

At three months it may consume about twelve quarts of skim-milk a day, given in two feeds. Care must, however, be used not to over-feed it. If a calf leaves milk in its pail, reduce its next ration, more harm being done by over-feeding than by under-feeding. Always feed sweet skim-milk if possible, but if this cannot be done wait until it becomes coagulated, or thick, for in this stage it is not nearly so liable to produce scours as when sour and still in its liquid form. Always feed the milk warm, about 80 or 90 degrees. Feeding it too hot, above blood heat, is, however, more injurious than feeding it too cold. Calves should always be fed at as near the same time of the day and as often as possible, thereby preventing too greedy drinking, which interferes with the digestion.

If a calf commences to scour, which is a symptom of indigestion, give it three times a day a reduced ration of whole milk, properly warmed, to which a tablespoonful of lime-water has been added. An egg, or parched flour, stirred into the milk, has often given good results. The lime-water is prepared by slaking a lump of lime about the size of an egg, in a bottle of water, corking it and letting it stand until clear, when it is ready for use.

Good calves have been raised which did not get a drop of milk after they were a week old, hay tea and oatmeal or barley gruel being substituted for it. But if possible, give them their natural food, milk.

#### A Chatty Stock Letter from the States.

(FROM OUR CHICAGO CORRESPONDENT.)

Scarcity of feed still prevails in the West, and the floods of cattle forced to market on that account and owing to lack of faith in markets of the near future, are only beginning to subside.

It seems strange, but many sections of the western feeding country were also unable to get stock water during February. Streams were very low to start with, and many creeks were frozen apparently to the bottom by the protracted cold weather.

A Western farmer of large practical experience, Mr. Geo. Whitcher, of Platteville, Wis., thinks the fine cutting of hard cornstalks to induce cattle to eat them does not pay. It is like grinding cob-meal. The amount of nutrition is so immensely small that it does not repay either the preparation or the wear and tear on the animal's digestive organs.

Wm. Heaton, of Newman, Ill., says:—"If the cattlemen will raise a smaller number of cattle and market only first-class stock they will make more money. My Hereford calves brought me last May an average of \$116 per head at 10 to 12 months. That beats scrubs." While Mr. H. is a breeder of fine cattle and it is his interest to talk encouragingly of fine stock raising, there is no disputing the fact that he has the correct idea.

There are evidences of a revival in the fine stock business this year, but the average stockman will wait until he is pretty well assured that the great depression in the cattle trade is really over before he takes hold of improved breeds very enthusiastically. Retrenchment has been the policy of stockmen during the past few years, regardless of ultimate ends.

A Montana horseman, Mr. Green, of Glendive, was here recently with a car of 2-year-old Clydesdale stallions bought in Scotland. They were what he called third-rate horses, and cost £60 to

£100 per head from the farmers direct. His object is to use them on the native "cow-ponies" of Montana. Mr. Green said the valuable prize-winning stallions he found to be worth more in Scotland than on this side the Atlantic.

Application was recently made to the City of Chicago for licenses to butcher horses for food. Prominent physicians gave the opinion that healthy horse-flesh is as wholesome as any other, but the license was not granted. There would be too much dealing in sick horses, though a horse butcher shop might solve the problem of what to do with the thousands of semi-wild horses in the far West that could be butchered as cheaply as hives. The prejudice against eating horseflesh, however, could not be easily overcome.

Railway freight rates are badly unsettled throughout the country. We hear of widespread evasions and infractions of the Inter-State Commerce law, which was designed to establish equitable rates on the basis of so much per mile and to prevent a railroad from charging more for hauling a car to a non-competing point 300 miles distant than for hauling a like amount of freight 1,000 miles. There are many ways of ignoring and evading this law, which also aims to have the poor man's freight hauled as cheaply as the capitalist's, and the railroads seem to be making a special study of how to follow the letter without the spirit of the law. As a rule, instead of reducing their "short haul" rates to the basis of their "through" rates, they have in all cases reversed the order, viz., raised the long-haul rate to the basis of the highest local tariff. This has so far made a bad matter worse. But it is hoped that the law may yet be made to have a salutary effect upon railway business. There are many "trunk" lines, for instance, from Chicago to the sea, but so far as real competition is concerned the pooling plan makes one road of many.

