

We recollect it in its earlier days, when the average percentage of nitrogen was 14, and of phosphoric acid 12, with perhaps 4 or 5 of potash, and marvellous effects it had on our lighter soils in the south-eastern counties of England, as well as in the moister climate of the west of Scotland.

Phosphates of most kinds, too, have gone up 25 per cent.

*Nitrate of soda* shipments, this last season, have exceeded the demand by from 30,000 to 40,000 tons; the price in Liverpool is now £7 10s. to £7 15s. per gross ton, equal to about \$1.65 per 100 lbs., cheap enough, considering that 250 lbs. make a fair dressing for an acre of wheat, and 200 lbs. on an acre of mangels will add some tons to the crop. Add 15 per cent for dealer's profit, and \$5.00 for freight and insurance, and it will easily be seen that it could be sold here for \$45.00 the 2,000 lbs., or \$2.25 a hundred pounds.

*Sulphate of ammonia*, at present, is worth, in Liverpool \$48.60 a gross ton, and should be sold here for about \$55.00 a ton of our computation. Not so much bones and bone-ash in market as usual, owing to less exports from South America; prices up from \$4.00 to \$4.25 a ton. Mineral phosphates up from 20 to 25 per cent.

*Weather in England.*—How the rainfall varies in England! In Holker Gardens, Lancashire, there fell in August last 8 inches of rain, i. e., one-third of the whole year's rainfall in the eastern division of Wiltshire, in which county, there only fell in August, the great harvest month, 76/100 of an inch! The total fall, snow included, in the two counties, was:

In Wiltshire . . . . .	24. 48
" Lancashire . . . . .	45.298

In the latter part of the island the farmers are beginning to dread a return of the "fluke" in the liver, which played the very mischief with sheep, hares and rabbits in the 'eighties.

*Milk analysis.*—We append a very interesting letter, and the reply, on a disputed point in the purity of milk, which we take from the *English Agricultural Gazette*:

"I have heard from the company to whom I sell my milk, in reference to a sample taken from a churn at Paddington, as follows: Total solids, 12.05; fat, 3.90; solids free from fat, 8.15; showing 7 per cent of added water. Do you think

that a sample showing such a percentage of fat as 3.90 would be likely to be so deficient in other solids as mine is represented to be unless water were added? Of course, I send the milk off pure. My cows average nearly 9 lb. per day of feeding-stuffs, principally decorticated meal and cake, and I am quite at a loss to understand the result of the analysis, unless the milk be tampered with in transit. If you would reply to this, and could give me any hints in explanation or assistance, I should be greatly obliged. My point is that I cannot understand how milk showing such a percentage of fat, should be so deficient in other solids."—C. H. M.

"The chemist who analysed your milk adopted the standard of 8.5 per cent for the solids other than fat, and because your milk does not come up to this he returns it as watered in proportion to the difference between this figure and 8.15. Your case is quite a common one, and illustrates once more the unsatisfactory state of our 'standards' in analysing milk. Prof. Stokes, a London analyst, recently took samples from cows himself and found that a very large proportion had milk with 'other solids' considerably below the 8.5 standard, while the writer of this reply has had several instances of the same within his own knowledge. Your milk is perfectly natural, and we do not believe it has been watered, either at the farm or *en route*; it is the chemist's standard which is at fault. The only remedy we can see for this state of matters is to endeavour to get the fat and total solids only taken into account in an analysis. So long as milk has 3 per cent of fat or over, and a total of 12 per cent of solids or over, it is satisfactory, and the 'other solids' may be left out of account."

*Improving an Orchard.*—A correspondent of the *Journal of Horticulture* gives a remarkable example of the renovation of a very old and worn-out orchard in Ireland. It consists of three acres, and came into the possession of the Rev. Mr. Smith, of Oaklands, Boyle, in 1894. The trees, about 140 in number, were then about eighty years old, badly cankered, and covered with lichens. The crop of 1894 was worth only £4 10s. and Mr. Smith decided to plant some new trees, and to graft those of the old trees that were fit for the purpose. Consequently, in the autumn of 1894 he bought 100 young trees of Bramley's Seedling and planted them. In the April of 1895