

distinguish them for a long time by the differences in the colour of the wool, and this can sometimes be seen through the artificial dressings employed. Rich clay lands produce the best wool, and loam comes next, while the hard dry soils on chalk or sands yield produce of rough quality. The limpid pure water of limestone regions cannot be used for wool-washing purposes, on account of its hardness making it unsuitable for this purpose. The length and evenness of the fibre of course depend on the food supply, but the indefinable "quality" is a matter depending on the soil where the sheep pasture. Thus Sussex and Surrey wool is of better quality than that from Essex or Norfolk; Leicester and Nottingham better than that of Oxford and Bedford; and Roxburgh wool better than the Lothian material. Even individual farms may have a known and fixed special quality, as is exemplified by the sales in some parts of the Highlands of Scotland, where the merchants buy according to the known "character" of the clips, and without ever seeing the wool at all. In such a case individual management, feeding, use of well-bred rams, &c., must all be reckoned as subordinate to the natural influence of the soil and surroundings, which stamps the individuality.

It is curious to note that the sheep of the eastern counties of England have all bare heads, while those of the midlands and west are well covered up with wool, though it cannot be said that this is a result of soil influence so much as climate.

The diseases of sheep are very much influenced by the nature of the grounds over which they pasture. Liver-rot is much more prevalent on heavy clay soils than on those of the lighter class. An instance of this occurs in the investigations reported in No. XXXIII, of the Royal Agricultural Society of England's Journal. It was found that the fluke was very prevalent on the Oxford clay, but not at all on the neighbouring calcareous formations. Foot-rot follows the same rule, and is most prevalent on heavy wet soils, and almost unknown on sandy or rocky pasturage, or on the chalk. A correspondent of the *Live Stock Journal* has pointed out the unsuitability of mangels as a food for rams or widders on the ironstone formations of the midlands on account of a deposit of a salt of lime in their urinary organs, requiring the dosing of the animals with small quantities of nitrate of potash as a preventive.

Instances might be multiplied where the well-being of the flock depends entirely on the nature of the soil formation, and there is no doubt that many readers of this article could give facts from their own experience of modifications of the nature of breeds, and differences of management, all depending on, or due to, differences of soils. Modern farming is pretty much an interference with, or a guiding of, natural processes, and the more a man follows the leading of nature the more successful he will be. The nature of the soil is one of the first consideration to a farmer, and the more he knows of its influence on his flocks and herds the better able will he be to make their management a success.

P. M.C.

#### BUTTER AND CHEESE.

LONDON, FRIDAY.—Trade for fresh butter is rather dull, Aylesbury firsts making 13s., second 11s., and thirds 10s., west country at 11s. to 12s. per 12 lb. Foreign butter market dull and depressed. Friesland quoted, 84s., 86s., and 88s. Normandy, ordinary best baskets, 98s., extra mild, 102s. Present top prices of Danish 112s. to 114s., but the price in Copenhagen having declined 5 kr. on this week's shipments, arrivals next week will be 4s. to 5s. under this week's rates. The stock of English cheese is very small. Finest Cheshire from 78s. to 84s.; medium to fine, 48s. to 70s., Derby, 60s. to 66s., best double Gloucester, 66s. Somerset, 56. to 66s.,

finest Cheddar, 66s. to 74s.; others, 56s. to 60s.; and loaf, 62s. to 66s.; best double Wilts, 66s. medium, 46s. to 50s. American cheese dull of sale and casier; best coloured, 52s. to 56s. Dutch steady in value but quiet.

CHEESE FAIRS.—At Leicester on Thursday there was a very small supply. Choice dairies were very scarce, and where the cheese was true of flavour and of rich buttery quality, trade ruled very brisk at an advance of 7s. to 10s. per cwt., while in good useful lots the advance established ranged from 5s. to 7s. 6d. per cwt., and in the case of inferior lots 2s. 6d. to 5s. per cwt. The best dairies made 85s. to 86s. per cwt., and good useful cheese ranged from 75s. to 82s. per cwt., while secondary qualities made 70s. to 73s. per cwt. and inferior 63s. to 68s. per cwt. Stilton cheese was in strong demand, and the best qualities sold very freely at 2d. per lb. advance, secondary qualities 1½d. per lb., and inferior 1d. per lb. dearer. Choice dairies of Stilton cheese made 10d. per lb., good useful lots 9½d. per lb., and secondary and out of condition dairies 7½d. to 9d. per lb. The whole of the dairies shown were quickly cleared off, not a single lot being left unsold. At Salisbury on Thursday good Cheddars made 55s. to 58s., fine ditto 60s. to 65s. At Lancaster on Wednesday the bulk of the better sorts realised 70s. to 72s. 6d., other kinds 62s. to 70s. At Chippenham on Friday—Cheddar 50s. to 60s., Somerset 44s. to 54s., thin 30s. to 48s., and half-skim 20s. to 30s. per cwt., milk butter 11d. to 1s. per lb. retail.

#### THE CATERPILLAR SCOURGE.

That some persons who are in "happy ignorance" of the destructiveness of the caterpillar of the Winter Moth *Cheimatobia (brumata)* in orchards and fruit gardens should regard various statements that have been made respecting it as not untinted with exaggeration is only what might be expected. The persistency of the attack of the enemy, its extraordinary increase, its terrible voracity and remarkable invulnerability to ordinary insecticides, can only be appreciated by those who have either had to wage war against the foe or seen the desolation it leaves behind after an invasion. Mr. J. Higgins, whose trees are free from insects, evidently thinks it right that he should have apples, and other persons caterpillars, and he almost implies that those who are victims of their attacks are either visionaries frightened at their own dreams, or that they deserved the visitation as a judgment to them for killing birds. He cannot know that where birds abound and are protected that caterpillars much more abound, and when unmolested leave the trees as destitute of fruit and foliage in May and June as his own are at Christmas. I certainly do not think it right that insect-eating birds should be destroyed, but who will say it is wrong to destroy caterpillars where there are not sufficient birds able or willing to eat them? Those who do say so must be content to share with the pests in the wholesale destruction of human food, and, if they can, be thankful.

Some kind friend has sent me a "cutting" from a newspaper in which Mr. Jabez Hogg says: "Syringing trees with a solution of a deadly poisonous nature is as unreasonable as it is unscientific," and would "settle all bird-life." At Glewston Court, Mr. Campbell's splendid bush apple, pear, and plum trees have been syringed twice a week for the past two months, yet in the plantation chickens are kept, and have free range through the plantation for eating the caterpillar that are shaken from the trees, and I do not know that any of the birds have been "settled." Moreover, the practice denounced as "unscientific" is advised officially by Mr. Charles Whitehead of the Intelligence Department of the Board of Agriculture,