

that when the high-grade and the poor quality are put in the one lot, the market price of the whole is brought down to the level of the inferior. Mixed good lots go at bargain prices to buyers, who often make profits by sorting and selling the different qualities separately. Sometimes one market, one town, or one merchant, can do with a quality which would be unsalable to the customers of another. There is immediate profit to Canadians, and an improving reputation and trade from careful selection and grading on this side.

"There is more money for shippers of all classes of products in sending them closely and properly graded, than in sending them some good, some inferior, some large, some small, some light, some heavy, under the same brand or in the same package.

#### OUR APPLE TRADE.

"Our Canadian apple trade would bring into Canada, I think, twice as much money for the same number of barrels, if the fruit was all carefully sorted, as to size and quality, before it was packed. Small and blemished apples are seldom worth shipping at all; but the best value that can be realized out of them can be obtained if they are packed by themselves. A fine price and a growing trade can be got for uniformly sound, large apples, equally good throughout the whole barrel or box.

#### DEMONSTRATION FIELDS.

"Over 200 of these are now conducted in Great Britain by the agricultural departments of colleges and county councils. The Imperial Government contributes \$35,000 a year towards the maintenance of those carried on by the colleges. Their primary aim is to demonstrate to farmers in the open field some of the lessons derived from such historical stations of research as that at Rothamsted. The authorities on agriculture there say that 'each district furnishes objects for experiments which are mainly of interest to that particular locality.' These stations are greatly appreciated by the farmers in the various localities. They are usually about ten acres or less in area. The more intelligent farmers are those who have to do with the carrying on of these illustration stations for the benefit of the neighborhood.

#### ROTHAMSTED EXPERIMENT STATION.

"I had the pleasure of being taken carefully over the Experiment Station at Rothamsted by Sir John B. Lawes, the one authority everywhere acknowledged as foremost on agricultural questions. He explained to me many of the investigations which he himself has personally supervised and conducted for over sixty years. His almost unabated vigor of mind and body may be illustrated by his occasional remark as we walked during the afternoon: 'I hope I don't tire you by going over so much.' It was not only a great lesson in agriculture, but a superb, unassuming instance of the delightful old English hospitality and courtesy even to strangers. His colleague, Sir Henry Gilbert, who has managed the laboratory and chemical part of the investigation since 1842, went over the fields and through the laboratory with me another day.

"I had the benefit also of visiting illustration stations with Professor Wood, of the Agricultural Department of Cambridge University, and Dr. Somerville, of the Durham College of Science. Dr. Somerville has been carrying on investigations into the improvements of pastures. By a light application of Thomas-Phosphate, a three-acre plot is said to have been improved to carry twice as many sheep and yield nearly twice as much mutton per acre as the adjoining plot of three acres untreated. That was not due to an increased yield of produce on the field, but to an improvement in the quality of the herbage. When a part of each of the plots was cut as hay, there was little difference in the yield per acre. The application of phosphates had produced a plentiful growth of white clover on the treated plot; whereas clovers were hardly visible on the other one. There had not been any sowing of clover or grass seeds on the field. It was an old permanent pasture. I saw similar results in a large field carrying cattle on the same farm. The 'Stations of Field Demonstration,' as they are called, impressed me as being among the most useful, practical and economical of all the work carried on in Great Britain for the improvement of agriculture. To say the least, it was gratifying to find the foremost authorities in England in scientific and practical agriculture in full accord with what I have been advocating lately for Canada.

#### EDUCATION THROUGH MANUAL TRAINING.

"I gave some time, when in the cities, to looking into the newer developments of education in England along the line of manual training in schools. The training is chiefly in woodwork; in a few places in ironwork. The object is not the turning out of boys with a trade, but the education of the boys in natural ways through training them to use their hands skillfully. The most marked results are the habits of accuracy, close attention to the work in hand, self-reliance, and thoroughness which are formed. Her Majesty's inspectors unanimously report that more progress is made in all the book subjects where manual training is part of the course; and also that the work in book subjects is

of better quality. Archbishop Walsh is one of the most earnest advocates of the improvement of schools in Ireland in the same direction. The cost of equipment has not been large. A building costing about \$2,000 has been found sufficient to provide for 400 boys, who are trained 40 at a time. The benches and tools for woodwork would cost about \$500 for the whole school. The development of manual training in schools, instead of exclusive bookish and theoretical studies, impressed me most favorably and deeply as being capable of application in Canada with far-reaching and lasting benefit to the country."

