

Butter Making in Holland

The struggle for the British butter market has always been a keen one and, generally speaking, it can truthfully be said that in the better class butters, the European competitors have had the best of the fight. Of course such results have not been attained without great efforts, and Canadian readers will be interested to hear what has been done in Holland to foster and encourage the industry.

Cattle breeding has always been the principal feature of Dutch agriculture, but during the last twenty-five years increased attention has been paid to the butter industry. The low corn prices seriously affected the growing of cereals, compelling farmers to replace them by fodder crops. It is remarkable to find that in a small country like Holland the number of cattle is 1,606,868, of which 667,492 are milch cows. There are no fewer than 324 head of cattle to every 1,000 acres of land under grass or crops, hence it will be readily seen to what a large extent stock raising is the Dutch farming economy.

The first butter and cheese factory was opened in 1879 and this was a private venture, but at a later date co-operative production came to the front and at present it predominates over individual enterprise. The transfer of butter making from the farms to the factories has much contributed to the improvement of the quality of Dutch butter. Government assistance has been given in various directions and care was taken that all necessary information was available.

The government experiment stations, of which there are at present five with a technical staff numbering 27, made numerous experiments in connection with cattle feeding and milk production. Lectures were given by government teachers of agriculture with a view of pointing out to owners of cattle what important advantages could be secured by proper breeding, by the cultivation and purchase of the most suitable feeding stuffs, and by rational feeding.

It is estimated that the export of butter now amounts to 17½ million kilos (a kilo is 2.2 lbs., English) to Great Britain, 7 to 8 million kilos to Germany, and 3½ million kilos to Belgium. The export to England takes place via Harlingen, Rotterdam and Amsterdam, while that intended for Germany, France and Belgium is, of course, forwarded by rail, consignments from the north of the country partially going in refrigerator vans. It is now nearly always packed in beehcomb casks containing about 50 kilos (100 lbs.) of butter, also in tubs, cases and boxes containing butter in rolls of ¼ kilo or small parts of various weights. Butter intended for tropical climates is packed in air tight tins. It appears that the mode of packing formerly in vogue (double casks separated by salt) is gradually disappearing.

As far as the butter itself is concerned it is forwarded both fresh and salt. France and Belgium take almost exclusively fresh, Germany chiefly fresh, whilst England and Scotland receive slightly salted butter. Although the real deal of butter is sold to order or through agents, large quantities are forwarded by way of consignments. The co-operative factories especially dispose in this way of their produce in England.

In most of the large factories, which are all supplied with steam power, the most modern machinery is used. The custom of ripening both the cream and the skim-milk is fairly gen-

eral and this vastly improves the quality of the butter at certain periods of the year. In order to make a product that will keep in the warm season, a great many factories have ice-houses attached, which, however, of late years have been replaced by refrigerating and ice-making machinery. In dealing with the milk, all kinds of centrifugal systems are used. Especially in those provinces where no half cream cheese or skim cheese is made, a practically complete separation of the cream is aimed at and it may be said that as a rule hardly one-tenth per cent. of fat remains in the separated milk. In ripening the cream pure cultures are largely used.

No matter what care is taken in the manufacture of the butter, it is necessary to protect it from adulteration before it reaches the consumer. The Dutch parliament have a number of stringent acts dealing with butter substitutes. The principle on which legislation is based is that all products resembling butter, in so far as they contain fats, which have not been obtained from milk, are considered to be margarine, and have as such to be transported, exported, exposed for sale, etc.

Where butter and margarine are allowed to be sold together in shops, conditions must be observed that both are kept visibly separate. Infringements of the act are punishable by fine and imprisonment. Although legislation has benefited the honest butter producer, it has not succeeded in putting a stop to adulteration and this has given rise to butter control stations, which are under government direction and inspection. The control is of a continual and stringent nature, and is of such a nature as to practically guarantee the quality of the butter produced at the factories under its aegis. H.W.S.

New Use for Skimmed Milk

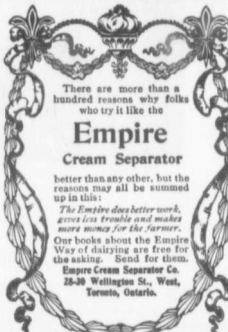
Mr. Richard Guencher, of Frankfurt, describes a newly-invented milk stone, or petrified milk. It is manufactured in the following manner: By a chemical process the casein is precipitated as a yellowish brown powder, which is mixed with formaline. Thereby a hornlike product is formed, which, with various admixtures, forms a substitute for horn, turtle shell, ivory, celluloid, marble, amber, and hard rubber. Handles for knives and forks, paper-cutters, crayons, pipes, cigar-holders, seals, marble, stone ornaments, and billiard balls are now made of this skimmed milk. The insolubility of "galalith," as it is called, its easy working, elasticity, and proof against fire, make it very desirable. Already 20,000 quarts of skimmed milk are daily used for this purpose in Austria—The Dairy.

Big in Milk and Butter

The imported Guernsey cow Hayes Rosie, 15476, holds the year's record for both milk and butter in the advanced registry of the American Guernsey Cattle Club. During the year ending March 31st, 1904, she gave 14,633.08 lbs. of milk, which was equivalent to 744.31 ponies of butter fat—equivalent to 833 lbs. of butter. Hayes Rosie was imported from Guernsey in the fall of 1902. She had been a noted prize winner at the important English shows. She consumed, during the year of test, 2,518 lbs. of shorts, 602½ lbs. oil meal, 661 lbs. cluten, 2,223 lbs. of carrots and mangels, and 1,322 lbs. of ensilage. She had the run of a small acre during the forenoon of each day in summer.

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