news dealers.

AGRICULTURE.

Paris, March 24.

A few notes on the recent Fat Stock Show held in this city. As a general observation, all the native races exhibited, prove, that marked progress, in the sense of fattening, has been made; that while precocity is an attribute peculiar to certain breeds, it can be developed in other cases, where attention is paid to selection and alimentation; also, animals not intended for the butcher were remarkable for their excellent condition in respect to age. The eminent chemist Chevreul draws attention to the quality of tallow, &c. of animals fattened to excess, as the diversity in the proportions of the immediate principles of its composition, can influence very materially its value. Among the most remarkable exhibits were pigs; the crossings with English races have completely transformed French breeds. Formerly pigs were sent to the fields, to the woods, or left free to roam in the farm-yard, or along the highways, to find their food—the sty being the last of places to count upon for a meal. Dealers drove the animals, at sale time, from fair to fair. These necessities implied long limbs and flat sides for locomotion; muzzles like plough shares; arched backs, falling ears, and bristles approaching those of the wild boar. To-day pigs go to market by rail, and are fed in comfortable cots; hence no necessity for long legs or lance snouts; special and punctual feeding develop precocity and rapid fattening. In 1880, the mean weight of crossed breeds, of the prize pigs, was 504 lbs; and in 1881, 496 lbs; their ages were 307 to 350 days, and so represented an average daily increase of 26 to 28 ounces respectively. On the other hand, in 1880, the mean weight of pure English prize pigs, was 507 lbs, and in 1881, 496 lbs, their ages 186 days, thus representing a daily increase in weight of 44 and 42 oz. (1) It has also been remarked, that when a pure race does not receive, from time to time, infusion of new blood from the parent breed, it tends to degenerate.

The agricultural society instituted some very carefully conducted experiments to test the yield of meat, its nutritive value, &c., proportionate to the weights of the prize animals. These scientific examinations have fully confirmed the points followed in practice for judging and estimating fat stock for slaughtering. Cattle prepared for a show exceed in fattening those intended for commercial ends; the former can never be sold for what they cost; they attract public attention by prominently showing the extreme limit that certain aptitudes can attain. To ascertain the commercial value of an animal we must study the cattle market.

The convertible value of meat, that is, of the quantity digested or utilized, is in proportion to the amount of dry matter it contains, and a certain relation between the latter and the azotized and fatty substances. The superior morsels of meat unite these characteristics; they cost dearest at the butchers', and are always found in certain parts of the animal. Hence, of two animals, as similar as possible in race, and convertible quality of flesh, the superiority will rest with the one that puts on the largest quantity of the choice morsels. The Show Committee selected, as standard of comparison, the weight of the hind quarters as compare with the other parts of the carcass, to determine the monetary value of the beast; the eminent chemist Müntz, chose a sample of the muscle and fat of each animal for analysis. For the bovines, the sample of meat was taken from the neck, because of all parts of the body, that is the most difficult to fatten, hence, differences are more significant in that which refers to fattening propensities, and the nutritive value of a food. With all

(1) Hardly possible, one would think. Two pounds and a half, a day, is double the usual increase on our best prize pigs in England, and quite equal to that of the best bred bullocks.