An important factor in the live stock transportation business is the crusade in the interest of stable or palace cars, in which animals can be fed and watered in transit, guarded against ordinary bruising and carried in special trains on passenger time, since all the new cars are fitted with patent air-brakes. The railroads, of course, have fought these patent cars bitterly, because (1) they are patent, and cannot thus far be controlled for the benefit of a few railroad directors at the expense of common shareholders; because (2) nearly all the roads have large supplies of old-fashioned live stock cars that would have to be remodeled, and because (3) the stock yards and intermediate feeding points have fought them, and, of course, the latter have mainly been owned and controlled by the powers behind each railroad corporation. Some of the roads, however, have taken up these improved cars, notably the Grand Trunk, and the other roads are slowly but surely being forced into line. Just as soon as the inside directors can turn around and manage to get enough stock in these improved car companies, no doubt they will be speedily adopted.

The Chicago stockyards are in favor of these cars, of course, since thousands of cattle, hogs, and sheep coming from the West are unloaded at Omaha, Kansas City and St. Louis to be fed and watered and often sold at these places, when, if they were in stable cars, the animals would be more likely to make the trip directly to Chicago.

The dressed meat men are still forced to pay a comparatively exorbitant rate to get their products hauled, and the producer is the one who seems to have the brunt of this to bear.

### The Apiary.

#### Seasonable Hints.

The season in which it is perhaps the most difficult to manage bees is upon us, and the beginner is apt to make blunders which will decrease his honey crop, if not destroy his colony entirely. If bees are wintered in a cellar they should remain there if possible until some of the early flowers are out, such as the willows, or even later; colonies may have dysentery, which will be indicated by the spotted condition of the front of the hive, but unless this is very serious it is better to not take them out of the repository. The idea that a colony may be taken out of winter quarters and allowed a cleansing flight upon a fine day, to be again placed in the old quarters at night, has been a very general one, but however much our best apiarists may differ upon very vital questions, upon this they are almost if not entirely one. A colony loses by such treatment. By keeping colonies in proper quarters through the changeable spring, when it may be bright, warm and tempting to the bees outside one moment and raw and chilly enough another to cause the loss of all bees away from the hive, much is gained. Bees upon their summer stands may be examined if they appear to be weak and short of stores; if you are satisfied they are not, leave them alone. See that the entrances are kept clear, and if there are many dead bees upon the entrance board, you may upon a fine day when bees are flying, assist them in their house cleaning operations by pulling dead bees out with a bent wire. Avoid the exposure of any honey or any manipulation of hives that might tend to start bees robbing. Of robbing the inexperienced bee-keeper is perhaps more afraid than the expert are; all dread it after it has been commenced. By having your entrances facing the prevailing spring winds there is less liability to rob, the scent of honey, if any is at the back of the hive, being driven by the wind in that direction; if the opposite way it is at the front and only an additional guide to the bees to enter at the front; if at the back they can get no entrance even if they find their way there. If a colony has not lost all light, instead of contracting the entrance, leave it open, and this method is especially to be recommended if robbing has not yet commenced and as a preventative. By having your bees not black, but mixed with Italian blood, you will have a bee less liable to permit itself to be robbed out. Cyprian and Holy Land bees are excellent to defend their hive; they will actually fly from their alighting board to meet and fight an enemy, but their strains we cannot recommend even after ever so many crosses; they require very careful handling. The inexperienced are not in a position to do this and the least jar arouses them to such an extent that no smoke will subdue them, but they must be left alone until pacified; they are, when once aroused, most persistent in their attacks and will follow the unfortunate apiarist through several dark rooms. Then they have a great tendency to have fertile workers, a most difficult matter to handle by a novice. Fertile workers are workers which have the power to lay drone eggs; in these races they appear often in a few days after the queen has been lost, in a measure performing the function she has in the past, but she has the power to produce both worker and drone, but the fertile worker's eggs produce only drone, and in consequence the colony soon perishes. When such workers