5 H.—29.

One of these matters is the use of fertilizers. Investigation of the economic role of fertilizers has continued, and has yielded evidence confirming that previously obtained, extending its application and indicating that in many parts of the Dominion there is economic justification for increased use of fertilizers on the basis of current returns and costs in farming. Hence the trend towards increased use of fertilizers as indicated in the increased quantities of fertilizers carried by rail for the year ended 31st March is well warranted and indicative of improved farm practice.

As is so advisable, the development of pig-keeping as an auxiliary to butterfat-production continues to receive increasing attention. The rise, during recent years, of pig-products as an important item in the export trade has been somewhat phenomenal. In 1924 the killings for export numbered slightly fewer than 5,000 carcasses; twelve years later, in nine months of the 1935-36 season, they have exceeded 660,000 carcasses, and seem likely to approximate 710,000 carcasses for the complete producing season ending September, 1936. Assuming export prices of pig-products remain constant at about the current level, further substantial increases in production are economically sound, and seem extremely probable. This may be attributed to the fact that more and more farmers are realizing that it is quite a normal performance to produce 40 lb. of pig-meat (dressed weight) for every 100 lb. of butterfat produced, and that such a production of pig-meat often may be secured without any substantial additional outlay in equipment and material. The possibility of further economic expansion in pig-production gives rise to a pressing need for activity in various directions, and this activity is being undertaken or contemplated by this Department. In the first place, it is important to bear in mind that much profitable expansion could be based simply on freer application of our present knowledge. This points to the need for a more extensive advisory service. In the second place, further expansion probably will make certain current problems of greater moment or create new problems. Hence, there is urgent need for investigation relative to certain matters so as to be the better able to deal with the problems of the future. Among the matters which promise to be prolific of future problems, which are now receiving attention, and which warrant continued and increased attention, are (1) the more effective use of dairy by-products which is likely to develop along the line of increased exploitation of pastures, pasture-equivalents, and grain crops in pig-keeping; (2) the production of carcasses of the weight and type best suited to the needs of the market—this is likely to involve an intensification of the swing-over to the production of baconers, which is already taking place; (3) the prevention in preference to the cure of diseases and disorders, which, judging from the history of live-stock ventures, is likely to become a more acute problem as our pig-population becomes more dense; (4) the evolution of strains of pigs in which good carcass type is associated with economical conversion of feed into flesh under the conditions of feeding and accommodation which it is economic to provide in the Dominion.

In zeal and enthusiasm about the future development of our pig-keeping there seems at times to be an inclination to overlook the outstanding feature of the position—this is, the immense and profitable scope for expansion there is along the line of better exploitation of the foundation material we already possess, both in the better strains of our pigs and in our knowledge, which, though imperfect, in some respects is nevertheless considerable.

Evidence of the trend towards improved farming continues to be provided in the maintenance of a relatively heavy, and in several instances an increasing, use of certified seed. In the 1936 harvest there were record acreages devoted to the production of certified seed of potatoes, wheat, white clover, cocksfoot, and Italian rye-grass, while the perennial rye-grass acreage increased in comparison with that of the previous harvest. The major portion of the certified seed produced is used by the farmers of the Dominion, and from the superior characters inherent in certified seed its use makes possible increased production of crops and pastures.

An endeavour to make better provision of feed is indicated in the fact that the sales of lucerne culture by the Department have been record ones and sufficient to treat the seed required for the sowing of approximately 8,000 acres. After making allowance for the area of previously established lucerne which goes out of production annually on account of its age, &c., the sales of lucerne culture point to an increase in the total Dominion acreage of lucerne. At the same time, the apparent increase at best is only a few thousand acres, and, while welcome as a continuation of the steady increase in the Dominion acreage of lucerne which has been going on for several years, it is much less than the intrinsic merits of the crop justify. Our knowledge of the requirements of lucerne and of its culture under local conditions has become sufficient to enable the failures with the crop that occurred fairly often in the past to be avoided, provided advantage is taken of the conclusions which have been drawn from accumulated field experience and from field trials.

Though there are differences in detail, and though exact data are not available, the position in respect of the role of special crops for feed seems to be essentially the same as last year when evidence of a satisfactory trend was recorded. Facts supporting this are the heavy sales made last spring of seeds of crops providing feed to supplement the pastures, and the frequency of inquiries about such crops.