DAIRY-HERD IMPROVEMENT.*

SOME LEADING FACTORS.

W. M. SINGLETON, Director of the Dairy Division.

HERD-TESTING.

"By their fruits ye shall know them" is a saying not more true of human beings than of dairy cattle, and there is conclusive evidence that during the past two seasons our dairy-farmers have been more inclined to obtain an accurate idea of what amount of butterfat the individual dairy cow is delivering. Until more recent years comparatively little testing was done - partly because many dairymen were making a comfortable living without going to that trouble, and partly because many thought the Babcock machine could not tell them very much about their cows; in other cases, again, the releaser system of machine milking did not facilitate the taking of individual samples and milkweights. In some instances it is possible that owners were rather afraid that some of their favourite cows might not make good, and as a consequence did not test. However, more dairymen are now facing facts, and in the past season some eighty-four thousand cows were tested for yield under the association system.

The influence of herd-testing is frequently very manifest during the second testing season for the herd. For example, among the herdtesting associations whose computations were made at the headquarters of the Dairy Division during 1920-21 and 1921-22 were some 218 herds which were tested in both these seasons. The yield of the average cow in these herds increased from 213 lb. to 253 lb. of butterfat, or about 19 per cent. Even granting that some portion of this increase may have been due to the fact that 1921-22 was a better season for grass, much of the improvement is undoubtedly due to knowledge gained as the result of the previous season's testing. In these herds the number of cows tested each season was very similar. figures show that often dairy-farmers reduce their herds as the result of testing, and still maintain the total yield of the herd. We also have data which show that in certain cases during a second testing season with only two-thirds of the previous season's herd the total butterfat produced underwent no reduction, while one dairy-farmer during his first testing-year milked twenty-three cows to produce as much butterfat as did sixteen which he milked two seasons later. Instances which bear out the same principle could be multiplied. The first testing season's returns were prejudiced by overstocking and therefore underfeeding.

MANAGEMENT.

Like children, dairy cows are perhaps more often "sinned against than sinning." The yield of the average dairy cow in New Zealand

^{*} Substance of a paper read at the annual conference of the New Zealand Council of Agriculture, Wellington, July, 1923.