## STOCK.

### The Modern Ayrshire.

#### THE VALUE OF TYPE.

Aside from the dairy qualities that every Ayrshire must have to be worthy of recognition, we wish to discuss the question of the value of type or style. Let us say an Ayrshire should be at least a 40-pound cow, that is probably a fair average as to her daily yield. A 40-pound cow, native or grade, is worth say \$50. Now, when we pay \$150 for a registered Ayrshire, what is it we pay the extra \$100 for, granting the cow is capable of giving 40 pounds of milk a day? It looks to me as if we pay \$50 for an Ayrshire's dairy qualities, and \$100 for her Ayrshire style and type. This statement will no doubt shock some (even some Ayrshire breeders), but if \$50 will buy a 40-pound grade or native cow, then so far as the dairy qualities of the 40-pound registered Ayrshire are concerned she is worth \$50, but her type, her peculiar style, her peculiar markings, the set of her horns, the grace of her lines, makes the difference between a \$50 and a \$150 animal.

There are some men, even Ayrshire breeders, who profess to keep Ayrshires and breed Ayrshires for utility only. They have never stopped to think that style or Ayrshire type is worth more and brings more in the markets than dairy ability. Go

most likely the result of a Shorthorn cross somewhere back in the fifties, when that thing was practiced, and to-day in any Ayrshire exhibit in the States many of the animals look suspicious. Nevertheless, men have grown up from boys with this type in their eyes, and when now, for the first time, they see an up-to-date imported cow or bull come into the ring the radical difference shocks them, and, amid wailing and gnashing of teeth, they condemn her; but in spite of all this prejudice, the few imported Ayrshires that have come to the States within the last three years have proven a leaven that is quickly working, and sure to work, in the interest of the up-to-date Scotch type. I know of several breeders that are converts, and all that stops them from making a large importation is the fact, as they have said to me, that if they should get them, judges would condemn them in the showing; but the seed of corruption, as some of the older breeders would style it, has been sown. Photos illustrating champion cows of Scotland, with their up-standing horns, and mostly white, are beginning to look attractive. A cow with drooping horns don't look as attractive as she did, and they want to get bulls that are more like the Scotch type, although some of them can not screw up their courage to the point of going the whole figure. Nevertheless, there is a marked tendency among the Ayrshire men in the States to come into line, and when they do the Canadian breeders want to be ready; and while their stock may meet with prejudice at our fairs, and their prizes may be less than they deserve, they can do the Ayrshire interest no better service than to send to the States a representative herd, even if the Ayrshire men have to put their hands in their pockets to make up a loss in expenses over prize money. I repeat that if the Canadian breeders will make an effort in this direction now, I think it will be a good investment. Let me admonish them, whatever they do, to breed to the highest standard. In the Scotch breeders you have an example of the best breeders of dairy cattle in the world. There, as here, it ever has been, and ever will be, the up-to-date, most stylish, most perfect formed animals will bring in the dollars, while breeders who scoff at the idea of style must be contented with the cents. I may repeat also, in closing, that if the Canadian breeders of Ayrshires will breed up to the highest standard in type, they will produce a dairy cow that is superior to the Scotch animal, because of her better dairy qualities. And when they shall have overcome the general criticism of short teats they will have produced an all-round dairy cow that has no equal in the world, either in beauty, style, grace or utility.

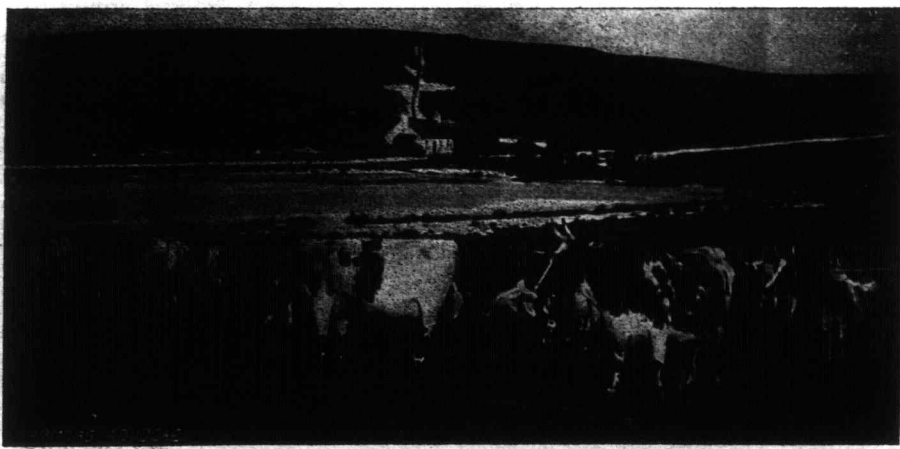
Wishing the Ayrshire breeders of Canada the greatest success, and that their grand cattle will soon take the high rank in the States that they so richly deserve, I am,

Very truly yours, F. S. PEER.

