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Notes by the Way.

**Fertilisers.**—Mr. Thomas Macfarlane, *Chief Analyst*, Ottawa, in his report to the Com. of Inland Revenue, dated August 2nd, 1894, "regrets to state that out of the 83 samples of fertilisers collected, 29 were found of which no standard samples had been submitted to the Department by the manufacturer or vendor." We sincerely hope that this increasing unauthorised sale of unregistered fertilisers which is now taking place within the Dominion will be arrested by the government authorities. To allow it to go on is not only an injury to the farmer but is unfair to the manufacturer who complies with the law.

**Cider.**—At p. 000 of this number will be found a sketch of the most improved methods of making cider as practised by our Gloucestershire farmers. The resulting beverage is as *dry* as *Amontillado*, and will keep for any reasonable time. Most of our tenants can show cider five years old, and it is always drunk from the wool. We hope the good Fathers at Oka will succeed in their endeavours to promote the use of cider in this province: anything to stop the consumption of that abominably adulterated whisky must do good.

**English crops.**—"Harvest, a most enormously bulky one; all crops magnificent, but the heavy rains of July and August laid the grain flat, and the wheat and barley never recovered, so the quality of these two cereals is not fine. In Canterbury market, barley, of malting kinds, is worth 34s; and wheat 19s; a quarter!" (In 1853, we remember selling wheat for 84s; a quarter and barley at 44s) Hops very fine indeed, but price, naturally, low. Cherries a large crop, and pease abundant, but *no apples* to speak of. Potatoes a heavy crop; but the disease set in early. In this parish (*Preston, East-Kent*), though there is plenty of talk of depression and so forth, there is very little outward sign of it. The land is some of the finest in the county; all the farms are let; and every labourer employed—wages 2s 4d a day; not only now but all through last winter."

The above is an extract from a letter from the Editor's brother, some time Bishop of Dunedin, but now vicar of Preston near Dover, Kent: he knows what he is talking about.

**Thermometers.**—As most of our readers know, the thermomotor generally used in this country is Fahrenheit's. All thermometers are made on the same plan: a simple glass tube, air exhausted, and hermetically sealed; it is only in their notation that they differ. The scale of the *centigrade*, used in Europe, is, as its name imports, divided into 100 parts, starting from zero, the melting point of ice, up to 100°, the boiling point of water. Fahrenheit's melting point of ice is 32°, and the boiling-water point, 212°. The conversion of these scales is simple. Suppose we have 20° centigrade to be converted into Fahrenheit's notation; multiply by  $\frac{9}{5}$  and add 32:

$$20 \times \frac{9}{5} + 32 = 36 + 32 = 68^\circ \text{ F.}$$

$$\text{And contrariwise: } \frac{36}{9} \times \frac{5}{5} - 32 = 20^\circ \text{ C.}$$

Réaumur's instrument is so seldom used that it is not necessary to dilate on it.

Do not buy cheap thermometers; many of them vary by as much as 5 or 6 degrees and are useless, even for dairy-purposes.

It is a pity that the temperatures given daily by some of the Montreal papers are so carelessly noted.

**Butter.**—The appearance of butter is almost as important as its taste. Shape, colour, and texture all are to be studied if we wish to succeed in the English market as well with our butter as we have done with our cheese. The best way of testing butter, as regards texture, is to take a brick-shaped piece and cut it one-half through with a smooth damp knife, and break the other half. If properly made, the cut half will be smooth in appearance, showing no holes, and very little moisture exuding from the cut surface. The broken half should be similar to a broken bar of cast iron, granular in appearance, and not drawing or dragging out, but snapping off into two halves. In order to obtain this result, the butter-worker must be properly used. If the grains of butter are too fine when they leave the churn, they will hold a quantity of water, which cannot be got out on the worker without destroying the grain, and therefore the finished butter must have one of two faults: either there must be too much moisture in it, or the grain must have been destroyed in getting the moisture out. Therefore, collect the grains while washing in the churn so that they shall be of a moderate size when put on the worker.

**Dorset-horns.**—"Lindenbank," who writes for the Montreal Witness, "sees no special merit in Dorset-horns." Well, if early lambs are wanted here, as they are, and a good price is paid for them too, there is no breed that will furnish them like the Dorsets; moreover, the ewes, after the lambs are weaned, fatten very rapidly and yield a carcase weighing from 96 lbs. to 104 lbs. of excellent mutton. We kept them on the home-farm in Kent for many years and found them very profitable. As for their being "dog-proof," that is as it may be; but we should doubt it very much.

**Hampshire-downs.**—At the Toronto Exhibition, Mr. John Kelly showed six Hampshire-downs from his farm at Shakespeare, Ont. As his were the

only sheep of this breed exhibited, of course he took all the prizes. From what we have seen of his stock at the Montreal shows, we should not hesitate in recommending those intending to invest in this kind of sheep to visit Mr Kelly's flock.

**Oats for hogs.**—Mr. George Moore, who has just returned from a tour in the neighbourhood of Ottawa, tells us that, at the Experiment-farm, they were carrying on investigations in the fattening of hogs on differently combined rations, but in none of them were oats used. The Wisconsin Experiment Station recommends a small portion of oats, where pease cannot be grown, for the sake of the nitrogenous matter in the oats, but pease grow and yield so well in the province of Quebec that there is no need to substitute any other nitrogenous food for them here. One U. S. station recommends sowing pease, and, when they are in pod, turning hogs loose into them! Well may the "Farmer's Advocate" say: Agricultural experimental work in America, is according to Old World authorities, lacking in scientific guidance. Experimentalists make a very grave mistake in publishing bulletins, &c., merely to make a show that they have done something. A great deal of the work is done by raw subordinates, and many of the bulletins published evince crudity.

We say: rear your pig on oats, clover, boiled potatoes, corn, tares or vetches, wash, any or all of these things; but fatten them for bacon with pease for the only addition to the dairy-refuse during the last month.

**Green-manuring.**—"It is a mistake to plough into the soil for manure a pound of vegetable albuminoids that can be used for making milk or meat" "so says the leading agricultural report of Saxony, and as clover vetches &c., all the legumes in fact, contain large supplies of "vegetable albuminoids," it follows that to plough in clover, vetches, &c., is a mistake; about which we never had any doubt, but are glad to have our opinion fortified by such an authority as the *Ztschr. Landw. Cent. ver Sachsen*, which continues thus: Let us then take advantage of these recent discoveries in agricultural science, not to "manure the land with atmospheric nitrogen" but to produce and to utilise to the fullest extent the nitrogenous and carbonaceous materials derived from the atmosphere by feeding them to the animals of our farms.

**Tamworth hogs.**—There were 76 entries of Tamworths at the Toronto show, to 9 at the show of 1892. They are certainly creeping up in favour. Whether they will retain their popularity as the ideal pork- or rather bacon-making hog, is another thing, and depends upon whether they can be raised as cheaply as pigs of a different style of build. At any rate, they are not an early maturing breed.

**Turn-wrest plough.**—M. Joseph Beaubien tells me that the whole of his farm at Outremont is now ploughed with a *turn-wrest* plough that lays all the furrows in the same direction, doing away entirely with the need of open furrows and water-furrows. His land is of course well drained. This was the old style of ploughing in the S. E. counties of England, and probably is still practised in many parts of that district. In 1842, or thereabouts, there was an irruption of Scotch bai-