

with until the surface is thoroughly dry in the spring.

ON THE PREPARATION OF THE FOOD OF CATTLE.

At the recent Smithfield Cattle Show, I promised to afford early and definite information relative to an experiment at Trimmingham between eight Scots, one-half fed with boiled linseed, the other with raw.

Assured that you will readily afford the medium of your paper, I beg to state, that the bullocks, after three months' feeding, were submitted to public inspection at North Walsham, on Thursday last, and that the superiority was awarded to the raw fed, by a great majority of farmers.

But, admitting the fattening properties of both systems to be equal, the cold must possess the greater advantages:—1st, because firing is dispensed with,—2ndly, because the mixture does not turn sour,—and 3rdly, because the cattle eat it without waste.

It is my intention to continue the experiment until the animals are ready for market, but with respect to the rest of my cattle, I shall substitute the cold for the hot food.

The object of either process is to form the linseed into gelatine, and to incorporate it with any substance, or fibrous material, that will act as a vehicle to the stomach, and as a reconveyance to the mouth for rumination.

Gelatine, proper for cattle feeding, is obtained either by boiling linseed reduced to fine meal 5 or 10 minutes; or by soaking it 25 or 30 hours in cold water.

The method of making the cold compound with which the bullocks in question are fed, is precisely the same as that described for hot in page 234 first edition of my book, and in 245 of the second, viz:—

The half of a large tub being conveniently placed, a bushel of pea-straw, &c., or hay and turnip tops cut into chaff, is put in. Two or three hand-cups-full of the jelly are poured upon it, and stirred up with a three-pronged fork. Another bushel of the turnip-tops, chaff, &c., is next added, and two or three cups of the gelatine as before; all of which are then expeditiously stirred and worked together with the fork, and a rammer. It is then pressed down as firmly as the nature of the mixture will allow, with the latter instrument, which completes the first layer. Similar quantities of the turnip-top-chaff, &c., are thrown into the tub, the jelly poured upon it, and so on till the copper or vessel in which the gelatine was formed, is emptied. The mass is lastly pressed down with a copper lid, and in a few hours, the chaff having absorbed the mucilage, the compound is given to the cattle three or four times in addition to as many turnips as they like to eat. The proportion, up to this date, has been one pailful of linseed meal to eight

of water. Next month it will be one to seven, with about two pints of barley or pea-meal added by degrees while the compound is being made. Afterwards more linseed and barley will be used. By this means the present cost of eighteen-pence a head per week for the artificial ingredients will be increased to about half-a-crown.

In adhering to these regulations I have never failed to obtain ample remuneration for grazing, independent of the box manure which is beyond price.

I exhibited also at North Walsham, a Dutch heifer that cost £8 10s. a short time before last Christmas. She was fed according to the above system, at the rate of two shillings and three-pence per week for linseed till June, when an unlimited quantity, compounded with grass, pulse, grain or turnips was daily placed before her. During this time, however, she consumed on the average only 20 pints of linseed, and 35 of barley or peas per week, the value of which was £4 16s. This sum added to £2 14s. for the previous six months' compound, amounts altogether to £7 10s. for the year.

The heifer is considered to weigh about 70 stones of 14lbs. Three weeks since I refused £30 for her. On Thursday last £29 were only offered. Taking the latter sum as the criterion of value, and deducting the original cost leaves £20 10s. for twelve months' maintenance upon the exclusive produce of the farm, besides the manure, which, I repeat, is beyond price.

To prevent misunderstandings, I think it right to state, that the heifer never had a calf, and that she was one of six purchased at £8 10s. each. They were equal as to size and breeding. One died, and the others were sold at the end of six months for £19 each. Therefore, had this heifer been then disposed of, she also would have repaid £10 10s., whereas, by retaining her six months longer, her value only increased £10, though at an extra cost of £2 2s. for compounds.

It will be seen that the heifer repaid £2 2s. less for the last half-year than for the former. We may, therefore, reasonably expect, that if kept another half-year, a proportional decrease would occur. Depending, however, upon the economy of the system, and believing that a net profit will be obtained from the present value of £29, I intend to exhibit her at Norwich during the meeting of the Royal Agricultural Society in July, as a powerful illustration of the advantages derived from "*fattening cattle with native, instead of foreign produce.*"

The weight of the heifer in June was estimated, with the others, at 54 stone of 14lbs.—now at 70. Then the price was calculated at 7s.—now at 8s. 3d. per stone. Therefore, had not the worth of the meat been increased, loss, instead of gain must have been noticed; and as the increase is only 16 stones or 10lbs. per week, some idea may be formed of the loss sustained in rearing and fattening cattle for Christmas shows,