

such a method there are many impediments come in the way which leave the seller comparatively at the mercy of the buyer. The manufacture of butter and cheese in factories will undoubtedly give a uniformity of quality and excellence to our product, thereby enabling it to take its place as an article of commercial importance, as the making of any product by skilled workmen must always do. Co-operative dairying would also in a great measure solve the problem of keeping more milch-cows, and thus increase the food-value per acre. It would be superfluous to go over in detail the benefits which would accrue to this colony through a well-organized system of co-operative dairying, and I am certain it would solve many of the difficulties which now beset the small farmer, as indeed it has already done in several sections. Co-operative dairying is a comparatively new feature in our agricultural work, and has already proved itself, when carried on with skill and judgment, competent to return a good remuneration for the labour employed. For a ready return, and as a means of increasing labour and so carrying a necessarily large population, I think it stands unequalled in importance. Since population is principally responsible in giving value to property, a well-founded system of dairying tends to increase the value of every property in the locality where it is generally engaged in.

I have already said that a well-organized system of co-operative dairying would increase the food-value per acre, which before going further I wish to illustrate. Take our wheat-crop as an illustration. Now, only about one-half of the possible life-sustaining value of the entire crop lies in the flour as prepared for human food. What is termed the refuse, or residue of the crop—I mean the straw, the chaff, and the bran—which is totally useless as human food, can be with profit fed to milch-cows, and by them changed into milk, butter, and cheese. Thus, by the use of cows farmers are enabled to furnish themselves with both bread and butter, and to export food of the most valuable and concentrated kind. I know many would say that it is not profitable to feed such to cows, and that since we have an abundance of grass for eight months in the year it is not desirable. But I venture to say that we will never give the desired character to much of our butter-product until a little concentrated food is given. By such means the total milk-solids, especially the butter-fat, would be increased, and so increase the profits to all concerned. Personally I know that the industry has not reached a stage of development when the breeding and feeding of dairy-cattle will receive the attention it ought to do, and will do at no distant date. Indeed, there is a steady and increasing movement towards this desirable end in sections where factories are now in successful operation. Dairying will also keep more of the substances in the soil which go to sustain plant-life, and will enable the farmers to sell their labour and skill to better advantage, as well as keep up the fertility of the soil, which cannot be so easily done by continued grain-growing. By grain-growing it would seem the soil becomes more of the nature of a mine, the fertility of which is bagged up and exported to other lands.

Before going further, perhaps it will be well to introduce a few remarks regarding the present status of co-operative dairying in this colony, as being of some interest. New Zealand co-operative dairying was represented last season by seventy-eight cheese-factories, butter-factories, and creameries; the respective numbers being, thirty-eight cheese-factories, twenty-two butter-factories, and eighteen creameries, having an output for the season (1891-92) of 2,490 tons of cheese, and 1,087 tons of butter, representing nearly 12,000,000 gallons of milk, the product of about 34,000 cows. Estimating the 2,490 tons, or 5,577,600lb., of factory cheese at 4½d gives a total value to that product of £110,390. Estimating the 1,087 tons, or 2,434,880lb., of factory butter at 10d. per pound gives a total value to that of £101,453 6s. 8d., or a grand total of £211,843 6s. 8d. It is evident we have at last surmounted the difficulties which invariably beset most new ventures. I learn through information received from Home merchants who are handling our products that during the past season the produce has arrived in much better condition, and that complaints are much less numerous concerning the quality, so that we may now congratulate ourselves on having at last got a recognised position in the Home market. This is no doubt due to the more uniform and improved quality of the shipments, which must to a great extent be due to increased knowledge on the part of the factory-managers. During the season our best factory butter and cheese have met with a ready sale at remunerative prices, and it would seem that the trade with this class of article is capable of enormous expansion.

Now, the first question, to my mind, for us to consider is, what means should be taken to encourage the establishment of the factory system. I venture to suggest an extension of your present system as being the most effectual means of bringing about the desired result. With the present system of instruction by the use of itinerant instructors I would couple a system of milk-inspection. From my sojourn among the factories I find that the practice of slightly adulterating the milk furnished to such establishments is much too prevalent, much of the milk being of a doubtful character. Nothing tends to more quickly bring the whole system into disrepute than when it becomes known to honest patrons that some are tampering with the milk they supply to the factory. To assist in preventing the dishonest practice alluded to it is necessary there should exist some statutes to provide against frauds in the supplying of milk to cheese- and butter-manufactories, and with this end in view an Act is now in course of preparation.

With reference to the grading of dairy-produce before leaving the colony, I am confident such a step would not prove of much practical utility, although by such means a certain amount of equality might be secured. I know there has been a divided opinion expressed regarding this, and it has been pointed out that Irish butter is so treated previous to exporting. But there exists no analogy in the two cases. The Irish butter would retain its class, and would arrive in much the same state as when it left the country, as it is only subjected to a few days' test on its journey; but, as in our case, a three-months voyage, and that very often frozen and thawed, makes all the difference. I say without fear that much of our butter would be inspected here and branded as firsts, and by the time it got Home it might, and in many cases would, be a bad second, or *vice versa*.

What should be done is to make it compulsory by competent legislation for all cheese- and butter-manufactories to have registered brands, and to compel such to be used before leaving the