

Cattle.

TOO MANY CATTLE.

We believe we can justly assert that the majority of our farmers attempt to winter too great a number of animals. Empty mows greet the spring sun, and weak lean cattle nibble at the half-formed grass. Our winters are trying on stock even with good shelter, and a full supply of nutritious food. But in a large number of instances they possess neither. Many farmers ask themselves what is the prospect for an open winter, and seek for weather signs and on these base the calculation of how many cattle they can "carry through." But lo! their prognostications fail, the winter is severe, and the barn yard is filled with kine so lean that we wonder how such a crop of hair can grow on so miserable a soil of bones. The result is that the season is far advanced before the cattle have recovered from the prostration induced by poor feeding in the winter months. This is a short-sighted policy and farmers will find it to their interest to keep no more than they can maintain in good condition, even if the Spring should open later than anticipated. Dispose of your surplus cattle and pay careful attention to the remainder, so that when grass comes they may be in good flesh and not mere waltering skeletons. Milch cows especially show the results of short feeding in a scanty supply of milk, and calving time finds them so debilitated, that it requires careful attention to recover. Many valuable cattle are lost from this cause. One giant evil of the Western States is the almost insane longing after large farms, and impoverishing tillage is the result, and the same principle guides too many of our farmers who boast of the number of cattle they have, although their farms cannot properly feed half the number possessed.

FEED FOR COWS.

To determine the proper variety of food for stock, we must be guided by the object in view. If we aim alone to produce fat, we must provide oily material, and promote rest in order to prevent waste. We must maintain a high temperature as this diminishes the waste of fat also. If we desire the development of muscle, provide food containing albumen. We see the truth of this in feeding horses, for a horse cannot stand the amount of labor or muscular exercise when fed on Indian Corn, that it can when fed with oats. The destruction of muscular tissue is greater than corn from its oleaginous nature can repair. Chemistry is such a valuable assistant to the labors of the agriculturist, that the farmer who does not give every ounce of food with a definite aim, commits waste of treasure entrusted to his care. During the winter months a cow is valuable

in proportion to the per cent. of butter her milk yields. We must feed sufficient oleaginous or fatty matter to serve as fuel to maintain a proper degree of animal heat and to afford a surplus in the shape of butter. That there is a material difference in food is established by the researches of Dumas who decides as follows on

| FAT IN ARTICLES OF FORAGE. | |
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| Indian Corn | 8.75 per cent. |
| Rice | 1.00 " " |
| Oats | 3.30 " " |
| Rye | 1.75 " " |
| Wheat | 2.10 " " |
| Dry Hay | 2.00 " " |
| Clover in Flower | 4.00 " " |
| Wheat Straw | 3.20 " " |
| Oat Straw | 5.10 " " |
| Beet | 0.05 " " |
| Potatoes | 0.08 " " |

A mere glance at the above statement shows the superiority of one article of food over another to attain the object sought. But there is another light in which to view the relative value of food for cows. Sulphuric ether can remove from one hundred pounds of hay 2 lbs. of fatty matter yet a cow in good condition will only give about 1 1/2 lbs. of butter showing that 1 lb. has been stored up or used for the production of heat. From the same we can conclude that the yield is only in proportion to the amount contained in the food given. But aside from the consideration of immediate return cows should be kept in good flesh preparatory to calving time. Many valuable animals are lost owing to neglect in this particular. We do not claim it to be desirable that the cow should be in a fit condition for beef but think they should be in a better condition than is usually the case. Cows should also be warmly sheltered from the cold, and no farmer can expect a profitable return if he permits his cattle to be exposed to the piercing blasts of winter. Shelter is food.

The Cause of Abortion.

Thanks for your answer to my query, as to the cause of abort on in cows, in your impression a fortnight ago. I now consider I can trace my losses to stagnant water, which I otherwise would never have thought of. MAIGLE [We are glad to have been able to afford you a clue to the causes which have caused such losses among your cows. Stagnant or foul water is injurious to all animals. It causes blood poisoning and thus leads to many febrile complaints. It brings on abortion in other animals as well as cows. Two winters ago three valuable mares, belonging to a somewhat careless, untidy farmer, slipped their colts shortly after Christmas. The mares had been tolerably well kept, and not too hardly wrought, but they had been watered for several weeks at a pool by the side of which a large manure heap had been foolishly placed, and into which the highly colored organic matters freely found their way.—Some ewes watered from the same pool cast their lambs; while another lot of ewes, kept two fields distant, managed in exactly the same way but enjoying a purer supply of water, carried their lambs to the full period. Since better care has been taken to prevent the water supply being contaminated by the manure heap, neither mares nor ewes have suffered from abortion. Similar cases have doubtless occurred in the experience of many of our readers.]—North British Agriculturist.

LOW FEEDING.—There can be little doubt that, as a general rule, cows are not fed high enough during winter to afford the best results during summer. A cow kept in a comfortable well-ventilated stable with abundance of nutritious food, will be healthier and better able to stand the strain on her constitution at calving, than if kept on a low diet; and their can be little doubt that, with a cow of the right sort, all the fat that is accumulated while she is dry will find its way to the pail during the summer in the form of butter. In the dairy districts, wintering a cow is expensive, even on the poorest description of food, but it is a short-sighted policy to stint her, as we thus lose the whole benefit of her existence during several months. It is just as important to feed her well while she is dry as while she is giving milk.—American Agriculturist.

LIQUID MANURE.—In every one hundred pounds of cow's urine there are sixty-five pounds of water, five pounds of urea, five pounds of phosphate of lime, twelve pounds of sal ammoniac and muriate potash, and ten pounds of carbonate of potash and ammonia. While the solid excrements obtained from one cow are estimated to manure three times the amount. Our dairy farmers will see, therefore, how important it is to have tanks connected with their stables in which to deposit this material, or a good supply of sawdust, dry earth, or muck, for absorbing it in the gutters of the stable. Urine is more efficient on light soils than on clay lands and strong loams; on the latter much of its carbonate of ammonia is evolved before it can penetrate into them.—Utica Herald.

Oxen are scarce in Oregon. The average price is \$1,000 per yoke.

A NEW CATTLE DISEASE.—A new cattle disease has appeared in England. The symptoms are dullness increasing to extreme prostration, difficult breathing, small and frequent evacuations, colorless urine, membrane of the mouth discolored and ulcerated as in the cattle plague, pulse weak but not rapid, and the temperature does not rise. The disease is not inflammatory, and post mortem examinations show that the blood has been poisoned.

LIQUID MANURE TANKS.—We take the following from the Western Rural: As liquid manure is exceedingly beneficial to all vegetables, plenty of it should always be available, and without a liquid manure tank this cannot be obtained. For large gardens, a tank should be built exactly like a cistern; the bricks being closely cemented at the bottom, sides, and roof, to prevent the liquid from percolating through the soil, and also to keep surface water from entering the tank. The liquid should be conveyed to the tank by tile drains from the stable, byre, kitchen, etc., and may be taken out by a pump. In small gardens a hogshead or large cask of any kind that will hold water may be sunk in the ground, and will answer on a small scale. In this, soot, guano, etc., may be converted into a valuable manure, by dissolving them in a suitable proportion of water. Manure is much more readily taken up by the roots of plants when in solution than when in a solid state. In fact, solid manure has to be dissolved before it can enter the sponge-like mouths of the roots.