

sustenance; the milk secreted is small in quantity, or if it be considerable in bulk is poor in quality, nor will the most liberal aliment given after the birth of the young one always remedy the evil. Surely, then, it is false economy to put pregnant cows on over restricted diet. Remember, too, that there is no period in the life of an animal in which the effects of insufficient food are more prejudicial than in early years; this is far too often the case with regard to calves. The calf, after a week or ten days, should be liberally supplied with milk, and for six or eight weeks should receive only new milk, from eight to ten pints per day, divided into at least three meals; then skimmed milk may be gradually substituted for a part of the new milk—milk should, during three or four months, form its principal food; then the calf may be gradually accustomed to other sort of diet, such as oat or scorn ground. Calves should be housed at night before the weather becomes cold, after their first summer's grass. Young cattle are generally placed in sheds or courts, but their feeding often receives too little attention; the result is unthrifty coats, lank limbs, and pot bellies—these, again, when they are suddenly put upon a more liberal diet, become liable to various casualties, such as purgative, congestive fever, abortion, epilepsy, and various cerebral affections. When the bulk of the food is insufficient, and the quality poor, the digestion is impaired; thus straw is apt when used exclusively for some time, to cause distention, constipation, wind-fardel-bowels, and afterwards dysentery. When cattle are put up to fatten about their second or third year the evil effects of early bad feeding are apparent by the length of time required for fattening. In milch cows, more than in any other kind of cattle, an unusually large supply of food is requisite, not only to support the condition of the body, but also an overplus from which the milk may be formed. In sheep, insufficient food, produces thinness and tightness of the fleece; coarseness and brittleness of fibre; general debility, emaciation; excessive liability to the attacks of the fly; purgative dropsical swelling; hydatids in the brain; typhoid fevers; and scab. *Change of food*; on the advantages of this we need not dilate, or its preparation, or the regularity which should be observed in feeding. *Exposure to wet*: its most uniform effects are a tendency to diarrhoea and muscular relaxation; there is a marked tendency to dropy and bloating observed among men and animals living in moist localities. Wet weather is apt to induce rheumatic enlargements of the joints, foul in the feet, and quarter-ill. In sheep, the ill effects of exposure to rainy weather are still more decided than in neat cattle; in them it produces diarrhoea, affections of the feet, enlargements of the joints, rot, and such like maladies. *Cold*: Exposure to a moderate amount of cold, and for a limited time, increases the vital energies and invigorates the organic

functions. In excess, it has an exactly opposite effect. It then exercises a sedative or depressing influence, inducing slowness of the circulation, feebleness of the respiratory organs, diminished power of generating heat, stupidity, and death. These are the symptoms which manifest themselves in severe winters, and are seen in all their stages by shepherds, whose pasture grounds are unsheltered, and exposed to piercing cold and scourging winds. *Shelter*: want of shelter exposes animals to sudden and excessive changes of temperature, and to the heat-abstracting influence of cold currents. It necessitates the consumption of a very large allowance of food; and when, as is usually the case with animals badly sheltered, exposure to cold is conjoined with exposure to rain and all kinds of weather, the necessity for an increased supply of food will be still greater. In such circumstances, an unusually large quantity of material is expended in the maintenance of the animal heat: and if this extra expenditure be not compensated for by an increased quantity of food, the animal necessarily loses weight. Amongst the other diseases produced by exposure to cold, are rheumatism, pulmonary consumption, scrofulous tumors, increased loss of ewes and lambs in the lambing season.—*Farmer's Magazine.*

#### CABBAGES.

There is no vegetable from which so bountiful a return may be expected as the cabbage. I have so often told the story of 18,000 heads raised by Mr. Mason of Beverly, on 2½ acres and seen such an expression of incredulity awakened thereby, that I hesitated about mentioning it again, until I heard Mr. Mapes state that he had raised on his own farm the last season, 73,000 head of cabbages on 6 acres, being more than 12,000 to the acre. The only difference between Mason's and Mapes' cabbages, as the story was told was, one sold them at 6½ cents and the other for 3½ cents ahead. I admit I was astonished by the number raised by Mr. Mapes. I remember to have heard the late E. H. Derby say, there was no crop that could be so advantageously grown for the feeding of stock as cabbage. This he said after many years experience on his extensive farm at Salem, Massachusetts. The best approved method, as far as I know, of raising cabbages, is that practised by Mr. Mason. He turns over the sward to the depth of 8 or 9 inches; applies a liberal coating of well fined compost, made in his barn-yard, from material collected on the beach, intermingled with the other materials there gathered; harrows the land until the manure is completely imbedded in the soil; furrows at such a distance as will admit a cultivator to pass between the rows; plants the seed in hills almost one foot apart; when the plants are fairly started, thins them out leaving only the most vigorous one in the hill; and subsequently keeps the ground

well stirred and free of weeds; always resists the first beginnings of the worms. In this way he secures a crop with heads as uniform as so many peas. Such culture I have repeatedly witnessed and know there is no fiction about it. The fertilizing properties disengaged by the decomposition of the verdure, overlaid by the inverted furrows, keeps the plants in healthy condition through the droughts of August and September, and the rich coating of manure applied gives vigor and health to the whole plant. I have never seen a more handsome growth of vegetables than Mason's fields of cabbage.—(*John W. Proctor, in the Trans. of the Agricul. Societies of Mass. 1853.*)

#### FLAX AND BARLEY.

The seed of the Flax plant, or *Linseed*, generally sells for a dollar a bushel and upwards; and were it not for the comparatively small yield—8 to 15 bushels per acre—it would be worth our growing without any regard to the fibre. It is out of the question our attempting to make a profit from the fibre unless we are located near a flax mill; and is of essential usefulness to the Farmer if he is fattening either hogs or cattle. Two pounds a day, boiled and mixed with other food, have a most marked effect upon a fattening animals. Barley, too, is an excellent feed for both hogs, horses, and cattle; and in Michigan, when the oat succeeds but moderately, we wonder that barley is not grown extensively in its place. Properly put in, on good corn land, it will yield from 30 to 45 bushels per acre, and perhaps more. Now, if we can grow both these crops together, without injuring either, we cannot fail to make a handsome profit. This has been done in New York; and why should not we in the West, with far better land, do it also? At least, it is worth our trying the experiment, and finding out what we can do. Who will make the attempt this spring and let us know the results?

Col. Stubbins, of Earlville, N. Y., prepared an acre of ground for barley. After sowing 2 bushels, he then sowed a bushel of flax seed on the top of the other; dragged well, and rolled. He harvested both together with the cradle; thrashed with a machine; cleaned with different sized screens, in the fanning mill, so as to separate the two kinds of seed; and the crop stood thus:—

30 bushels of Barley at 50 cents,	\$15.00
15 " " Flax seed \$1,	15.00
	<hr/>
	\$30.00
Straw, Barley, \$4.00.	
Flax, 2.00	6.00

Thus, the Linseed was a clear net profit. The Barley crop appeared to be as good as if no flax had been sown, for Col. S. had sowed barley on a few acres adjoining of equally good land, and this produced only 30 bushels per acre. Our rich western black loams, of a sandy character, would, we believe, pay well with such a crop. Of course,