In pens H, I, J, K, L, M, it will be noticed that two rations were used ; the first was fed until the pigs reached a live weight of 100 pounds, the second, from that weight until the pigs were finished. This method allowed us to ascertain the effect on the quality of the pork of the various rations at different periods of growth.

Where not otherwise stated, a sufficiency of green fodder, usually pease and oats, in addition to the grain ration was given to keep the animals in a thrifty condition.

2. As regards the supply of food, the pigs in one pen on each ration were given all they would eat, and this has been termed 'unlimited' ; the pigs in the duplicate pen were fed with that quantity only that was thought necessary for normal growth ; and this has been given in the tables as 'limited.'

It is very doubtful, however, if in experiments conducted with several pigs in a pen this classification is of any value, for we have found that, no matter what the supply may be, the larger animals practically get an unlimited quantity, while the smaller ones are sometimes on an extremely limited ration. We have accordingly grouped together in the tables of data the pigs on the 'limited' and 'unlimited' supplies of the same ration.

3. In two experiments, cooked as against a dry grain mixture was tried ; in four cases, the effect of soaked as against dry grain was ascertained.

4. To ascertain what effect lack of maturity might have, two pigs from each pen were examined when they had reached the live weight of 100 pounds; the remainder were fed until they attained a live weight between 175 and 200 pounds.

5. To ascertain the result of exercise on the production of firm pork, an equal number of animals on each ration was placed (*a*) in small paddocks containing shanties or shelters, and, (*b*) in a pen of the piggery, each pen having a small yard attached. The pigs in the former are assumed to have had unlimited exercise, and are designated in the tables as 'outside' while those in the piggery are considered to have had limited exercise only. These latter are placed under the heading 'inside.'

6. Each pen, as a rule, consisted of sixteen pigs, eight of which had been obtained in Western Ontario (Essex and Kent counties) and eight in Eastern Ontario (Carleton County). This feature was adopted at the request of certain packers, who considered eastern bred pigs of better quality.

To render this account more concise, and consequently easier of comprehension, we purpose placing the detailed data in tabular form together at the end of the bulletin, simply discussing here the averages obtained from each pen. These data, although, as stated, are somewhat in detail, represent only a part of the estimations made. All the determinations which do not apparently throw any light on the object of this investigation have been omitted, for the reason that they might confuse the reader. On the same ground, the pigs on 'limited' and 'unlimited' rations are classed together and the averages of the results of the 'shoulder' and 'loin' fats are also given, the differences being too small to merit in this bulletin detailed discussion.

GENERAL RESULTS FROM FINISHED PIGS. FIRST SERIES, 1899.

In order to obtain at a glance the relative merits of the various rations in the production of firm pork, a table showing the average percentage of olein and the average melting point of each pen will be first presented. In this table the rations are arranged from above downwards in the order of 'firmness,' as indicated by the olein ; that is, the ration giving least olein is placed at the head, and that producing most olein, at the bottom of the chart. We shall then discuss briefly these results and proceed to analyse more closely each ration separately, giving in chart form the figures for the olein content of the fat of the pigs obtained from the east and west respectively, and of those raised with and without exercise. In the appendix we shall place tables giving further details from each pen of pigs. These should be referred to in order to observe the effect of individuality among the animals similarly fed under the same conditions.