"*Breeders' Gazette,*" gives the following as the order of excellence of dairy breeds based on herd-records published by American experiment-stations :

As to total annual milk yield : 1st, Holsteins ; Shorthorns second, and so on.

Total annual butter-fat : 1st, Jerseys and Shorthorns, equal ; 2nd, Guernseys, etc.

Cost of food a year : 1st, Guernseys ; 2nd, Shorthorns, etc.

Cost of food required to produce 100 lbs. of milk ; 1st, Shorthorns ; 2nd, Guernseys and Ayrshires, equal, etc.

Cost of food to produce 1 lb. of fat : 1st, Guernseys ; 2nd, Shorthorns.

Upon the whole, our pet English dairy-breed does not come out so badly as some of the American papers try to make out. In the above records, the shorthorn holds the first place twice, and second place thrice, and we need not say which is the most valuable when the days of their milk-production are overpast.

We mentioned a few numbers ago that the Experiment-farm at Ottawa was about to import a herd of Dairy-shorthorns ; since that time we have heard nothing more of it. Would Mr. Grisdale be good enough to let us know if any steps have been taken about it ?

"Adulteration."—"Ground" spices have for many years been forbidden entry into our household, and we find by the last report of the chief Analyst at Ottawa, that we were fully justified in our "barring-out."

Complaints having been made by a large wholesale firm in England about the quantity of adulterated cloves that found a market in the Dominion, Lord Strathcona interested himself in the question, and samples of both whole and ground cloves were collected and analysed.

Out of 19 lots of whole cloves, three were found to be deficient in volatile oil ; while out of 22 lots of ground cloves, only seven were found to be genuine. If all ground spices are in the same condition when mixed with our Christmas puddings and mincepies, we fear that a cook who adheres strictly to the weights and measures of her recipe-book will find the flavour of her dishes below par.

"Practice."—Liebig was the first agricultural chemist to explain what element in bones had the effect of increasing the yield of crops ; but bones were used in agriculture long before Liebig was born. Similarly, as the Editor of "Hoard" writes : "Once in a while, theory and practice don't agree, particularly where poor chemistry and physiology come together. Oats and bran have almost exactly the same feeding value according to the analysis, yet feeding trials show that oats are worth 10 per cent more than bran as a fat producer. Why ? Well, who can say ? Not the chemist, with all his test-tubes and chemicals. Not the physiologist, for with all his knowledge of what the cell does, he is as ignorant as the rest of us why the cell does it. We only know that the digestive system of the cow will get 10 per cent more value out of a quantity of oats than out of the same quantity of bran."

"Varieties of oats."—Several new varieties of oats have been under experiment by farmers in Scotland for the Highland Society. The following are the kinds tried in 1898, alongside of the well-known potato-oat, with the yields of each in bushels of 40 lbs.:

The Waverley, 99 bushels ; Tartar-King, 92 1-10 ; Pioneer, 86 1-6 ; Potato, 61 3-10.

In 1899, the yields were :

American Beauty, 44 1-2 bushels ; yellow, 43 ; Abundance, 40 ; Potato, 39 1-5 ; Tartar-King, 39 1-4 ; Pioneer, 36; Newmarket, 24. A poor season must 1899 have been for the Scottish oat-crop.

"Worth growing."—We used to grow some pretty bulky crops of mangels in the "forties," in England, but they could hardly compete with that bought by Mr. Hatch of Early, near Reading, Eng., from Mr. T. Chettle. The crop was sold, by