

cake, linseed cake, lentils, beans, barley, oats, and maize. They were also receiving roots and hay. What upset the sheep? The over-proportion of flesh-forming substances contained in the first four as compared with the fat-formers. Why? This brings us back to the shepherd's remark: the sheep are making blood "too fast." They are making blood too strong. "When there is an undue proportion of flesh-formers in the food there is risk of too much of the nitrogen contained in them becoming taken up in the blood. When blood becomes surcharged with nitrogenous matter it "presses on the brain." The shepherd notices the effect of this, as the sheep becomes listless and dull. The shepherd knows nothing about the nitrogen, but he knows that if the sheep is left to itself it will most probably die a painless death in a little time. It will, because, unless the pressure is relieved, it will cause paralysis, the brain will become congested, and hope of recovery is very remote. The shepherd very properly "weakens" the blood by taking some away. If he is in time the sheep may be saved; if congestion has taken place, it is very unlikely that it will live. This points to the necessity of bleeding promptly. If the sheep does not recover, it is a mistake to leave it unwatched, as it may die at any moment. In all bad cases it is best to convert the sheep into good mutton rather than risk its dying and becoming useless. The farmer recognises that the sheep are "doing" too fast, and orders the corn to be knocked off all the sheep in the same fold for a day or two. This is correct when the effect of the overdoing is noticed. It is better, however, that the ailing should be avoided. It is not necessary although the sheep are fed at high pressure. Sheep for exhibition purposes are fed highly, but good shepherds rarely lose one from this cause.

It is well to notice under what conditions the ailment presents itself. When lambs are receiving their mother's milk in addition to grain "ad lib.," provided that grain is not too nitrogenous, they do not suffer in this way. One reason for this is that their frames are growing rapidly, and a considerable amount of food is required to build them up. A fattening leg (1) has little frame to build up. It is less frequent when sheep are being fed on soft green fodder than when they are on roots, because the congestion is doubtless somewhat induced by stomachic troubles, and chunks of roots involve more stomach work. Large lumps of cake irritate the stomach, and point to the necessity of giving it in finer pieces. These conditions do not wholly influence the weakness; they only predispose the animal to it. The real cause must be looked for in the excess of nitrogenous matter in the concentrated food. In the mixture quoted earlier in the article, cotton cake, linseed cake, lentils, and beans contain a large proportion of nitrogen; oats a rather high, barley and maize a low percentage. The albuminoid ratio, although one which is not a thorough guide, reveals much that is advantageous to follow within certain limits. In building a house it is necessary to have at hand bricks, mortar, wood, &c.; but extra labour is involved when twice as many bricks are brought together as are required. So, with feeding mixtures, an excess of nitrogenous matter is waste; and worse—it is inju-

(1) When a lamb is weaned it becomes a leg.—Ed.

rious, as it throws an excessive amount of work on the kidneys, and if they do not succeed in getting rid of the surplus it renders the blood unhealthily surcharged with it. If there is a great excess of carbonaceous matter there is waste, because of the deficiency of nitrogenous matter to work up with it.

When sheep that are being forced by large quantities of concentrated feeding-stuffs suffer from paralysis it is a sure sign that there is too much nitrogen in the food, and the nitrogenous foods should be partly withheld. It is better to prevent than to cure. Feeders should, therefore, use such substances as contain a moderate amount of nitrogenous matter. The topping-up of animals consists largely of laying on fat, for which fat-producing foods are best adapted. Linseed cake, when given in moderate quantities, is an excellent, almost a typical food, but if given at the rate of more than 1 lb. per day it becomes risky. The oil it contains is beneficial not only for the fat which is produced from it, but it tends to keep the bowels open. A much better and safer mixture than the one quoted would be made by taking out both the lentils and the cotton cake. The maize and barley should certainly be retained. Whenever the corn is stopped for a day or two the sheep receive a check they do not get over for several days; the object, then, of the feeder should be to force the maturing of his animals by giving them foods which will increase their weight safely. This is not the case where the food is of too nitrogenous a nature.

W. J. M.

"Eng. Ag. Gazette."

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#### LONDON MARKETS.

Mark Lane: Prices current; Sept. 8th	
Wheat, per 504 lbs.; British.	s. s.
White...	28 32
Red...	31
London flour per 280 lbs.	28 —
Barley, malting...	34 45
Barley (grinding)...	18 10
Oats, English per 8 bushels	15 29
White pease...	32 36

#### FOREIGN

Wheat—Manitoba...	30 32
Canadian white pease...	— 25

Milk-cows, per head, £15 to £22.

BEASTS.	s.	d.
Scotch per stone of 8 lbs.	4	7
Herefords do do	4	0
Wash (rants) do do	4	4
Shorthorns do do	4	1
Fat cows...	3	6

#### SHEEP.

Small Downs per stone of 8 lbs.	5	0
Half-breeds and Scotch do do	5	0
Lamb trade over.		
Calves nominal.		

