

The results are presented in Graph 7, in which the numbers on the right give the number of records included for each curve. From August to December that portion of the curves from the tenth to the twelfth tests has been gradually depressed, until for December the twelfth point is below that for the tenth. From August to October the dip becomes less, until for October it is very slight. However, the dip occurs again to a greater extent in the November curve, with the depth of the dip increasing up to January. In the December curve a flattening-out of the portion from the ninth to eleventh tests will be noticed as compared with the same portion in the November curve. In January we have a "two-dip" curve, the second dip making its appearance at the eighth test. The February curve has the second dip at the ninth test, while for March we have two pronounced dips separated by a high point at the fifth test. From April to July the two dips are gradually transformed into one long dip by the gradual depression of the high point at the fifth test. May, June, and July curves climb very steeply from the eighth test onwards, June having the greatest gradient.

Average lactational tests have been run out for the four chief breeds, grouping separately spring, summer, autumn, and winter calvers, as shown in Graph 8. Considering the graphs for Friesians, Milking Shorthorns, and Ayrshires only, a marked similarity is noticeable in the respective curves for cows commencing in different seasons of the year. The spring curves have first a small dip, and then a gradual upward trend right to the end. The summer curves are shaped something like the letter "S" lying on its side and considerably straightened out, the final regression of the test being well borne out. The autumn curves are "two-dip" curves, the dips being separated at the fifth test. In the case of the Ayrshires there are really three dips, but this is considered unimportant owing to the very small number of records for this curve. It is satisfactory, however, to observe that the characteristic of the fifth point is nevertheless quite apparent. All the winter curves have long and deep dips, with fairly sharp "risings" at the ends. The Jersey graph presents what appears quite a different position from those of the other breeds. As there is no dip in the first portion of each of the curves, comparison at first seems difficult. However, if we compare the respective curves from the seventh test onwards it is obvious that the agreement for the four breeds is quite close. As in the case of the Milking Shorthorns and Ayrshires, autumn calvers are poorly represented numerically in the Jerseys, and the curve for this reason is rather irregular. Nevertheless the fifth test ranks high. To properly follow the effect of the time of commencement on the lactational-test curves for the Jerseys, all the Jersey data would need to be utilized, as has been done in the case of the Friesians, in order that curves could be shown for each month of commencement.

The difference in range of variation of the lactational tests for cows commencing at different periods of the year is of some interest. In Table 10 figures for the chief breeds are given according to the season of the year of commencement. In considering range of variation the year seems to be divided into two rather than into four, since on the one hand figures for spring and winter, and on the other figures for summer and autumn, agree fairly closely. Range-of-variation figures were run