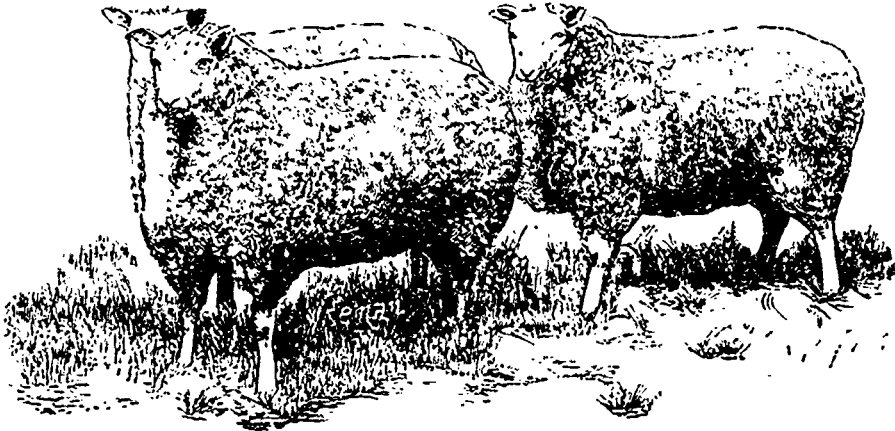


quite as much to be avoided as are good pedigrees to be desired. A good pedigree has often been defined by the writer hereof as one which commences with a good animal and runs back through an ancestry all distinguished for unusual excellence for many generations, and the longer such pedigree is the better. It is important to know that the male which is to be placed at the head of a stud, herd or flock should himself be a good one; it is important to know that his two parents, and four grandparents, and eight great-grandparents were also distinguished for excellence in the points that it is desired especially to have transmitted. A pedigree, to be of any particular value, must be something more than a mere string of names. Instead of accepting the fashions that titled aristocracy may have set for us, it is vastly more important to ask: Do his steers make more and better beef from the same food than ours? What is the butter record of his cows? Have his horses proved themselves winners? Are his sheep more famous for wool or for mutton than ours? Are his pigs hardier, and do they produce sweeter hams and better bacon than ours from the same food? It is by such practical questions as these that we should try pedigrees, and we should be infinitely more concerned to know whether the immediate ancestors of an animal have

the beasts could consume, and the other lot 28lb. per day each of silage, made partly from clover and rye-grass, and partly from the product of "a leafed hained" (1)—whatever that may mean. Both lots received 4½lb. per head daily of mixed linseed and cotton cake. At the end of a month it was found that the silage-fed animals had increased in live weight 48lb. per head on an average, while the turnip-fed lot had increased only 18lb. per head. As this extraordinary difference was attributed to a change of diet the result was excluded from the record, the experiment being deemed to have commenced after the second weaning. Four weeks later the silage-fed lot had increased in weight 25lb. per head, while the other lot had lost 2 2-3lb. each. At the end of another four weeks the cattle fed on turnips had done better, having gained 53 2-3lb. each, against 42 1-5lb. per head increase in the case of their rivals. Both lots were then turned out to grass, and the important part of the experiment came to an end. When the beasts were killed it was found that those that had been wintered on silage were, on an average, 2st. 11lb. each heavier in carcase than the others, and dressed 71 3/4 per cent. of their weight at the commencement of the experiment, against 67 5/4 per cent. for the turnip-fed lot. There is one point of similarity to be noticed between



No. 3.—Mr. George Turner's shearing Leicester rams.

been distinguished for especial excellence, than to know that the line of descent is straight from Booth or from Bates, or any other noted breeder of former years. The very *main* row of pedigree consists in the *qualities* of the ancestry all along the line. If selecting stock from which to breed trotting horses, look at the records of the winners on the trotting turf, and judge of the merits of the ancestry accordingly. If for the dairy, search for the *butter* or *milk* records of the ancestry. This is the essence of pedigree as applied to stock-breeding. — *The Breeder's Gazette*.

### ENSILAGE.

A set-off to the results of the cattle feeding experiments at Woburn, so unfavourable to ensilage, is to be found in the new volume of the Highland and Agricultural Society's "Transactions." The Ensilage Committee of the Society selected twelve head of cattle for experiment, dividing them as equally as possible into two lots. The whole of the animals were at first fed on silage, a very sensible precaution, as it familiarised them with a food that would otherwise have been strange, and possibly at first distasteful to them. After two lots had been divided, one lot received a daily allowance of 30lbs. of Aberdeen yellow turnips and as much oat straw as

the results in Scotland and those at Woburn. In both cases silage, after a time, appears to have cloyed on the appetite or to have injured the digestion of the cattle, as they did worse on it the longer they were kept on it. This is a point that should be further investigated.

### SOME "SARCHIN" QUESTIONS.

The following letter is from one of the most thoroughly scientific farmers of our neighboring province:

*Mr. Editor:*—I have been following, with what attention I could, apart from my official duties, your valuable articles on artificial or commercial fertilizers. It strikes me you have not stated exactly how much of the elements—nitrogen, phosphoric acid and potash—are needed, say on common New England light soils, (1) for a full potato crop, and (2) for a corn crop—nor what difference you would make (3) for a corn-fodder crop. (4) Please give the quantities required in pounds, as we don't all know how much a barrel contains. Please state also what quantities should be used (5) for a

(1) "A leafed hained" means a grass-field that has been pastured, and afterwards been kept free from cattle until the herbage has grown again.  
A R J. F.