#### BUTTER.

Fresh, (Finest factory) per doz.	
lbs. ....	12.6 to 14.6
English Dairy-butter fresh...	varies
Irish (creamery) ...	11.4s.
Danish...	12.5s.

#### BACON.

Irish...	54	50
Canadian .....	35	44
American...	48	49
Irish hams (small)...	88	—
Hay, per load of 2016 lbs.	88	—
Prime meadow...	88	—
Prime clover...	90	95
Straw, per load 1296 lbs.	34	36
Hops from 550s. to 103s. per 112 lbs.		

#### Notes by the Way.

FLAX is said by some not to exhaust the land more than a crop of oats does; but, there is one thing in which oats and flax differ. Whereas oats are, generally speaking, consumed on the farm, both grain and straw, flax is, generally speaking, sold off the farm, both grain and straw. Hence the old clause in most farm-agreements in the South-East of England; that no flax be grown on the farm.

GRASS IN STUBBLES.—Where early fall-ploughing is practised, a great blot is that the grass in the stubbles is hardly ever buried out of harm's way, (1) and, if the weather of latter autumn proves fine, it grows freely and binds the furrows together, giving a vast deal of trouble in spring to tear them asunder. We were mightily struck with this at St. Thérèse, last month, and pointed it out to our friend M. Bouthillier, who asked for a remedy. We strongly advise him, and all other farmers who wish to have their land work freely in the spring, to fix a "knife," as it is called in Kent, i. e., a small round board, just behind the coulter; (see fig.) this is set so as to pare the top of the furrow about 2 inches wide by 1½ inch deep, which slices the real mouldboard turns over and throws down to the bottom of the furrow, thereby smothering the grass and entirely preventing its future growth. Of course the use of this addition to the plough presupposes that the land is free from stones.

FRUIT.—If grapes can be sent from Australia to England, arriving there with both bloom and flavour intact, though three months from port to port, then, as says the "Farmer's Advocate:" Why not from Canada?

RAPE.—We cannot approve of sowing two crops together, except as in the case of grass-seeds. But, to sow rape in a crop of oats, seems to us an in-

(1) This does not mean coach-grass, or quitch.—Ed.

fringement of good practice. If the harvest is any other but a very dry one, how on earth are the butts of the sheaves ever going to be fit for carting? We, and most farmers would agree with us, say: if you grow oats, give the oats a fair chance to do their best, if you want rape, sow it at the proper season, and you will have "splendid feeding for the sheep," and a good chance of cleaning your land into the bargain.

THE DODDER.—F. C. writes, from Yarmouth Co., N. S., to the "Farmer's Advocate," as follows:  
INFORMATION WANTED RE CLO-

#### VER TROUBLE.

To the Editor "Farmer's Advocate:"  
SIR,—I remember reading in the "Farmer's Advocate" a few years ago something about a weed, or little vine, that saps the clover. I noticed some spots in my grass last season; they have spread considerably this year. I can see no roots that enter the ground, but it clings and mats on to the clover. I presume plenty of salt would kill out little spots? Would fall plowing and some other crop next season destroy it? I think it came with the clover seed.

F. C.

Yarmouth Co., N. S.

This troublesome parasite is the "Dodder," (*Cuscuta Europæa*) and a destructive pest it is. As the enquirer says, it "clings and mats on to the clover", and is introduced with the seed. We should advise great care in purchase of clover seed, and should feel very much inclined to burn the aftermath. We had a small field of red-clover seriously injured by dodder in, or about, 1849, in England, but after the crop was consumed, it never re-appeared. We have never met with it on this side of the Atlantic.

AYRSHIRE AND JERSEYS.—A proposal to make a permanent breed of cattle, by persistent crossings of these two races, we saw in a farm-paper the other day. Now, as Henry Stephens, in his invaluable "Book of the Farm" says:

"Attempts have been made for some years past to cross the Alderney with the Ayrshire, in both ways, putting the Alderney bull to the Ayrshire cow, and the Ayrshire bull to the Alderney cow, but the endeavours to imitate the form of the Alderney cow have not succeeded, and the result has rather tended to produce in both progenies the inferior points of both breeds, as might have been expected; for the Alderney bull has not so good a frame as the Ayrshire cow, nor has the Alderney cow so good a constitution as the Ayrshire bull. The light weights have been attained by the reprehensible practice in all breeding—by starving the young heifers, with the avowed object of making them good milkers, whereas its direct tendency is to injure the constitution of the milking stock. On the contrary, were the heifers bred and reared so as to attain heavier weights and greater substance, they would not only prove better milkers, but afterwards feed to greater weights. The paramount object of the Ayrshire breeder, for profit, ought obviously to be to obtain the largest quantity of rich milk, with the greatest disposition to fatten." Of course, the "Alderney" mentioned here stands for the Channel Island breeds in general. If any one of them