

Fine Sample of Nepaul Barley.

We are in receipt of a particularly fine sample of this hardy and useful grain from Mr. A. G. Fleming, Craigeath, C. W. The communication appended, which accompanied the sample, will be interesting to our readers.

To the Editor of THE CANADA FARMER:

SIR,—I send by this post, for your inspection, a sample of Naked or Wheat Barley, called "Nepaul Barley." I procured about half an ounce of seed from the office of the *American Agriculturist* a year or two ago, and by repeated sowings, the product is now 200 bushels. It is a most prolific and hardy grain; and as it is not subject to the attacks of insects and other diseases, it would be an excellent grain to cultivate in those parts of Canada where the wheat crop suffers from the ravages of the midge, &c. It weighs 61 pounds to the bushel.

Cuthbert W. Jonsson, F.R.S., says:—"The six-rowed naked barley is cultivated in various parts of Europe, and is greatly esteemed for its fertility. In some parts of Germany it is regarded as the most valuable kind of barley, and by the French, on account of its supposed productiveness, it has been termed "celestial barley," or "heavenly barley." M. Mazucco, in a French paper, earnestly recommends the more general cultivation of naked barley, as he states that it weighs as much as the best wheats, and its quality resembles them so much that it may be used for the purpose of making good bread, and also for pearl barley. In mountainous countries its produce is twenty four to one.

Mr. Warren Hastings says, after twelve years' experience in the cultivation of naked barley, that it is of the greatest importance to cultivate this sort of grain. It is, he adds, the corn that, next to rice, gives the greatest weight of flour per acre, and it may be eaten with no other preparation than that of boiling. It requires little or no dressing when sent to the mill, having no husk, and consequently produces no bran. It is gathered into the barn, and may even be consumed, when the seasons are favourable, in about eighty or ninety days after being sown, and there is no species of grain better calculated for countries where the summer is short, provided the vegetation be rapid." C. W. Johnson says also:—"Naked Barley, or Wheat Barley, is so termed in consequence of the grain separating readily from the chaff when threshed. It is a native of the North, and will bear sowing early in the season. It makes strong malt, and is excellent for fattening hogs and cattle."

I find it makes good mush and bread, and, when roasted, an excellent substitute for coffee. That this excellent barley may be more generally cultivated in Canada, I am willing to dispose of the greater part of what I have to Canadian farmers, at a moderate price, for seed. I am, &c.,

A. G. FLEMING.

Craigeath P. O., Feb. 1, 1866.

The Hawthorn as a Live Fence.

To the Editor of THE CANADA FARMER:

SIR,—In perusing your excellent journal, I notice that Professor Buckland calls the attention of farmers to the cultivation of live fences as a substitute for the rail and board ones in present use, and that he recommends the cultivation of the English hawthorn as the best plant for that purpose. I was surprised, in reading his communication, to find that he should take so bold a stand, since many farmers with whom I have conversed on the subject, have given it as their opinion that they could not be successfully cultivated in this country. They doubted if they would grow at all, or if they did, the mice would destroy the plants in winter. The expense of obtaining the plants was another drawback, the protection of them an additional outlay, and, last of all, it would take a lifetime, having escaped all these formidable obstacles, before it would become a perfect protection against their own and their neighbour's stock. It will, perhaps, be considered presumption in me to endeavour to convince the farmers that it would be to their interest to commence the cultivation of live fences in the face of so many objections; but, having ventured to try its cultivation, and found it a success, I can with pleasure add my testimony to the authority alluded to above, and urge an early trial by everyone residing in the older settlements of Canada. For their encouragement, I may state that I have four hundred rods growing freely, and have not found any of the above objections to apply with any force. One hundred rods is now a substantial protection, and greatly adds to the beauty of the farm. The remaining portion was planted in the spring of 1860,

'61, and '65, and promises in a few years to make what I intended it for, namely, a perfect and beautiful protection from my own and my neighbour's cattle, especially those which are inclined to be unruly.

I have had but little experience with other plants for fencing besides the hawthorn, but I am convinced that it is the best for the purpose known in this country. The expense of plants and planting is, in my opinion, no objection to its culture, and when grown to the height necessary, not near the labour is required to keep it in repair which is needed to maintain a common rail fence. Should any of your numerous readers wish any information upon the manner of setting the plants, or where they may be obtained, I would cheerfully give you any instructions that will lead them to try what I consider our best live fence.

C. YALE.

St. Catharines, 26th Jan., 1866.

NOTE BY ED. C. F.—We are glad to receive the foregoing testimony to the success of the English Hawthorn as a hedge plant in Canada. There are, however, those who cannot tell the same pleasing story as our St. Catharines' correspondent. Difference of climate may partly account for this. It is well known that what is practicable in the Niagara District cannot be done all over Canada. Perhaps, too, other experimentors may not have tried so good a method of planting and pruning as Mr. Yale. We hope he will send another communication detailing his plan of management, being quite sure it will be read with much interest by all who desire to see living fences take the place of dead ones.

Stock Department.

Working and Management of Farm Horses.

