

a moment but that wheat is the cheapest of the four grains raised, for feeding to stock. Some farmers are already acting upon this knowledge. But as wheat is too heavy fed alone, we are mixing wheat and oats, half and half, for feeding horses and horn cattle. Sheep will stand wheat and corn mixed will do much better than on corn alone. Why then is it not much more economical for the farmers to sell all, or nearly all, their coarse grain and feed their wheat, thereby reducing the quantity of wheat by disposing of it for a better price than the speculators and consumers are willing to pay for it?

Feeding Meal.

The following, from L. W. Miller, in the *Chautauqua Farmer* of August 24th, are views and experiences of a practical dairyman, and as such entitled to consideration.

The records of the factory where I send my milk show an aggregate of 531 cows. There are

wet meal daily to those giving milk. Under this treatment they did well, and although the flow of milk was less than when fed hay, its quality was excellent and the butter superior. The bean vine butter, however, was poor.

I find, by the factory records, that my cows are giving five pounds of milk each, per diem, more than they gave during the corresponding period last year, when wintered on hay. But with this difference in their treatment—This season my hill pasture has been very short during the entire season thus far, although I am carrying five head of stock less than last year, and I have in consequence fed about three quarts of dry bran, per head, to my herd daily. I do not think, however, that this bran would make up the deficiency in pasture, as compared with last season.

I fed this winter with Western meal instead of yellow native corn of my own growing, as heretofore. White Indian corn contains only a fraction of one per cent. of oil, while yellow contains nearly four per cent. There was a marked difference in

pelled from the system. Consider, if you please, the whole animal a machine, which requires power to run it. The food which it eats is that power. Every motion, even to the chewing of the cud, uses up power, and is made upon the actual nourishment which the food contains. If twenty pounds of hay is fed to a cow, fifty per cent. of its actual nutriment is used up in mastication, re-mastication and the other processes through which it passes to prepare it for digestion, and to expel that which is worthless from the system; the remainder supplies the waste of the system, and is just about equal, in nutritive value, to three quarts of Indian meal.

The miller can do the work cheaper than the cow—he takes one-tenth for toll, but she takes one-half. Nineteen pounds of hay cut into pieces two inches long, is said to be equal to twenty pounds of uncut hay. No nutritive value is added to cut hay, only so much labor is saved in mastication to the animal eating it. If it could be ground fine as meal, the saving would be in proportion.



The Tiger's Victim.

Next to the lion, the "King of the Forest," the Tiger is the most ferocious beast that roams the wilderness. He is the terror of all the weaker animals, and this spotted deer (see engraving) shows with what agility he seizes his victim, of whom, no doubt, he will soon make a "square meal," and the fawn, standing by its side, will probably share the same fate unless it absconds to a more favorable distance. The tiger seldom attacks men, unless they are very hungry or provoked; but when they taste human blood they prefer it to any other food, and will seek their prey in the most determined manner. Some assert that the tiger is untamable. This is a mistake, for he can be tamed as easily as the lion, and displays much affection for his keeper if treated kindly; but he is very treacherous and requires watching, as sometimes their savageness breaks out on the slightest provocation. A blow from the claws of a tiger is sudden death to the victim he strikes. The strength of this animal is most extraordinary, especially when we consider the small compass in which it is comprised.

three herds of cows giving as much, or more, than my own the present season—one of them nearly two pounds more daily; but the last sale of cheese of which I have a record, being the make of sixteen days, from June 10th to 26th, credits my herd with giving two pounds fifteen ounces each per diem more than the average of the whole 531. My herd was selected with reference to making butter, not cheese, and I have never regarded them as great milkers. They averaged twenty-seven lbs. per diem for the sixteen days' sale.

In 1873, I wintered my herd upon hay. They came through in good condition, and were fed during the spring months with two quarts of meal daily, and all the hay they would eat. In 1874, I fed for nine weeks (while dry) three quarts of meal; then what hay they would eat and two quarts of meal for three weeks; then bean vines and meal for four weeks, losing one of my best cows in the operation, and setting the whole herd scouring badly and losing flesh. Then I did what I have never done before to cows giving milk; I fed the balance of the spring on clear meal, a period of about five weeks; giving five quarts of

its effects from anything I have ever seen while feeding yellow meal. The hair first began to look and feel stiff and harsh; then the skin became dry, with the appearance of scurf, after about six weeks' feeding; and finally some of the herd actually broke out with small blotches along the back and sides. I understood perfectly well that a small quantity of linseed oil-cake, fed with the meal, would correct all this, and make the white meal equal to yellow; but the eyes of the whole country were upon me, predicting failure, ruin and starvation to my cows, and I chose to run the risk of consequences, without any variation from what was advertised; but I shall never feed white meal exclusively again, without adding to it something to supply the deficiency of oil. Hereafter I intend to winter my cows, when dry, upon meal, when I can get it, in preference to hay.

The Creator designed the cow and all ruminants to subsist upon both coarse and fine food. He provided them with four stomachs, three of which are simply machines, to prepare the coarse food for digestion. Fifty per cent. of grass and hay is woody fibre and other matter, which has to be ex-