

to which fan I give the preference. The great point is now gained by having a fan which can be used without horse-gear and intermediate motion, and which, from its moderate cost, is within the reach of every farmer. Both fans can be easily moved, which is a great advantage, as fewer pipes will be required, and the same fan can be used at more than one homestead.—James Norris, *Castle Hill, Blechingley, Surrey.*

OUR FUTURE FRUITS.

Whence shall we derive our future fruits? Years ago, when the people of the North-Western provinces of France commenced the colonisation of their new possession, Canada, we may well suppose that the Breton and the Norman did not embark on their adventurous voyage without taking with them the fruits which they hoped to propagate with advantage in their future homes. In more recent days, the Englishman brought with him his Ribston-pippin, his Golden-pippin, and the Scot, his Hawthornden. Nurtured under the soft influence of the Gulf-stream, whose balmy softness tempers the wild gales of the rude Atlantic, these fruits of a milder clime have failed to prove hardy enough to withstand for long the rigours of our own winters, and are unsuited, in many cases, to even the milder parts of the North American continent. Some, it is true, are not unproductive, in favourable localities, as far north as lat. 45° to $45\frac{1}{2}^{\circ}$; but, as a general rule, the fruits of Western Europe have proved of comparatively little value in the fickle climates of the North-Western States; they are a class which spring from no hardy ancestry, but derive their origin from the *pyrus acerba*, or crab, of Southern Europe.

Induced by these considerations, Professor Budd, of the State Agricultural college, at Ames, Iowa, after mature thought, imported a large number of varieties from the interior of Russia; a country, where the summers are hot and dry, and the winters as cold as in the city of Quebec. Mr. Budd has already received two large lots, each lot consisting of nearly 200 varieties of Russian apples.

Previous to this, in 1870, the Agricultural Department at Washington received, and propagated in their grounds, 252 varieties of apples from St. Petersburg. This collection, including a number of trees of French and German origin, proved to have been far too hastily selected. In the climate of Washington, all the so-called *late keepers* ripened about August 20th; and until they were fruited in the North, were supposed to be summer fruit. Thus, we were led to expect that the importation of prof. Budd would show like signs of hasty selection. Far from it! It was managed with the greatest care, and reflects much credit on Dr. Regel of St. Petersburg, and Dr. Arnold of Moscow. These collections include the 42 sorts of late keeping apples, selected by the Russian Government commission for trial at the Agricultural college of Petrovsk, New Moscow, of which establishment Dr. Arnold is President. The collections from Kalouga, Simbrisk, and Vladimir, are of great interest. On the steppes near Moscow, where the winter temperature is 2°F. lower than at Quebec, and 5°F. lower than at Montreal, flourish many varieties of pears: most of which are the progeny of the snow and strawberry pears of Northern China. In fact the whole repertory of hardy fruits at Ames is as choice and full as Russian pomologists could make it. Here, you may see an orchard of 1,600 fruit trees, all top-grafted with 400 varieties of Russian apples and pears; hardy fruits too from other Northern regions, including the *Siberian apricot*, a fair fruit, hardy, and well worth the trouble of growing; the *Hartz Mountain apricot*, of better quality than the last, and grown, as its name indicates, on the Hartz mountains, 60 miles S. E. of Hanover. The Hartz apricot proved quite

hardy at Ames last winter. *Hill's Chili peach*, supposed to be the hardiest of the peaches, suffered greatly last winter at Ames, while 9 varieties of that fruit from Pekin escaped absolutely uninjured. The collection is, doubtless the finest ever seen beyond the confines of Russia, and includes peaches from such boreal regions as 360 miles to the North of Pekin.

Of cherries, we place great confidence in those from the East of Europe. Dr. Lucas of Wurtemberg, has 6 sorts which he strongly recommends for the cold districts of this country: even in Russia, as far north as Moscow, sweet and sour cherries, of all colours, white, red, and blackish red, seem to do well.

The *Russian Mulberry* is said, by the Mennonites, to do well as far North as Simbrisk, on the Volga, lat. 55°N. It is largely grown by these colonists in Minnesota, as far North as lat. 44° ; and is used for axe handles, for hedge plants, as a fruit tree, and as food for silk-worms.

As to *plums*, more is to be expected from improvements in the Chickasaw varieties of the Western States than from any importations from Eastern Europe.

It would thus seem that the cultivation, in this country, of the apple, pear, cherry, and other fruits, is capable of great extension, even if we bear in mind that, for all localities North of lat. $45\frac{1}{2}$, we should confine ourselves, mainly, to the fruits of the Russian Steppes.

A. R. J. F.

Yield of Bullocks in Meat &c.

A bullock in a fair state of ripeness—not over fat, but fit for the butcher will give about $58\frac{1}{2}\%$ of meat to live weight. In England, the theory is, very seldom carried out in practice I am sorry to say, that the butcher should be content with the fifth quarter for his profit. This fifth quarter consists of the skin, head, fat, tongue, and other, so to speak, refuse parts. Now, I happen to have by me, a calculation made by a butcher at Nottingham, at a time when there was a general outcry in England against the prices charged by butchers. He gives a list, and the weights, of the different parts of a heifer, weighing 40 stones, of 14 lbs to the stone = 560 lbs, and from this list I think it will not be difficult to calculate how much a butcher, in this town of Montreal, ought to charge per pound for his beef, without overcharging his customers, or depriving himself of the fair profit he ought to make on his capital: which, considering all things; the perishable article he deals in; its uncertainty in point of quality; and the trouble in procuring it, especially in such times as the present, ought not to be less than 20 p. c. I would not mind if he would be satisfied with 25 p. c. But when it comes to 30 p. c., 40 p. c. and even 50 p. c., I own that I can bear it no longer, and I and my family must be content to eat fish, vegetables and farinaceous food (which I hate) or—starve. I know well, that many unpleasant epithets will be heaped upon my head for what I am going to say; the retailer, as a rule, is not a mild man when his profits are aimed at, when his dealings are impugned. Well, my head is thick enough; I can bear it; but I cannot bear the farmer being defrauded of his fair share of the price which the consumer pays for his meat.

Our bullock, which we take as a model, weighs 40 stones or 560 lbs. Therefore, on foot, properly fasted, it weighed 950 lbs; and at 7c a pound, the highest price paid for first rate oxen, it would cost the butcher, in round numbers \$60. (v. Montreal Star for Saturday, June 10th.)

Please, recollect, that I charge the highest possible price for the beast, though the heifer we are talking about would only yield a very moderate proportion of joints compared with a well bred large bullock of 70 to 80 stones;—980 lbs to 1,120 lbs.