### Notes on English Shows.

Throughout the past showyard season the representative of the FARMER'S ADVOCATE has been present at many of the principal English summer shows, and from time to time notes thereupon have been given in our columns. We have now the pleasure of placing before our readers the results of some of the leading county shows.

**Peterborough Show.**—At this grand and well-managed show, the two great features of which are the Shire horse classes, the like of which is seen at no other show outside the London Spring Show, and those classes for hunters, which are as large and as good as anywhere in the country. There were eighteen classes for the Shires, in which there were no less than 333 entries; this fact, of itself, making it apparent that the competition, through the whole, was a keen one. But in addition to this large entry, there was also the fact that most, or at any rate many, of the best specimens of the breed in the female section were amongst the competitors, the stallion classes being much smaller than the former. Briefly glancing at the more important results of this show, we record the following particulars: The champion cup for the best Shire horse, either sex, in the yard, was won by Lord Rothschild's grand mare, Aldenham Dame, who thus reversed the order of positions at the Spring Show, London, for thereat Dunsmore Gloaming won the challenge cup for best mare, but now she has to give way to the undoubted claims of the former grand mare, who, as will be remembered, was R. N. for that honor. Hitchin Ringleader, Mr. A. Ransom's grand two-year-old stallion, practically an unbeaten horse, led in his class. Lord Rothschild's yearling colt, Victor of Hitchin, went easily to the top in his class. This colt is one of the greatest merit and promise. Bury Harold won in the tenant farmers' class of yearling colts for Mr. J. Rowell, who, though a tenant farmer, is one of the foremost breeders of these horses in the country. There were three-and-twenty yearling fillies, a grand class, Mr. W. C. Goulding leading the way. Mr. F. W. Griffin, another of England's typical tenant farmers, won easily in the open two-year-old filly class, against all comers, with Grand Duchess, a great filly. Boro Royal won easily in a class of three-year-old fillies which were of great merit. Twenty-two entries were made in the mare and foal class, Sir J. Blundell Maple's (Bart.) Wykeham Mable taking the lead. In a class of twenty-two, Lord Rothschild's grand



THE BARCHESKIE HERD OF AYRSHIRES.

PROPERTY OF MR. ANDREW MITCHELL, KIRKCUDBRIGHT, SCOTLAND.

to any auction of Ayrshires and see that it's not a question of simply being a registered animal that makes such a great difference in the price of a pure Ayrshire, or grade of equal value at the stall. In fact, there are registered cows with good pedigrees that will not bring as much as a grade, because of inferior milking qualities, but see an up-to-date, stylish, typical, modern Ayrshire—a 40-pound cow or over—come under the hammer, and up goes the price one, two, three, four, and five hundred dollars, as was demonstrated at the Drummond sale last spring.

Now, an animal is worth what it will bring, and if Ayrshire breeders want to get the highest price for their animals, they may as well face the facts and breed for style, and the most modern style at that. Scotland sets the style of Ayrshires, as Paris sets the fashions in dress. Call it foolish or duds, or what you like—the breeder who produces it in his animals will be the man who makes the breeding of Ayrshires a success. I need hardly say that of course they must have dairy capacity, and in this respect the Canadian Ayrshires are quite superior to the Scotch Ayrshires. By the use of imported Ayrshires, the Canadian breeders can bring out the style, or up-to-date Ayrshires. They will ultimately have better cattle than can be bought in Scotland. In the States there has been a great laxness among Ayrshire breeders in regard to breeding to type. The simple truth of the matter is, they are waking up to find themselves so far behind the times that some are talking of American type, and others ridicule the Scotch type altogether. It's a question of sour grapes. They are, many of them, out of the race altogether. They have been breeding along after utility, and have, it must be said, a lot of rare dairy animals; but, alas, they are not salable for anything like the prices they would be if they had kept up-to-date in style. They hate to acknowledge this; and we have seen some awful work in the showings in the States in late years, where, as last year, I was informed a first-class Canadian Ayrshire herd went begging for prizes because the judge did not like their light color and upright horns, and found them a little heavy handers. The fact was he was used to seeing nearly solid red Ayrshires with crumpled horns,