

"FARMING IN DENMARK"

BY MR NORMAN LAMONT, M.P.

[Synopsis of Lecture delivered 26th January, 1909.]

The agricultural prosperity of Denmark during the last thirty years had been the wonder of the world, and the fact that this success had been attained while other countries were declining in agricultural prosperity made it all the more remarkable. Denmark was only about half the size of Scotland, with only about half its population, and the average quality of its soil was inferior to ours, while the climate was also not so good as ours, Spring being about three weeks later. Denmark was practically a Free Trade country, although there was a considerable protective duty on sugar, which was a home product, and a small protective duty on cheese, but it was intended to abolish the latter, and reduce the former. There was also a protective duty on manufactured imports. With these exceptions, the Danish fiscal system was one of Free Trade, and the curious thing was that the agriculturists were the staunchest supporters of that system. It was their prosperity during the last thirty years under a Free Trade system that had caused so many Commissions of inquiry to go there. The Danes themselves attributed their agricultural prosperity to three great causes, and all the Commissions from this country had come to the same conclusion, that it was to agricultural education, to their system of land tenure, and last, but not least, to co-operation, that the prosperity of Denmark was due. All these three causes had been impelled by the great patriotic movement

that started in Denmark in 1864, after the loss of their two provinces, Schleswig and Holstein, to Prussia. The Danes resolved to replace on the more limited area the population and the wealth that had belonged to Denmark before. The movement had been wonderfully successful: there was now a greater population than in the larger area and the country was certainly wealthier. It had been largely done by land reclamation and afforestation. Corn-growing had largely given place to dairy-farming, employing a larger number of people, and bringing much wealth into the country districts.

The country of John Knox led the world in educational matters for fully 300 years, but now in many departments they were already behind that little country of Denmark. Their system of elementary education was nothing out of the ordinary, but after it, the boys and girls returned home, and after learning there the practice of farming, they proceeded to the Secondary Schools, known as the People's High Schools. Such schools were only started in 1845, but now there were no less than 80 of them throughout that small country. If Scotland had the same class of schools, they would have 160 such schools scattered about the country. The pupils went to these schools at the age of 17, and the courses lasted three, six, or nine months. They were always held in winter, and the fees, including board, amounted to about 10s per week. There were about 6000 pupils of both sexes. Then the boys returned home again and got practice in practical farming. After that, at the age of 18 to 25, they proceeded to another school—the agricultural school. They had 43 of these schools, with 3000 students, in Denmark, while in Scotland they had only 3, with less than 300 students. The course in these schools was purely theoretical, because the boys got their practice at home, and the combination of theory and practice seemed to work exceedingly well. The schools were used during the three summer months for a short dairy course, when they were attended principally by girls. The system of education was admirable, but what had made the task of the teacher such an easy one was the profound desire of the people themselves for secondary and agricultural education,

Unfortunately, in this country, that feature had not been marked, but it was growing, though slowly. The final coping stone of the educational system was to be found in the Copenhagen University, and more particularly in the agricultural and veterinary departments of that university. In these about 300 students were educated every year, about 150 to go back to their farms, and the other 150 as veterinary surgeons, surveyors, or factors, or to enter the Government service as itinerant experts, inspectors, and advisers.

Coming to the next cause of the agricultural prosperity—an improved system of land tenure—the ordinary system of landlord and tenant had given way before a system of fixity of tenure, and about 1850 a very important movement began for the establishment of Land Mortgage Syndicates. Under this system, which was not land purchase by the State, though under its supervision, 90 per cent. of the land had passed to those who worked it. Another very important change occurred in the year 1899, when the Government passed an important Act providing small holdings for the agricultural labourers—a holding which would not occupy all his time, but his evenings or any spare days he might have, and also his wife and children. The Government purchased land and re-sold it to the agricultural labourer on easy terms. The small holdings varied from 3 acres up to 16, and might not exceed £275 in total value, of which one-tenth was payable in cash, the remainder in instalments, 4 per cent. interest being charged. That Act had proved very beneficial, and it was due to it that during the last two years the rural population had been increasing at a more rapid rate, while other countries had been declining. The Act had also increased the supply of agricultural labourers and domestic servants, their object being to help their parents to become purchasers of their holdings. The sale of holdings was free, but not the purchase, that was to say, a man could not acquire a second holding. Having gone to all this trouble and expense to break up the system of great estates, they were determined not to allow it to grow up again. One result of this prohibition had been to increase the productive power of the hold-

