

done with those ponies until I saw it on a visit to Europe. At the Shetland Isles many ponies are seen—almost like our sheep in this country. The cheapest that can be bought is £7 or \$35, but a good Shetland pony will cost £10 to £12 or \$50 to \$60. In all my travels I saw no pony that I liked so well as the Welsh. I visited North and South Wales. They are very fine limbed, clean-coated—almost as fine as a thoroughbred—and are fine travellers. My pony, which last year at the Toronto Industrial beat the celebrated trotting dog Dock, was a Welsh pony and has trotted a mile in less than four minutes. I think some farmers could make more money breeding ponies than horses. At 18 or 24 months ponies are ready to work. Many I have sold at eighteen months have been put at once at work and have always done well. They will sell readily at \$75. I always get \$100 or more for mine. I sold one colt five months old, last fall, to a party in Syracuse, N. Y., for \$100. Every year there are several car load of ponies pass through Canada for the United States. I know that we can raise them cheaper than they can be imported.

THE COMMERCIAL VALUE OF PONIES.

BY ROBERT MILLER, JR., BROUGHAM, ONT.

Ponies of any of the following breeds, Shetland, Iceland, Welsh, Exmoor or Highland, if well selected in Britain and imported to this country for sale or for breeding purposes, will pay as well as any other class of live stock. They range in value from \$50 for a foal to \$100 or \$125 for a mare old enough to breed or drive, and much more is sometimes paid for a fancy pony for either purpose. I think they have proved themselves valuable in cities already. They are now being used to a considerable extent to deliver parcels, by children to get the fresh air and for pleasure, a drive behind their pony being the greatest pleasure that any little boy or girl can have. And by no means the smallest advantage attached to this pleasure is the fact that children in this way learn to be expert in handling horses, and this is certainly a valuable accomplishment. I have always noticed that boys and girls who while small have had ponies have been very clever riders and drivers. They could, and no doubt will in time, be used in our cities to deliver all kinds of goods, even to quite heavy merchandise. Many men, otherwise almost helpless, could with a pony make a living by doing anything required in the way of removing goods. Ponies are used to a great extent in this way in Britain. We have imported and kept ponies for upward of twenty years and still have our first pony imported then. She has been very useful and we have raised some of the most useful drivers from her when bred to a trotting stallion. We have different times refused \$250 for a mare bred in this way. She is as good as we have ever seen. We have never had large numbers, having sold nearly always soon after we received them from Scotland. They have paid us very well. We like to do a little business in ponies as well as in any branch of our business, as in every transaction there is some little person made happy. I do not know that anything would be more profitable for many of our farmers than to have a few mare ponies and breed from them. They do not require very good keep, as they will naturally increase in size if well fed. One does not require any more feed than two sheep and they are very reliable breeders. The owner can count on \$50 from each

mare when the foals are fit to wean. They are old enough for small children to ride and drive almost as soon as weaned.

BY W. H. MILLMAN, WOODSTOCK, ONT.

The prices of ponies vary a great deal—from \$75 to \$150 for Shetlands. I have two ponies registered in the Hackney Stud Book (stallions), Cupid, three years, twelve hands high, winner at Royal Show, Windsor, England, 1889; 1st prize at Chicago, November, 1889; he is a black. Lord Man's, registered 2163, Hackney Stud. This is an extra cob pony, 12½ hands high; winner in Europe at several shows; 1st at Buffalo International Show, 1889, in a large class, over all hands. Of course these are extra well-bred ponies; few of this kind are imported. They are very valuable in cities for ladies and children. As a general thing they are very quiet and are easily broken. I have owned and broken a good many during the past four years and keep a pair for my own family. These I would not sell as they are very handy for us. My wife can drive them, also my little boy seven years old. I think they could be bred in Canada at a profit by farmers. Three will cost about as much as one ordinary horse to keep. Yes, there are a good many used in England and Scotland by children, and I believe a great many are used in the collieries hauling coal. I think the best pony is the offspring of a Shetland pony bred to a pony like Lord Mann's. This gives them a little more size, smarter move and breed blood.

Non-Breeding Cows.

BY F. GREEN, JR.

