

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

TWO DISTINCT PUBLICATIONS—EASTERN AND WESTERN.

EASTERN OFFICE:
CARLING STREET, LONDON, ONT.

WESTERN OFFICE:
IMPERIAL BANK BLOCK, CORNER BATHURST AVE. AND MAIN ST.,
WINNIPEG, MANITOBA.

BRANCH OFFICE: CALGARY, ALBERTA, N.-W. T.

LONDON (ENGLAND) OFFICE:
W. W. CHAPMAN, Agent, Mowbray House, Norfolk Street,
London, W. C., England.

JOHN WELD, MANAGER.

1. THE FARMER'S ADVOCATE is published every Thursday (52 issues per year). It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical, reliable information for farmers, dairymen, gardeners, and stockmen, of any publication in Canada.
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farmer, is given in detail, each explanation being accompanied by a cut of such excellence as to greatly lessen the danger of misunderstanding. The construction of canals, distributaries, flumes, aqueducts, wells of various kinds, etc., are dealt with in the same comprehensive manner, also the various methods of pumping as suited to different localities, by wind-mills, hydraulic rams, turbines, etc., and the best methods of distributing the water as required by individual crops. To the farmer, not the least interesting part of the volume, perhaps, will be that dealing with the cultivation of crops on irrigated lands, cereals, fodder crops, vegetables, vines and fruit trees. The latter part of the book treats especially of the light railway, in some sections the most convenient and inexpensive method of conveying produce to the larger centers or shipping stations. "Pioneer Irrigation and Light Railways" may, in short, be highly commended to all interested in the subjects of which it treats. It is published by Crosley Lockwood & Son, 7 Stationer's Hall Court, Ludgate Hill, London, England, who are to be congratulated upon the work.

Camera Competition.

We would again ask the attention of our readers to the camera competition, full particulars of which are given in the Home Magazine Department of this issue. You have "all out-doors" from which to choose, and these sunny days are ideal ones for snap-shots. Read carefully the rules governing the competition, and send in the photographs in good time. Some very excellent ones have already been received.

Better and Richer for Reading.

I think the "Farmer's Advocate and Home Magazine" should go into every Canadian home, and am sure that the people would be the better for reading its interesting columns. W. E. WEBBER.
Tavistock, Ont.

Please find enclosed \$1.50, my subscription to the "Farmer's Advocate," which I gladly pay, as I think it is well worth the extra fifty cents to get it weekly. THOS. A. NIXON.
Ingersoll, Ont.

Denmark vs. Canada in Bacon Production.

A LETTER FROM PROF. G. E. DAY.

Last month, it was my privilege to visit the little country of Denmark, a country noted for the excellence of its butter, bacon and eggs. So far as my mission was concerned, I was interested mainly in the question of bacon production from the farmer's standpoint, and devoted nearly all my time to this question. I presume that everyone knows that Denmark is our most formidable rival in the production of bacon for the British market, and that Danish bacon usually commands a premium over the Canadian product, often to the extent of four shillings per one hundred and twelve pounds. Before going to Denmark, I visited the Smithfield market in London, where I was given every opportunity to compare Danish and Canadian sides. So far as I could judge, the main advantages of the Danish bacon rested in its remarkable uniformity, and its somewhat larger proportion of lean to fat. In length of side, and in evenness of the layer of fat along the back, the best Canadian sides were quite equal, if not, in many cases, superior to the Danish, though there was a marked tendency on the part of many of the Canadian sides to run too heavy at the neck, and there was a decided lack of uniformity in the Canadian product as a whole. Having thus gratified my curiosity regarding the finished product, I started out to see what I could pick up regarding the raw material.

Denmark is a country of intensive farming. Every available foot of ground is under cultivation. Cattle are not allowed to roam at will and



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trample down the pasture, but are either tethered in the field or fed in the stables, and I even saw sheep tethered to stakes and disconsolately tugging at their ropes. As for the pigs, they are not tethered, but are kept closely confined, except the breeding sows, which are given a rather limited amount of exercise.

The most successful bacon factories are co-operative concerns, though there are some independent factories, and a keen competition exists between the two, with the odds in favor of co-operation. In the co-operative factories, the farmers who agree to co-operate agree to sell all the hogs they produce to their their own factory, and in Denmark an agreement appears to be binding. If a farmer, tempted by a higher price, sells his hogs to another factory, he is fined between \$2.50 and \$3.00 for every hog so disposed of, and the enforcement of this law tends to discourage the violation of agreements. Each man's hogs are killed and graded separately, and he is paid according to the price agreed upon for the different grades. The profits earned by the factory are divided proportionately among the interested parties at the close of each year.