ings, and the great development of intensive cultivation. Out of a population of $2\frac{1}{2}$ millions, no less than 41 per cent. were supported by agriculture.

The lecturer described the transition from corn-growing to dairy-farming. Breeding for milk had been carried to a greater extent than in any other country in the world. No cow at a show would get a prize on points alone, but must show a good milk record, and no bull unless there was a good milk record from its mother. Practically every cow in Denmark, whether belonging to big landowner or small cottar, had over its stall a board showing its milk record. The result of this milk record system had been very remarkable in raising the quality and quantity of the milk. He was glad to know there was a movement in this direction in this particular county, and hoped it would come to fruition. He went on to show the gradual increase from 500 to 700, 800 to 900 gallons, with the champion cow giving no less than 1320 gallons. There was also an immense increase in butter fat. After the ordinary milking, there was a sort of massage of the udder, and that residuum was very much richer in butter fat. All cows at the grass in Denmark were tethered, as it saved a considerable quantity of grass. The cows were carefully groomed every second day, which had a very beneficial effect. The milk was also filtered, and it was wonderful the amount of hair and rubbish that was taken out of it.

In his opinion, it was Co-operation that was the principal key to the agricultural success of Denmark. The system started about 1882, when creameries were first erected. There were now 1085 of them. A further development was the system of co-operation in carrying. Instead of each farmer owning his own machine, these co-operative machines collected the milk and brought it in. The Agricultural Societies of Denmark seemed to be very much more practical than their own, not only promoting shows but doing a great deal of educational and co-operative work for their members. The great milk distribution society of Copenhagen was also described. The handling of butter and margarine was also

dealt with, also poultry farming and pig-raising, which were, like the others, conducted on the co-operative system. Ventilation of byres, feeding to standard, and conservation of liquid manure by means of a tank under byre or stable, were also described. All this agricultural education and supervision cost money, and (according to the report of the Irish Commission) the taxation, local and national, on a farm of about 300 acres would run to nearly £100. He thought the people got value for it.

THE ROCKS OF BUTESHIRE.

BY MR JAMES KAY.

[Read 9th February, 1909.]

The subject before us this evening is the Rocks of Buteshire, and refers more particularly to the specimens collected by me for the old Museum, top of Chapelhill—now over 30 years ago. Before referring more particularly to the specimens which form the subject of this paper, we shall give an outline of the physical features of the Islands which make up the County, viz.:—Bute, Arran, Holy Isle, Pladda, Meikle and Little Cumbrae, and Inchmarnock.

BUTE is $15\frac{1}{10}$ miles long and from 2 to 4 miles broad, and has an area of 31,161 acres. The highest point (911 feet) is in North Bute, immediately above Stuck. Kames Hill, 875 feet, or 36 feet lower than that referred to; Kilbride Hill, 836 feet; Barone Hill, 530 feet; and Kilchattan Hill, 517 feet.

The north half of the Island—from Loch Fad—belongs to the slate formation. The southern portion of the Island consists of red sandstone overlaid in various parts by trap rock—as at Ascog Hill, Ambrisbeg, and the hills south of Kilchattan.

INCHMARNOCK is 2 miles long, greatest breadth, $\frac{1}{10}$ of a mile, and has an area of 675 acres. It is of the same formation as North Bute. The highest point is 165 feet.