

the breeding and rearing of pedigree stock has rapidly assumed large proportions. Without security from disease, both these industries must suffer to an enormous extent. In Ireland, however, the trade in stock overshadows in importance any other; 90 per cent. of the entire land-holders are dependent on it for their living. Of late the improvement effected in Irish stores has been universally acknowledged, and they are now keenly sought for by British buyers. The demand for the opening of the ports, it is pointed out, comes from a comparatively small number of stock-owners, and much of the agitation has been fostered and kept alive by corporations of several seaport towns, whose revenues naturally suffered from the passing of the Act. The very large majority of stock-owners, in all parts of the Kingdom, are decidedly against any opening of the ports, as should disease be introduced from Canada, or through that country from the United States, the results would be terrible to contemplate. Any change, therefore, concludes the memorial, in the policy of the Government, resulting in the opening of the ports, can only mean profit to the few and enormous loss to the many, especially in the case of Ireland.

A RECORD PRICE.

Just as I close, I hear of a notable sale in the north of Ireland, of a two-months-old Shorthorn calf, the property of Mr. A. M. Kerker, Co. Down, which has been bought by Mr. James Cullen for the Argentine, at the great price of £200. "EMERALD ISLE."

Dublin, Ireland, March 29th, 1906.

Dock the Lambs.

Dealers and shippers declare that thousands of dollars are lost every year by Canadian farmers through neglecting to dock and castrate lambs when quite young. Ram lambs are a drug on the market in the fall of the year, owing to their fretfulness, their disturbing the ewes with which they are shipped, and the rank flavor their flesh takes on at this season. Lambs should be docked at about two weeks old, and the males intended for the butcher's market castrated at the same time. There is very little danger of loss from these operations if performed at the early age mentioned, and the danger increases with every week after that age. In the case of lambs docked at two or three weeks old, it is very rarely that excessive bleeding takes place, and when it does it is only necessary to tie a soft cord tightly around the stump for a few hours, which will promptly stop the bleeding. In the case of older fat-tailed lambs, it may be well to apply the cord before cutting off the tail, which is generally done at the second or third joint from the rump. Castration should be performed just before docking, and consists in simply cutting off the end of the scrotum and drawing the testicles singly, casings and all, either with a pair of pinchers or with the teeth, as most English shepherds do.

For the sake of the cleanliness of the lambs, for improved appearance, for ready sale at the best price, and for convenience in pasturing and feeding both sexes together in the fall and winter months, docking of all the lambs and castration of the males not intended for breeding purposes should be attended to at the proper time.

THE FARM.

A Prize Farm Competition in Minnesota and the Dakotas.

Jas. J. Hill, President of the Great Northern Railway, has offered cash prizes, aggregating \$4,725, to the farmers of Minnesota, the amount being divided among the nine Congress districts of the State, at the rate of \$525 each. In each district three prizes are offered, in each case \$300, \$150 and \$75, respectively. Similar prizes are offered for the eastern half of North Dakota, the western half of North Dakota, and for South Dakota, making a total for the 13 districts of \$6,825 offered in the three States.

The prizes are to be awarded by Professor Thomas Shaw, together with one other judge from each district, approved by Mr. Hill. The judges will award the prizes according to what they consider the best system of rotation adopted by each farm entered in the contest, character of cultivation, cleanliness of farm, crop yield, number and quality of live stock kept in proportion to area. There are no fees, dues or expenses, the prizes are open to every farmer, the only restriction being that the farms entered must keep cattle, and, in addition thereto, either sheep or swine, or both.

If good for Minnesota, why not for us?

I Like My Job.

One of President Roosevelt's friends, seeing him in the midst of a big, busy day's work, asked him how he could stand such a strain. "Oh, I like my job," replied the President.

What a fine world would this be, what a more contented, happy people we should all be, if we could bring more joy into our work, so as to be able to say, "I like my job."

Ask the average man about his work, and in nine cases out of ten he will tell you of the hardness of the struggle, of this difficulty, of that obstacle, and of some other care. It is the rare exception that you find a man so in love with his work as to wish his son to follow in his footsteps. "Any other trade, any other profession but mine for him," he says. But what a difference when a man's eye kindles as he says, "I like

my job?" That is the spirit that grapples with difficulties and conquers them; that looks upon an obstacle as simply something to overcome—the conquering spirit of a relish for the "job" in hand, whatever it be; the playing of the game with a zest that makes for the surest success, and the biggest, truest happiness—the man who wins. That is what we want in our lives, men and women, whatever the work in hand; the spirit that works with a will and says, "I like my job."

Some New Grains and Their Value.

Editor "The Farmer's Advocate":

For the last few years I have tested almost every new grain that has been put on the market, and, therefore, I am able, I think, to give the readers of "The Farmer's Advocate" a few hints on what to put their money in, and what to leave alone.

Emmer, by many improperly called spelt, an entirely different grain, is one of the best new grains. Its weight is forty pounds to the measured bushel, and its nature is that of wheat. It is enclosed in a hull like that of oats, which is claimed to have a feeding value equal to oat hulls. It yields better than oats or barley, and makes good feed for any stock. Poultry seem to like it as well as wheat. On the whole, it is equal to any of the feeding grains we sow, and should be tried by every farmer. It is sown at about the same rate as oats.

