

It also allows the sun's rays to have more power on cold "soggy" soils. As above stated, all of these conditions promote nitrification. Thorough tillage reduces the soil to fine particles, upon which water and humic acids may act more readily, and by breaking the surface crust, which always forms on untilled soil, makes more room and better conditions for the development of fibrous roots. It is a well-known fact that roots grown in a hard, crusty soil do not have as many fibres (which are the chief feeders of the plant) as those grown in soil of looser texture. It is also true that, though our cropping-plants send many of their roots to a greater depth, the major part of their feeding is done near the surface. These facts suggest that good plowing is one of the most essential features of good tillage.

AN. Appeal for the "Coo"

We have pleasure in publishing the following production sent us by a fair reader in Manitoba. The appeal in behalf of man's best friend, the cow, is a touching one, and should make every dairyman think. The writer of the poem is evidently not of Irish descent:

THE COO'S COMPLAINT.

I'am only a coo, so I shouldna complain
O' that higher (?) animal—*man*;
But even a coo canna aye help her thochts
Ony mair than human folk can.

No a body I ken, man, woman or bairn,
Wi' a spark o' soond common sense,
E'er thocht in the winter time they could keep warm
At the back o' a straw stack or fence.

Yet they'll turn me oot on a snell winter day
In the cauld blast to shiver an' shake,
Nor think o' the misery they could spare me,
If a wee thing o' thocht they wad take.

I'm a patient fu' beast an' to trouble folk sirse
I'd rather no dae that ava,
But I ask ye man "hoo wad ye like it yersel'
Tae be set tae a meal o' dry straw?"

It wadna' tak' long to mak' a warm mash,
An' syne, sir, I wadna' find faut
If, tae keep it frae tastin' sae horridly wersh,
Ye addet a wee thing o' saut.

When tastin' yer coffee, or whiskey, or tea,
Jist stop for a meenut an' think,
An' it winna be ice water fresh frae the pump
Ye'll gie me the next time to drink.

Whiles curry me doon as ye curry your horse,
Clean ma stall an' I'll ask for nae mair,
An' never again will ye hear me complain,
An' I'll pay weel for trouble an' care.

MORAL.

If ye'd hae a coo pay weel in milk, cream an' butter,
Ponder weel on the words ye hae heard this coo utter.
—POLLY CRUMPLE.

Breeding Cattle for the British Market

Written for "Farming" by James Bowman, Elm Park Farm, Guelph, Ont.

This is a very important subject for consideration at the present time when we are hearing so much, truthfully too, about the Americans being quite ahead of us; South America is promising soon to be, if not already, there. The principal reasons for this we believe are that they are breeding with that object in view, and are sending large quantities at a time of uniform cattle of the best beefing breeds; not mixed up with dairy grades as we so often see in Canada to-day. I firmly believe that no country can

feed better or produce a more varied and healthful ration for all kinds of stock than our own beloved Canada. The *Breeders' Gazette* of America states that, though there is a national prejudice against the American, they find that all good Britishers like American beef. We must be able to satisfy the Britisher's taste also if we are to get their gold, as we have great reason to believe the truth of the *Gazette's* statement.

A number of years ago I met with some farm laborers from England and Scotland, men who worked for or were the sons of tenant farmers, and I thought it a very good opportunity to find out how the tenant farmers bred their beef cattle for the best markets. They all seemed quite settled that the "Blue Grays" were the most profitable, size, quality, and substance combined. These cattle were got by crossing black cows with a Shorthorn bull, generally a white one. We have made a number of enquiries since then and have frequently read of the same plan. These are the kind of cattle that turn out the prime Scotch beef that tops the English market. This is an idea I had before I had a dollar invested in black cattle. This kind of beef stands first, with "John Bull." Our nationality is all right, our feed is all right. Then let us go ahead and breed for it, and get there.

But one of the first difficulties we meet with is where are the black cows to come from and purebreds are too high-priced to buy. To satisfy ourselves on this point I fed a heifer got by a Polled Angus bull and a Durham grade cow, raised on skim milk and fed on very common feed until she was two years old, when I fed her for beef and at last fall's shows she took first prize at the Toronto Industrial for the best fatted cow or heifer; first in Quebec in same class. She was the best one of the medal pair of fat cattle at the Provincial Fat Stock Show at Brantford and also got first for cow or heifer over three years in a strong class of Shorthorns. At the Smithfield of Canada at Guelph she was the best one of a pair of export cattle over twelve hundred pounds. She weighed twenty hundred and seventy pounds when we started for Brantford, being the heaviest animal at that show, as she was at Guelph. We feel that this is a reasonably good argument that the cross between a Polled Angus bull and grade Shorthorn cows, of which there are a good number in Canada, is fully as good a beef animal as the general run of either of the pure breeds, and got at a great deal less cost. I have often thought that if the every-day tenant farmer of the old land breeds in this way in order to make his business pay best, and can afford to pay such high rents, he is a very safe man to follow. Let us look for a moment at the swine industry. We are holding our own there all right in the bacon trade and the Americans know it too. We sometimes read articles of their talking of breeding along the same lines as our pork packers advocated so strongly and backed it up by only paying remunerative prices when they got the right kind of hog. What a turn over there has been in the breeding of hogs within the last few years and how often we hear farmers say that nothing pays them so well as their pigs. We hope the time will soon come when our export cattle will be second to none in quality at least, and if we are to get there we must breed for it.

If champion prizes at fat stock shows such as Smithfield and Birmingham (which I think breeders of all beef breeds acknowledge to be the most reliable and critical test of real quality in the world), count for anything then all the statements I have made here have good honest backing. For the last six years the records are: 1893, '94, '95, all Angus heifers; 1895, the Queen's heifer, three parts Durham one part Angus; 1897, Blue Gray Galloway (Galloway cow, white Durham bull), and in 1898, Lord Strathmore's purebred Angus heifer. Pure Angus heifers were winners four times out of six.

May we all feel the inspiration expressed by our Postmaster-General in the few words at the bottom of our two-cent foreign stamp and don't let the breeders of export cattle be the last to prove the truth of these little words with such a big meaning.