

recent interview with a representative of the *Lindsay Watchman and Warder*. In this interview Mr. Campbell is quoted as follows: "Beef-cattle pay better than dairying. They have for twenty-five years. They are likely to, for we produce enormous quantities of fodder in one form and another. On broken and rougher soil dairying can be carried on just as well as on land like this, while beef-raising cannot. However, there is a decided boom in dairying now and it is paying better than the way a good many farmers have handled their stock heretofore. Those that have a good line of dairy cattle had better stick to them and they can make good profits. Although co-operative dairying will not give as good returns as well-managed beef-cattle, it will pay well, and a man who is in it will make no mistake by keeping on. The creamery is a great improvement on the cheese factory. You can't raise cheese and beef together for you won't have the milk to feed the calf, and unless the calf is well fed you can't do much in raising beef. The creamery does better, for you have the skim-milk. Beef and butter go together fairly well. Raising beef is like raising the bacon hog; both ought to be rushed for the market as rapidly as possible. It is easy to lose a year's growth through insufficient feeding.

"There is a poorer class of cattle in the country now than for years before and the fat cattle have been more poorly finished. The reason is to be found in the recent depression of the cattle market. It looked as though grain was worth too much to feed them. Farmers got careless and raised inferior stock. Crosses of dairy blood were allowed and it will take some time to get the herds up to the standard we ought to have. When the breed gets down the trade is ruined. Poorly-bred cattle cannot be nicely finished. It is all-important to use thoroughbred sires and the commoner the dams the greater is this need.

"The farmers in this part of the county ought to finish everything they raise. Back north they have not the feed to do it and the stocker trade is a good thing for them. The phenomenal values of this year have made the stocker trade fairly profitable for anybody, but these prices cannot last. Last year I raised eight calves. At an average age of eleven months I sold seven of them for \$460. Of course, some of them were valuable on account of their breed. I would not advise farmers to go wholly into fancy breeding but it pays even for beef purposes to have well-bred animals. Mr. Edwards, of Manila, sold one fourteen weeks-old calf for \$37 on the Toronto meat market, so you see breed pays even for veal. I would say breed well and feed well: stock up, but put quality first. I would rather take my chances with one animal well bred and cared for than three poor ones."

## Mature Breeding Animals

By Theodore Louis

There is an ever growing tendency to breed from young, immature stock, the breeders being roused by the demand of the market for lightweights of tender age. We should bear well in mind that, while the art of breeding has developed hogs of all leading strains which at the early age of from eight to ten months fill this requirement, this early maturing falls far short as to maturity for breeding. In no line of live stock is this law of maturity so much disregarded as in the breeding of swine. The frequent complaint that this or the other kind of breed does not respond properly to feed in the line of growth, and seems to be subject to difficulty in gestation, deficiency in number of pigs to the litter—these and many other complaints are seldom charged to where they properly belong, viz., to immature breeding, injudicious selection, and the indifference in the selection of food to develop them. If more mature sires and dams were retained, those that have proven themselves capable of reproduction and improvement, as to uniformity, prolificacy, good mothers and milkers, that have been perfected and developed to full size and vigor by age—only by the use of these can we expect to retain the im-

provements handed down to us by master breeders. When indifference is replaced by proper selection and retention of the best, improvement is the sure result. Is it not the duty of the farmer and feeder to acquaint himself with the laws of breeding which tend toward steady improvement? The above recommendation in regard to the retention of sires is most necessary to success and improvement, and carries most weight without further comment.

Another practice that has a tendency to depreciate the standard of excellence is to allow hogs liberty to serve sows *ad libitum*, and to be turned out with the herd or confined with a number of sows in a yard. Is excessive service less harmful to future offspring of swine than of other livestock? One service as a rule will give satisfactory results as to the number of vigorous pigs, while when the other system is followed small litters, dead pigs, deformed pigs are the result, but in swine breeding this is ascribed to bad luck, while the horse-breeder would charge it to excessive use of the sire. Build a paddock or yard four or five rods square, with a shanty like house seven by eight feet, seven feet high in front, five feet to rear, with a door two and one half by four feet high to permit of entrance when cleaning it, a half drop or swing door on hinges, attached to the upper part to keep out beating storms and cold, and a tight board fence, high and strong, which will prevent teasing the sows, and will also prevent fretting and irritating the boar. This often has disastrous results, the boar becoming impotent by self-abuse, especially in the case of young sires. There should also be a feeding floor in one corner of the yard, eight by eight or ten feet, so that a large boar can stand in front of the trough—a V-shaped trough of three feet in length—securely fastened to floor and wall. A plank should be securely fastened edgewise with spikes to end slippers; and stakes firmly driven home to guard against his natural propensity of root hog. At the corner a slide gate, two and one-half by three feet, should be placed, to permit the entrance of sows. At the further end of the floor build the pen. This may seem like extravagance, but, when we take into consideration that a yard of this kind will last from fifteen to twenty years by simply reposting it, this will lose its force, and furthermore to have a boar under control and use him at will is worth a great deal. If the yard can be situated so as to give natural drainage it is an advantage, but it is essential that a hand rake, shovel and fork should frequently be used to prevent contamination. But while secure and under control, the boar should never suffer for a food ration calculated in its nature to develop him; he should not suffer for the want of green food and succulent food when the season permits, and in fall and winter squash, pumpkins and roots should not be wanting. Nor should he be deprived of charcoal, ashes and salt—in fact no hog should.

If it is of importance to retain the boar to a greater age and until further development, it is of equal importance in the case of the sow. Too many do not deem it essential that they should have a system of breeding; if not, why not? Why can we not have a note book, a list, and a record of the sows that have proven themselves superior in all respects? Why not retain her as long as she proves satisfactory, instead of using a young, untried one that has not been selected with regard to heredity and the virtues of a mother, a breeder, and her milking qualities, but because she is pretty and she is a sow? If sows are selected yearly to replace those weeded out—those that have proved unsatisfactory—they should be selected from only the best and most profitable mothers, so that improvement will keep pace with reproduction. This selection should be deferred until the pigs are from three to four months of age, as we can then better judge their development and disposition, and they should be fed on the very best growing and developing food available. We have found it a good practice not to breed the sow for a second litter the first season but to give her a chance to recover from the strain so as to fully develop in size and vigor. Thereafter we breed her twice a year. We have an inflexible rule that no young sow is bred before she is eight months of age. It will also