An interesting and suggestive paper on this subject, recently appeared in the columns of the *Mark Lane Express*. It is much too long to transfer to our pages in its entirety; but in order that our readers may have an opportunity of deriving a hint from the evident experience of the writer, we have epitomized the article.

After remarking that the rapid extension of steam cultivation will greatly diminish the number of horses required for agricultural purposes, the writer proceeds to remark, that there will still remain many operations, of daily occurrence on a farm, which will necessitate the keeping of a certain number. He then deduces from the following considerations that the horse requires to be fed in limited quantities at short intervals:

"No animal with which we are acquainted, in proportion to its bulk, has so small a stomach as the horse. The stomach of an ordinary-sized man is capable of containing upwards of three quarts of water, whilst that of an average-sized horse, whose weight in proportion to the man is as ten to one, will scarcely contain three gallons, or four times the quantity of that of the man. The bulk and demand to supply the natural waste of the animal require a large consumption of food to keep up and support the frame. The digestive organs of the horse are more powerful and quick than those of most of our domesticated animals, otherwise life could never be sustained. The limited capacity of the stomach explains the necessity for using food containing the necessary elements of nutrition in the most concentrated form; otherwise the organs of digestion are over-tasked, the animal suffers in health, and is unable satisfactorily to accomplish the labour required of it."

Horses that are regularly worked should be regularly fed. When their food is given in a properly prepared state, they do not require so long a time as many imagine to satisfy their wants. It is only when the food is unprepared and of inferior quality that it is necessary to bait them for two or three hours. Before being fed, all grain should be bruised, and hay and straw should be cut into chaff. The latter and the bruised grain should then be thoroughly mixed together, with a sufficient quantity of water to cause their adherence, prevent waste, and assist the organs of digestion and assimilation.

"Horses, if sufficiently and regularly fed, will undergo the usual routine of the labour of the farm, from nine to ten hours per day, without showing any symptoms of distress; yet they should not go longer than six hours without food, if, as is sometimes the case, some part of the occupation lies at a considerable distance from the farm-yard. At noon, if economy of time and the health of the animals are studied, nose-bags should be used, and the horses bailed in the field. Four pounds of corn mixed with a small quantity of chaff will be quite sufficient, and will only require a short stoppage to enable them to consume that quantity. They will then be refreshed and fit to resume their labours, and when the day's work is finished will return to the stables in much better spirits than if they have been worked for eight or nine hours without either food or water: in the latter case they return jaded and faint, often refusing their food, or in some cases devouring it rapidly, to the injury of their health, or the digestive organs fail to assimilate the nutriment contained in the food."

The writer is opposed to the use of sloppy food for horses, because "the great quantity of water taken into the system is injurious to health, as it entails a greater amount of labour on some of the organs of the body." Still he does "not wish to condemn the use of turnips, potatoes, carrots, &c., for, when used in moderation, they all form a palatable and useful addition to the bill of fare of the horse."

After going somewhat minutely into the estimated cost of keeping a farm horse, the writer makes the following pertinent observations:

"The most expensive method of keeping farm-horses on the generality of farms during the summer months, is that of turning them out into the clover or pasture fields when the day's work is ended. Here we often see a greater injury done to the pasture by their feet than the quantity of grass they actually consume. There is no doubt that one-half the quantity of land would keep a horse if the produce were mown and given to him in the yard, to what he would require if he was turned out to graze upon it. Horses, when kept in the yard, are more able to perform a good day's work than when turned to graze, as in the one case they are frequently employed the greater part of the night in collecting their food, while in the other it is collected for them. Another argument in favour of yard-feeding is the extra quantity of manure produced; while there are fewer accidents, and the animals if hard worked, generally enjoy better health."

The shoeing of horses and the best form of shoe are then ably discussed. The horny substance of the sole should be well pared down, and the shoe should be fitted to the foot, and not, as is often the case, the foot to the shoe. The best form of shoe is one having the web of equal thickness from the toe to the heel, and as few nails as possible should be employed to fasten it. "The nails should all be clenched by the hammer. The use of the rasp should never be allowed on the outside of the crust or wall of the foot, as, by its employment, the enamel of the hoof is destroyed, rendering it more liable to injury and disease. The shoes of work-horses should be regularly removed at least once a month."

The health of the horse is greatly dependent on the way he is lodged and cared for. Stables should be lofty and well ventilated. Provision should be made for the free ingress of pure air; while proper egress should be furnished in the roof to allow the heated and vitiated air to escape. No method can be more imprudent and unhealthy than that of having over the stable a loft for storing the provender of horses. Not only is the animal deprived of the requisite supply of pure air, but his food is contaminated and rendered unwholesome by the effluvia from below. As to the propriety of allowing horses water, when in a heated state, the writer says: "Some have a great objection to water when heated, and cases of injury, and even the death of valuable animals are not unfrequent from this cause; yet it is only from their being deprived of the means of satisfying their wants that any injury arises. Where horses have a regular supply constantly within their reach, no ill effects ensue. In a stable of fifteen horses, where there was a water-trough in each manger, open at all times, we have seen horses enter in all the various stages of perspiration without suffering any inconvenience."