The market hogs of Denmark are mostly a cross between the Large Yorkshire and what is called the Danish hog. So far as I could learn, no other breeds are known in the country. The Yorkshires are imported from Great Britain, and are placed in the hands of certain farmers, who agree to breed nothing but Yorkshires. These farmers receive some financial aid from the Government, and the boars are sold for crossing purposes. The Danish hog is very similar to the Yorkshire in body, bone and color, but it has a long, narrow head, very light jaw, heavy, droop-

ing ears, and a light neck and shoulder. It has the reputation of possessing a stronger constitution and of being an easier feeder than the Yorkshire. It is more than probable that the Danish hog already possesses considerable Yorkshire blood. The reason assigned for crossing with the Yorkshire was that the cross-breeds gave thicker and more fleshy sides, particularly the belly meat. It is here where the Danes score a great advantage over us. From their method of breeding, it naturally follows that their sides of bacon should be remarkably uniform in character, and one of the great faults of Canadian bacon is its lack of uniformity.

The methods of feeding vary in different localities. Barley and oats are used to a considerable extent, and in some sections corn is used, though it is strongly condemned by the packers. Roots and green foods are also used, but perhaps the most important foods for producing bacon of choice quality are skim milk and buttermilk. Nothing but dairy cattle are kept in Denmark, and butter is the product manufactured. As a result, every farmer has a supply of skim milk and buttermilk for his hogs, and in this we can see a second important advantage which the Dane possesses over the Canadian feeder, for there is no food equal to these by-products of the creamery for producing bacon of high quality. There is no doubt that the method of feeding plays an important part in promoting the development of lean meat in spite of the lack of exercise, though it is quite probable that the method of breeding also has an influence.

A third important advantage possessed by the Danes is their proximity to the market. In less than forty-eight hours after the bacon is placed on the cars, the bacon is on the British market. The advantages accruing from such conditions can be easily understood.

With all these conditions against us, the question naturally arises, are we engaged in a hopeless competition, and will not the Danes eventually drive us out of the market? But there is another side of the question which I would like to present. At the time of my visit, the farmers were receiving at the factory a little over six and a quarter cents per pound, live weight, for their hogs, and they were complaining bitterly that the price was not high enough. The best authorities I could find agreed in placing the cost of production at six cents per pound, live weight. In addition to this fact, a number of recently-constructed factories in Denmark have failed, and others are running at a loss, not being able to obtain enough hogs to make the business profitable. When these two facts are considered together, the reasonable inference is that as soon as the price of hogs drops to the neighborhood of six cents per pound, the Danish farmer curtails his operations, and fewer hogs are fed for market; and that unless a cheaper method of feeding is discovered, the Danes are not likely to increase their exports of bacon. In other words, it looks very much as though the Danes had very nearly reached their limit in the production of bacon, for the present at least. I need not say that Canadian farmers can make money at six cents per pound for their hogs, and it is right here where we score a very important advantage over the Danes.

Thus, against the advantages of uniformity, abundance of creamery by-products, and closeness to market, we have the great advantage of cheaper foods; but we must not grow careless on this account, for the chances are that we will have to face more serious competition from other countries in the near future. If, and I would like to emphasize that word "if"—if we pay attention to the breeding of hogs of proper type, and also pay reasonable attention to feeding, I can see no good reason why we should not successfully compete with any country in the world, but if we grow careless and wilfully close our eyes to what is going on about us, we may find, some fine day, that we no longer occupy a position of any importance in the British market. We have a good fighting chance at the present time, and it remains to be seen whether we will rise to the occasion. G. E. DAY.

Ontario Agricultural College, Guelph.

How it Works Out.

Father—Now, see here! If you marry that young pauper, how on earth are you going to live?

Sweet Girl—Oh, we have figured that all out. You remember that old hen my old aunt gave me?

"Yes."

"Well, I have been reading a poultry circular, and I find that a good hen will raise twenty chicks in a season. Well, the next season that will be twenty-one hens; and as each will raise twenty more chicks, that will be 420. The next year the number will be 8,400, the following year 168,000, and the next 3,360,000! Just think! At only fifty cents apiece, we will then have \$1,680,000. Then, dear old papa, we'll lend you some money to pay off the mortgage on this house."—EX.