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EDITORIAL

Cost of Farm Machinery

The professor of mechanics in an American agricultural college has estimated that a grain binder on a 160-acre farm, if well cared for and properly housed, will last from twelve to sixteen years; that the same binder doing the same amount of work without extra care or housing will last from five to seven years. Observation along the same line in our own country bears out the professor's estimates fairly closely. The working life of a binder on the average Western farm is not more than eight years, on some farms not more than four years.

Farm machinery represents a very large proportion of the invested capital of the modern farmer. The authority quoted takes the case of two men who start farming each with \$1000 invested in machinery. One man allows his implements to lie outside and has to replace practically the entire outfit at the end of five years. The other gives his ordinary care and proper shelter getting from twelve to fifteen years use from the machines. At the end of five years compound interest at five per cent. on the original investment has raised the cost of the machinery to \$1276.28, and one farmer has to invest another \$1000 in a new outfit. Compound interest on the same rate on the double investment brings the total cost of machinery at the end of ten years to \$2,905.17, and by this time the second outfit is not in working order and a new equipment is required. The other farmer at the end of ten years has his original outfit costing \$1000, which with compound interest at five per cent., represents now a cost of \$1,628.89. If it has been well cared for it may last four or five years' longer, making a still greater difference between the cost of machinery for a given number of years on two farms.

It is estimated by the same authority that a serviceable implement shed, large enough to accommodate an average farm equipment, can be put up for \$200. Compound interest at five per cent. on this sum for ten years brings the cost of the shed to \$326.00, making the total cost for machinery and shelter for ten years \$1,854.89, which leaves a balance of \$1,050.28 in favor of housing machinery. And the shed perhaps is good enough for another ten years.

Early Breeding and Vitality

The tendency of the times to breed dairy heifers to calve at two years, or younger, is of doubtful expediency. The strain of motherhood upon so young an animal must necessarily tax her vitality, hinder her natural growth and sap her constitution to a considerable extent. Even though this effect may not show up seriously in one generation, it is reasonable to expect that if continued from generation to generation the natural tendency will be to reduce the size and weaken the constitution of the herd in which the policy is practiced. While size may not be considered the most important characteristic in dairy cows or other stock, it is desirable to the extent of affording plenty of room for healthy action of heart and lungs, and capacity of stomach to work up sufficient food to keep the animal vigorous and capable of giving a profitable return in milk or meat for the food consumed. The idea prevails that heifers bred to calve at or under two years will make better and more persistent milkers than those producing their first calves at two and a half to three years; that at the latter age they become disposed to fatten unduly for dairy purposes, but this is a theory, the truth of which has not, to our knowledge, been established, while there is danger of early breeding becoming a fad that will tend to undermine the constitution of a herd or a breed. There is little room to doubt that in the course of time, by unduly early breeding, continued from generation to generation, the largest breed of cattle could be reduced almost to the size of goats. There is little profit in milking heifers at or under two years old, as the quantity given at such age is, as a rule, comparatively small, and they need to be fed extra to keep them in passable condition. While the desire to increase the herd rapidly is natural, it may be done at the expense of its vitality, and the wisdom of breeding heifers to calve when under two years old, or, indeed, at two years, is doubtful. The age of two and a half years is a happy medium, and may well be adopted as the standard.

The theory that liberal feeding of heifers injuriously affects their milking qualities is another, the soundness of which is very doubtful. Provided the feed given is not of a heating or fattening tendency there will be gain, from

the standpoint of milk production, in keeping the heifers in vigorous, growing condition from the start, thus building up a strong constitution. Though they may take on a somewhat coarse appearance as heifers, it will be found that the processes of motherhood and milking will in a few weeks bring out the desirable feminine appearance and elasticity of hide handling, and it will be a strong femininity instead of the weak and delicate one forced by abnormally early maternity. The mother must possess strength and vitality if the offspring is to be strong and well developed. Doubtful theories and absurd fads, propounded by glib speakers and fertile writers, and followed by self-constituted, so-called, expert judges, have done much to injure the dairy breeds of cattle, and it is quite time that common sense had its innings in the conduct of the breeding, feeding and management of this most important class of farm stock.

Alberta's Agricultural College

The location of the proposed agricultural college for Alberta is a topic of live concern in the Sunny Province. It is now well understood that a college of agriculture will be established in the Province, but the advisability of making it a part of the University is being freely discussed, especially by the leading press of the Province.

By many, the view is held that the college is likely to do better work and to more satisfactorily fulfil the primary object of its existence if separated from the University, while others come forth with perhaps as good arguments, claiming that the economy in buildings and administration, the improved facilities, the increased efficiency in teaching, and an elevation of the status of the agricultural industry warrants the establishment of the institution in connection with the University.

While many sound arguments may be held forth in support of either side of the question, still the location should be discussed and determined from a beneficial as well as a practical agricultural standpoint. There are many conditions peculiar to Alberta that should not be overlooked. It is most lamentable that many whose voices sound the loudest seem to be inspired largely by the hope of snatching the location of the college for certain districts, rather than by an honest desire to secure a decision that would best serve the public interests and the interests of students of agriculture. It is to be hoped that those with whom the decision will rest, will not allow their judgment to be biased by local ambitions or local jealousies, but will keep before their view the single aim of the public welfare.

Agriculture is now a well recognized industry and a dignified science, as worthy of respect in the West as any other branch of learning. However, the practical side of such an institu-