Spelt is somewhat of the same nature as emmer, but is coarser-hulled, rusts easily, has weak straw, yields poorly, and, on the whole, is almost worthless. I would under no conditions recommend it.

Corn wheat, also called Polish wheat, is now being cracked up by some seedsmen. It looks like wheat, only larger, and is somewhat three-cornered, like emmer. Its straw is long and coarse; it threshes clear of the hull, like wheat, yields very poorly, and it would not pay anyone to grow, unless his soil is for some reason particularly adapted to it.

White and black hullless barley have also been grown throughout the country generally, and have not proven

Value of Underdraining.

Editor "The Farmer's Advocate":

A question often debated in agricultural journals is, "Will it pay to underdrain our farms, especially our low-lying lands?" I think it undoubtedly will pay, and for the following reasons:

1. The soil is materially deepened by underdraining, a fact which is of the greatest importance to our crops on the farm. Every farmer knows well the importance of having a deep soil for roots of plants. Many of the crops require a deep soil for nourishment, such as wheat, man-gels, rape, turnips, and especially is a deep, dry soil required for clover and lucerne. On the other hand, if the subsoil remains wet or water-logged, plants such as are mentioned above cease to draw nourishment, and consequently do not thrive. A deep, dry subsoil is of the greatest importance, because it supplies a very much larger feeding ground for the roots of the plants.

2. The soil is more easily pulverized. It is well known that a wet soil can never be thoroughly pulverized, so as to give the best results in sustaining and promoting the germination of seeds and plants. In working a soil such as clay, or a loamy clay, it becomes baked and hardened to such a degree as prevents, in a measure, the success of the crops planted there. It is just the reverse with underdrained land, as it immediately begins to supply the plant food, causing germination, and after that the roots can easily begin to penetrate the soil for nourishment. Underdraining first dries the surface soil of all lying water, so that it can be thoroughly worked and pulverized at least one week earlier in spring, and the same soil will work to greater advantage in midsummer. I think all will agree with me in the fact that at all seasons of the year it is easier to work underdrained lands than land not drained.

3. Our season for working land is lengthened by underdraining. This alone is of the greatest importance to the farmers of Ontario, when our long winters and warm summers are separated from each other by so short a period of spring weather, which period is most important, for often the difference of one week in planting corn or sowing a crop of grain means a bountiful return, when sowing a week later might mean failure. The gain of time and labor are not the only results we receive from well-drained land. We gain time for vegetation. A longer season produces heavier crops. How often in late years have we noted, in cutting our corn crops, the difference a week or ten days in the

planting produces, the crops planted later being largely injured by frosts, which would have been avoided by earlier planting.

4. Drainage prevents the roots freezing out. One of the drawbacks to farming in some localities is the winter-killing of fall wheat and clover roots. The reason is this: The soil is loosened and indifferently pulverized, being only plow-depth, and below this is a layer of clay or harder substance which is impervious to water. The surface soil gets filled, sponge-like, with water, and earth and water, freezing, draw the roots of clover and wheat to the top, where they are left to wither and die. Underdraining will quickly carry away this water, and thus prevent the freezing-and-thawing process, and as there is very little disturbance in the root-bed, the roots retain the position in the ground.

5. One great advantage yet to mention is the absence of open drains or water furrows, which are a great hindrance in drilling, reaping and drawing in the crops, besides the extra wear on implements and trouble to both men and horses. The cost of working underdrained land is much less, being in the ratio of man and team for three days to man and team for four days on underdrained land, and I think the work will be done with better satisfaction. One more advantage to the farmer who underdrains his land is that he requires less seed than otherwise would be required.

Six years ago, on taking possession of my farm of 150 acres, I was very much opposed to underdraining, for I had not previously laid one foot of tile; but, after seeing the wonderful results from my first underdrain, I was so satisfied



Clementine.

A good type of the English dual-purpose Shorthorn cow.

a very great success; although, on the whole, the black has proven the better of the two.

Beardless barley was also extensively advertised by some seedsmen a few years ago, but now its price is hardly quoted in the catalogues, and some have left it out entirely.

The only one of the above grains I can recommend any farmer to grow is emmer; I can heartily recommend it to one and all. CANUCK.

Plant Breeding at Ottawa.

At the Central Experimental Farm, Ottawa, an increasing amount of work is being done in cross-breeding of grains, with a view to the production of new varieties combining qualities which shall render them especially suitable for certain purposes and certain localities. The work is now in charge of Cerealist Chas. E. Saunders, a son of Dr. Wm. Saunders, the Director. One of the objects in view is to produce a variety of spring wheat suitable for heavy rich soil when there is plenty of rain and the grain is liable to rust and lodge. Some crosses of Red Fife have been made with certain very early sorts obtained from Hindustan. Some of these crosses are expected to combine early maturity, with a considerable degree of the qualities of the Fife. Last summer the earliest variety of Indian wheat grown on the farm ripened in 87 days after sowing. The Red Fife ripened in 105 days.

It is work for the future, this crossing and plant breeding—work that requires skill, with infinite patience and care. But considering the immense importance of improvement of varieties of farm crops, the country can afford to keep a few men employed in such investigative work.