

or all advanced dairying countries. Particulars of the constitution and working of such associations are appended to this report. Meanwhile, your Committee cannot too strongly urge the establishment of dairy factories, and the use of separators, or, where the use of separators is not practicable, the early separation of the cream by immersing the milk in cold water on the Cooley or Schwartz methods.

5. Your Committee find that the causes of good butter being spoiled in transit are (a) its being allowed to accumulate in stores after packing, sometimes for weeks; (b) its being exposed to the sun or to a high temperature on wharves and railway-platforms, or in sheds and steamers; (c) the use of faulty packages.

6. The cure for evils (a) and (b) would be to ship the butter as soon as possible after making, taking care to keep it out of the sun and in a low temperature; to reduce railway-freights to lowest level, so as to encourage the forwarding of the butter by rail instead of by steamer; to provide refrigerating cars, or, if that be not practicable, to at least take special care to ventilate the cars and keep them as cool as possible; to run night-trains where found advisable; and to provide cool storage at the port of shipment. (N.B.—The temperature in the Wellington Harbour Board's sheds last summer was far too high, being for October from 47° to 71°, November 51° to 73°, December 57° to 76°, January 54° to 79°, February 55° to 80°, March 51° to 80°.) The regular despatch of vessels, so as to place butter before consumers as fresh as possible, is also an important factor.

7. With regard to packages, the evidence before your Committee goes to show that the 60lb. keg is generally preferred on the English market, and that totara is probably the best of the New Zealand woods for the purpose; at the same time, it is only fair to state that some Australian shippers appear to prefer Pond's boxes (56lb. size), while in New Zealand opinion on this subject is much divided. A series of comparative experiments on this question of packages and woods would be very valuable, and should, your Committee consider, be instituted under the auspices of Government. It is strongly recommended that attention should be given to neatness of appearance, and to having the packages of even tare. The gross and net weights should be marked on each package.

8. With regard to the keeping quality of frozen butter, the evidence before your Committee is of a conflicting nature. Experiments to clear up this point should be instituted, as space in freezing chambers is often available when the cool chambers are full. There is no doubt, however, that the cool chamber, if an equable temperature of forty degrees can be maintained, is the mode of transit that appears most desirable.

9. The question of grading butter has received great attention at the hands of your Committee. It appears to them, however, that grading carried out in New Zealand would often be worse than useless, as butter which had been branded as first class here might, from any of several causes, turn out to be inferior when opened in London. To be effective, grading would have to be carried out in London by a qualified inspector appointed by the Agent-General; but your Committee are unable to recommend that course.

10. Your Committee find that the market in England for good butter is practically unlimited, and that European countries have nearly reached their limit of production. The attention of English buyers is therefore now being specially directed to New Zealand as an available source of supply, our fertile soil and genial climate entitling the colony to take high rank among the dairying countries of the world.

11. Your Committee are of opinion that Government may legitimately assist the industry by the above-mentioned methods; and recommend that steps be promptly taken to give effect to this report.

12. With respect to cheese, your Committee find that, while the quality of that produced by some factories is such as to command prices equal to best American, yet in many cases the quality is inferior, owing to faulty methods of manufacture, with, of course, correspondingly low values, whereas your Committee are of opinion that New Zealand presents all the conditions which should enable the colony to produce cheese equal not only to best American, but to the best English Cheddar. Your Committee therefore recommend that the Government, assisted by such associations as above recommended, should continue to give attention to the fostering and development of this branch of the dairying industry, with a view to further improving the quality of the manufacture.

9th September, 1890.

GEORGE BEETHAM, Chairman.