

sent them to the gastric solvents in a for a calculated to secure their speedy digestion—in fact, they are in a condition favorable to a speedy insatiation.

Ground oats are more nutritious than *whole*, for the same reasons, that flour is more so than unground wheat.

Ground oats contain more of the nitrogenous, or flesh-making principle, than any other kind of horse food; at the same time they furnish a mixture of *coarse* and *fine* food—the husk of oats constitute the first, and the meal the latter. The coarse material serves to keep the bowels in a soluble condition—irritate and excite the mucous coat, and thus obviate the necessity for drastic medicine. This kind of food is decidedly the most economical for working horses. They require, however, a certain quantity of sweet hay, in view of distending the stomach to a healthy capacity.—*Am. Veterinary Journal*.

#### CONDITION OF CATTLE BEFORE WINTER.

It is of great importance to the farmer that his domestic animals are in good condition at the setting in of winter. A goodly quantity of fat, "well laid on," as the sentence runs for flogging a culprit, will carry an animal through a hard winter, when another, equal in constitution and in all other respects except the one indicated, would be certain to perish. One of Nature's own provisions against a frigid climate is an abundance of fat. Fur outside and grease within characterize nearly every class of animals which live in the polar zone. The farther north we go, even to the limit of animal existence, the more this peculiarity manifests itself; and the walrus is never so successful in laying in a cargo of oil, as when he manages to escape the icebergs and pursues the leviathan far within the Arctic circle. The Polar bear is the fattest of his race; the seal, the walrus, and even the birds of those regions have these peculiarities. These things are mentioned for the purpose of verifying a general principle, viz., that abundance of fat is one of the provisions of nature against the rigors of climate. Any farmer who has half an eye for observation, has not failed to perceive with how much more ease and comfort, and with how much less sensibility to cold, a fat animal, over a lean one, gets through the winter. Turn them out of shelter while a keen gale is blowing from the north; let them drink at a hole cut in the ice, where the water is thick with mingled snow, and while the latter shivers in every joint as if seized with an ague fit, the former really seems to enjoy it as a recreation, drinks his fill with perfect deliberation, and then returns leisurely to his stable.

It costs a farmer more to keep poor animals than it does those in decent flesh. This may seem paradoxical, but it is true notwithstanding. We grant that less grain and fodder may be fed in the former case, but the returns will be diminished a hundred fold. Is it the prosperous farmer, who does the most work and does it best with his teams, the man whose horses are mortgaged to the crows, and whose oxen are scarcely decent food for dogs? Is it the money-making dairyman, whose milk cows are so thin that all the juices of their carcasses would secrete little else than a few gallons of water? Is it the owner of lean swine, whose pork when brought to the market commands the highest price? We leave each of our readers to answer these questions in the light of his own experience.

The loss of animals by disease and casualty is no mean item in the account; and the rule will be found invariable, that the farmer who keeps his stock in best heart by providing abundant and wholesome food and warm shelter, will suffer least in this respect. It may by some be deemed unworthy of mention, but not by farmers who save their manure and apply it carefully to their fields, that the excrements of well-fed cattle are much more valuable than those of ill-fed ones. If an animal is fed on hoop poles, of course the manure would be about equal in value to moderate sawdust. French chemists have demonstrated, both by the vegetable results of its application and by analysis, that the night-soil of a well-fed population, into whose food meat and the better grains enter largely as a component, is vastly more valuable as a manure than that of a people whose chief aliment is vegetables and fruit composed in a large part of water and woody fibre. The same rule holds good of animals—the richer and more valuable will be their manure. This of course is a small argument compared with others in favour of generous feeding, but it points in the same direction, and is cumulative evidence in that behalf.

Now is the time to have an eye especially turned to the condition of our animals, as the winter is nearly upon us. They will as yet pick up much of their living on the field, but partial auxiliary feeding earlier than usually resorted to, will be very beneficial.—*Rural N. Yorker*.

#### THE TURNIP CROP IN GREAT BRITAIN.

It appears that the Turnip crop over a large part of England has turned out but poorly the present season, thus tending to keep up the price of food. The following extract from the *Mark Lane Express*, the leading English authority on crops, markets, &c, will be read with interest in Canada. The remarks on the evils of a succession of the same or like crops upon the same land for a series of years are worthy of consideration by many farmers on this side of the Atlantic:

The injury sustained by the turnip crop must ultimately be felt severely. Throughout the eastern and home counties, a failure will be found to exist greater than has happened for many years. First came a deficiency or total destruction of plant by the fly; then drought and mildew, accompanied by another fly [*aphides*] succeeded; and in many localities the leaves have become withered and dried up so entirely, that scarcely any vegetation is now apparent. We are speaking of the Swedish variety; but the common or white turnips are little better. What with failure of plant, excess of drought, black caterpillar, fingers-and-toes, besides other pests, consisting of grubs in the crown and at the roots, the injury is general, and the crop upon the whole, worse than we have witnessed for many years; and, whether in our gardens or fields, the entire *Brassica* tribe has failed beyond a precedent. Fortunately, the mangold wurtzel is more extensively grown than usual; and, owing to the prevalence of exceedingly fine weather in the spring months and at the present time it promises to become a most abundant crop.

The potatoes also become rather generally attacked with disease; but, fortunately, very few of the bulbs have become affected: and the crop, upon the whole, may be pronounced a good one.

We have been induced to enter upon this subject for the purpose of showing that the difficulty of obtaining