Some time ago a well-known breeder enquired what our practice was in the case of cows and heifers that would not breed, and at the same time remarked that he had met with very little on the subject in agricultural papers. There are few farmers but have had the unpleasant experience of owning some cows that will not breed, and in most cases they are usually, after several attempts, promptly consigned to the butcher, thus entailing a heavy loss, especially if they should happen to be pure breeds. The subject is one which would be more ably treated on by a veterinary surgeon, but as none have felt disposed to enter upon it, I will endeavor to give what information I have been able to glean, combined with our own practical experience. Non-breeders may be divided into two divisions, (1) barren cows, i.e., cows which, through some natural defect or malformation of the sexual organs, are incapable of reproducing their kind, and (2) cows which are temporarily barren. There is little doubt that many of the latter have been, and are still being, confounded with the former class, for Prof. Tanner, of Queen's College, Birmingham, England says:—"That from the result of the examination of the ovaries of several heifers which, after careful trial, had been condemned and killed as barren, he was strongly inclined to believe that such cows are comparatively rare, and that he believes that we have the conditions of successful reproduction very much under our own control, cases of legitimate barrenness being much more rare than we imagine, and he further states that he knows that animals which are naturally capable of breeding, can be rendered incompetent by adopting a special course of treatment." Such being the case one should not be too hasty in condemning a valuable heifer until every known remedy has been attempted. In the first place one should seek to ascertain what is the probable cause of the sterility. At times it arises from either the males or the

females or both being kept in too high flesh; another cause is an enfeebled condition of the breeding organs. Instead of the females breeding in a regular manner they come into season again and again after most irregular intervals. This results, says Prof. Tanner, from one of the following causes, either the female does not become impregnated, or else the embryo is imperfectly developed. The non-impregnation of the female may generally be traced to an excessive fatness in one or both animals, and an absence of constitutional vigor, the breeding powers being most energetic when the animals are in moderate condition, uninfluenced by extreme fatness or leanness. When the trouble arises from overfatness alone it can usually be remedied by reducing their condition by low keep and plenty of exercise, a dose of epsom salts administered a few days before the oestrus is sometimes of material assistance, while in others bleeding has been resorted to with benefit. As an instance of the success of exercise and change, I may quote the valuable cow Dodona, bought by the late Mr. Jonas Webb, from Lord Spencer at a moderate price in consequence of her being considered a non-breeder. After the purchase she was driven to her new home, a distance of 100 to 120 miles; in a short time she was bred and afterwards produced twin calves, and subsequently another calf, after which, as she ceased to breed, she was sold. A change of climate again brought her back into breeding, and at the time of her decease no less than 160 valuable animals could be traced to this cow, which had been sold on two occasions as barren. Many other instances could be given but space forbids. Again, highly satisfactory results have been attained by a thorough change of climate. When stock have been sent to hilly districts where the air is bracing they have to take plenty of exercise. Barrenness occasionally arises from too close relationship of blood, or from both animals being deficient in constitutional vigor. Frequently the evil is occasioned by the mouth of the womb becoming almost or completely closed, occasioned by too high feeding or other causes, and until this is remedied it is of course impossible that the animal can breed, but our own experience has shown us that the obstruction can be removed without danger, and that, provided the breeding organs are in a healthy condition, the cow with very few exceptions becomes a breeder. It is of course well high impossible for one not skilled in veterinary science to ascertain whether a heifer is or is not a total non-breeder. Our own practice, which has the merit of simplicity, may be of some advantage to other farmers, and in most instances it has proved successful. In the event of a heifer not breeding after several trials we (if possible) try another bull, while, if she is in heavy flesh we reduce it and administer a dose of salts; should this not avail we examine her when she is in season and if, as nine times out of ten, we find the orifice to the womb is closed we open it gently and gradually until one can insert one's fingers in the same manner as one takes a mare; she is then again bred, and if she does not hold at that time she usually does at the second or third time following. With regard to cows breeding we have found the following results which may be of interest. (1) That where the oestrus is not exactly opposite to the entrance to the vagina there is considerable difficulty in getting the animal to breed. (2) That cows and heifers, as well as mares, are not apt to become pregnant immediately after being turned out to grass or immediately after being taken off grass.