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New and Improved Dairy Factories .-- The great increase in the output of butter and cheese per factory has in many instances called for extension or rebuilding. In most instances officers of the Division have been called in to devise the form the alteration should take, and in a number of cases the entire lay-out has been left in their hands. Three factories were destroyed by fire during the season. Most of the new structures are to be of a permanent character, and in brick or concrete. Dairy companies generally are to be congratulated on the quality of the factories they are erecting. The new factories which have this season replaced old ones, and those in hand and to be taken in hand for next season are distinctly creditable to the industry.

Casein. The manufacture of casein has extended during the year under review. Some 2,100 tons, most of which was lactic casein, was graded for export. The quality of lactic casein evidences improvement, and the quality of some 100 tons of rennet casein which was manufactured was of a very high standard. It is expected that the manufacture of casein will continue to be popular where whole milk is being delivered at factories or skimming-stations for the manufacture of butter.

Farm-dairy Instruction. - The work of farm-dairy instruction has increased in popularity during the past season. Five new appointments have been made, four of which were for the South Island. The officers appointed have carried out their duties in a manner which has been acceptable to those concerned. To do this work efficiently and without causing friction it is necessary that a man should have a degree of tact greater than the average. Much improvement has been made, and this has been effected by the co-operation of the dairy-farmer and not by compulsion.

Inspection in London. At the request of the National Dairy Association the position of Inspector of New Zealand Dairy-produce, London which had become vacant during the war was again filled, and Mr. W. Wright, who previously carried out this work, was reappointed. Mr. Wright left for London in September last and commenced his duties there early in November.

Legislation. During the year a Dairy Industry Amendment Act was passed. This makes it a duty of the owner of a dairy factory -co-operative or proprietary-to advise suppliers of the yield of cheese or butter obtained per pound of butterfat received during the financial year. Authority for

the check-testing of milk and cream samples for butterfat was also provided.

Advertising New Zealand Butter. -- The disparity in prices between Danish and New Zealand butters was very marked during the latter part of the previous financial year. The dissatisfaction which this was causing induced the importers to start an advertising campaign in the interests of our butters. A fund was subscribed by the importers amounting to £500, which was supplemented by our Government, through the High Commissioner's Office, to the extent of £250. When the campaign started the price of Danish butter was some 45s, ahead of that of New Zealand. In three months after the advertising started there was practically no difference between the prices of the two. It would be rash to state that the change was entirely due to the advertising, but the need of the comprehensive continuous advertising of New Zealand dairy-products has been evidenced.

Association Testing of Ordinary Herd Cows.—The increase in this branch of cow-testing is little short of phenomenal. Statistics received show that for the season under review some 85,000 cows have been tested under this system, as compared with 45,564 for the previous season. The number tested this year represents over 7 per cent. of the dairy cows in the Dominion. Of the 85,000 cows under test 34,558 were tested and figured by officers of the Dairy Division. It is yet early to forecast the next season, but already the Division has received requests for assistance from dairy companies anxious to commence cow-testing associations, and a considerable further development may be

Testing of Purebred Dairy Cows.—The number of purebred dairy cows entered for certificate-ofrecord (semi official) testing evidences an upward trend from year to year. A year ago the fee for testing was changed from a flat rate of five guineas per cow to ten guineas for the first and three guineas for each subsequent entry. It was thus hoped to make the revenue from this work more nearly meet expenditure by increasing the number of cows per breeder. The desired effect was attained to a marked degree. During the season under review the average number of cows tested per testing breeder was 3.83, as compared with 2.69 for 1921-22. This year some 1,060 cows are, or have been, under C.O.R. test, as against 810 last year. The number of proven purebred sires with butterfat-record backing drafted out into grade herds increases, and it is gratifying to report that some of our most outlying districts are included in the movement. Thus the C.O.R. testing is attaining one of its most important objects. The average yield of cows tested has improved, and many outstanding individual records have been authenticated, two cows having passed the 1,000 lb. butterfat mark.

Staff.—The phenomenal increase in the production of dairy-produce for export has caused the work this season to be very exacting on the staff, which is numerically too small for the work. A particularly heavy season's work has been well carried out, this applying to officers in all branches of the Division.

## HORTICULTURE DIVISION.

The work of the Horticulture Division covers a varied field, and it has been well carried out by the Director, Mr. J. A. Campbell, the Assistant Director, Mr. W. T. Goodwin, and the divisional staff.

The Fruitgrowing Industry.—The total area in commercial orchards throughout the Dominion stands at approximately 30,000 acres. As far as the fruit crop is concerned the season under review (1922-23) has been a satisfactory one generally. Prices realized by growers from the sale of apples and pears have not come up to those ruling last year, however. This has been brought about to a great extent through the large quantity of low-grade fruit placed on the markets, which has had the tendency of keeping down the returns for the higher-grade article. With a view of improving the position a scheme of voluntary standardization is at present under consideration, whereby it is hoped a more specific method of selling standardized fruit in the markets than has existed in the past will be brought about. For other varieties of fruit the prices realized have been fairly satisfactory. The area planted during the year in new orchards was practically the same as that of the previous seasonnamely, 204 acres. At the same time it is estimated a similar area has either been cut out or