

it a recognized standing, should do a good deal towards improving the general standard, tending to the elimination of the poorer specimens by the selection of choice animals only for breeding purposes, the result being an appreciable increase in the value of this class of farm property in the province.

Gazette.

TREE-PLANTING.

Near Aberdeen, N. B.,—that means North Britain, not New Brunswick—young plants of Scotch firs were sold for four pence a thousand, sixty years ago!

TURNIP-TOPS

What is the value of turnip- and carrot-tops? Of course they are good for sheep, in moderate quantities, or for any other animal that gives hard excrements like deer or rabbits; but for horned stock, with their soft dung, I fancy the tops of our root crops are rather injurious than otherwise. For cows, they probably increase the flow of milk, but at the expense of quality; and they certainly won't put any flesh on a bullock's bones. If I had no sheep, I should plough the tops in.

Sheep at the Smithfield Club.

I am delighted to say, that the Champion pen of sheep at the December exhibition of the Smithfield Club in London were Mr. H. Lambert's Hampshire Down, aged 22 months. The gross weight of these superb sheep was 840 pounds, or 280 pounds a piece. So, once more, the Hampshires have beaten all the long-wooled and short-wooled breeds of England, and, therefore of the world.

The first prize pen of Hampshire-down lambs weighed 224 lbs each; but I had better give these weights in tabular form

	lbs.
Hampshire-down 22 months old.....	280
“ “ lambs, 10 months.....	224
Southdown 4 years old ewes.....	205
“ lambs 10 months old.....	173
Shropshire 22 months old.....	236
“ lambs 9 months old.....	130
Oxford lambs, 9 months.....	183

To compare the weight of these lambs, the Hampshires beat the Oxfords by 41 pounds a head; the Southdowns by 51 pounds a head; and, nearly doubling the weight of the Shropshire lambs, beat them by 9½ pounds a head!!! My figures are taken from the English Agricultural Gazette of December the 13th.

Of the long-wools, the Lincolns seem to have been the best. Only two exhibitors of Cotswolds, Messrs. Swanwick and Gillett. The fact is, long-wools have seen their day in England, and the sooner they are given up in this country, the better will it be for the exporter.

From my knowledge of the Hampshire-downs, I should be inclined to say, that the dead weight of the lambs would be about 34 pounds a quarter!!! More we can hardly look for than hardiness and such early maturity as this. As for quality, I have bred, fed, and eaten, both South- and Hampshire downs for years, and I do not believe there is any perceptible difference in the flavour of the meat.

A. R. J. F.

The Chemistry of the Farm.

“In the first place let us speak of what the analysis of the soil has done for us. Much has been said of it, and it ought to tell us, of course, the sorts of manure required for our dif-

ferent farms. But I will tell you that I have had soils analysed, and I have never received the slightest benefit from the advice the chemist has given me as to the sort of manures to apply. I know that is saying something which may offend our chemical friends here; but I really never did. It is very disappointing. I will give you a wonderful illustration of it in an experiment I say conducted this year on a chalk farm in West Norfolk. A foot of soil was analysed, and there were supposed to be by the chemical analysis three tons per acre of potash, all of which was more or less available as a fertiliser. Three cwt. per acre of nitrate of soda was applied to a piece of barley, and that extraordinary dressing of nitrogen only produced nine bushels—only nine bushels altogether. Two cwt. of muriate of potash added to the three cwt. of nitrate of soda produced fifty four bushels. There, you have a difference of forty-five bushels per acre by the expenditure of 16s. per acre on this potash, which was added, not by the advice of the chemist, but simply by the judgment of the practical farmer who farmed the land.

Now then, I go on to say, that as far as we are informed a long series of experiments have proved that nitrogen is good for our grain and phosphates for our roots. Geology has come in to help us with regard to a certain discovery—the discovery of coprolites—and chemistry, again, told us how by the use of acid those coprolites were to be reduced. We went on for twenty-five years thinking this was all right, when up jumped a certain chemist (1) of standing and experience in the North, and said that we had been all wrong—that we should not dissolve coprolites by sulphuric acid, but grind them into fine flour. Now here is an illustration of the stupidity of continuously applying superphosphate in the growth of roots. This year in Norfolk we have been experimentalising under the Chamber of Agriculture, and I will give you the results of two remarkable experiments. Four hundredweight of superphosphate actually grew two tons less than nothing at all—two tons less than no manure at all. The addition of half-a-hundredweight of bone flour, which costs 3s., increased the whole by seven tons. That is to say, it grew five tons more than the unmanured portion, and seven tons more than where the superphosphate was applied alone. Besides the good which it did in producing an extra seven tons of roots, the addition of the bone flour to the superphosphate had the excellent effect of making the superphosphate work remarkably well in the drill. Then the application of three hundred of salt to mangold, which cost about 3s., actually produced five tons more roots. But these interesting little experiments were not made nor even suggested by the chemist; they were rather objected to by the Chemical Committee of the Royal Agricultural Society; they were the outcome of some practical minds told off by the Norfolk Chamber of Agriculture to conduct experiments. This shows that although we are very much obliged to science, we cannot follow it blindly, and that after all there is not so much wrong in our practice as some people would have us believe.”

The above extract from a speech by Mr. Clare S. Read, formerly M. P. for Norfolk, England,—the tenant farmers' member—will strike many of our readers as bold in the extreme. I need hardly say that, to a great extent, I agree with Mr. Read's positions. I have over and over again expressed my opinion on the subject of the utter uselessness of the chemical analysis of soils, and advised the practical analysis by means of plots of land treated with manures containing, severally, either nitrogen, or potash, or phosphoric acid, or all three. The Liebig theory I have, often I fear, most irreverently laughed at.

I am glad to see that, at last, a man, who is not only a

(1) Jamieson