Liberal Feeding and Early Freshening Elias Snider, Oxford Co., Ont.

FEED my calves three times a day for six or seven months For the first two months they receive whole milk, but after that skim milk is substituted. I start off with about two pounds a meal or six pounds a day, and gradually increase the amount until they are receiving about 16 pounds. That is enough for any calf. They receive skim milk as we have it for them, even if they are nine or ten months old. We don't keep pigs, as I consider that skim milk gives better returns when fed to calves, even if they are approaching the wearling class.

If the calves are kept growing every minute, their size and development at two years will allow them to freshen without injury. That is where the economy of liberal feeding omes in. This is the practice we follow, and we h. ve no under-

sized cows.

Cow Comfo By " Herdsnan"

UST three weeks ago to-day as I write, I was in a stable that was originally built to be light, but is now dark at midday. There was lots of window space, but every time a light was broken it was replaced with a shingle or a bag of straw. This process has been going on for some years now, and at least two-thirds of the window space overed over.

Sunlight is important in the stable than would appear at first glance. Microbes are the dairyman's greatest enemy. They spoil his milk and affect the health of the cows. The greatest enemy of the microbes in a barn is sunlight. Provide lots of window space and let the sun's rays reach every corner of the stable, and the result will be better milk, healthier cows,

and hence more milk

A schoolboy in his examination paper was asked to define transparent, translucent, and opaque, His answer was: "I do not know that I can give correct scientific definitions of these terms, but I will illustrate. The windows of this room were once transparent. They are now translucent, and if not washed soon they will be opaque." The windows of most of the stables in this country are in the same state as the windows of that schoolroom. They are translucent because of cobwebs, and readily become opaque through the substitution of shingles for window glass. And yet light is one of the most important elements in cow comfort and cow profit.

Why Not Covered Barnyards A walk in the open air is good for cows, but it must be a walk in a sheltered yard on a cold, windy day. It is surely cold comfort that cows have on the sunny side of a barbed wire fence. I believe that the covered barnyard will become popular in this country to which it is so well adapted.

Where cows stand and lie directly on the cement floor, extra good bedding is of first importance Fattening steers give off much heat and lying on the cold concrete does not hurt them to any great extent, although even there it is not advisable. Milch cows, however, give off milk, and to produce the most milk it is necessary to at least partially conserve the body heat. Then there is this additional danger that if the udder lies in contact with cold concrete it is apt to chill, and udder troubles, one of the dairyman's greatest worries, will result.

Our friends, the horsemen, have a saying that a good currying is equal to two quarts of oats. I would not put it as strongly as that when it comes to the dairy cow, but it is as important to cow comfort as to horse comfort that the hide be kept clean.

Warm stables are usually designed more for the confort of the attendants thru the comfort of the cows. Even dairy cows do not require a very warm stable. Extremes of temperature, however, are very injurious, and I would aim in every way possible, short of stopping off ventilation, to keep the stable temperature fairly uniform.

"The yield of corn in the United States is not high. The ideal method, the 100 bushels to the acre method, is to plant the corn 316 feet each way, which gives 3,500 hills to the acre. With two stalks to the hill, an acre contains 7,300 stalks, that should each produce a one-pound ear, which figures out to 100 bushels to the agre. This is no dream, as 238 farmers in an experiment in Indiana, grew 100 bushels to the acre. The average production of the state was 36 bushels an acre. The cost of producing an acre was \$12.28.-Prof. Christie at Chatham Corn Show.

The Stability and Advantages of Dairying By Hugh C. Van Pelt

I N addressing you, it is with appreciation beause of the realization that you are dairymen and breeders of dairy cattle who are making the production of milk and butter fat a business, rather than a side issue, which is true in so many other localities. You recognize the advantage dairying has over other phases of agriculture. You have learned that the fundamental orinciple of retaining and building greater the fertility of your farms is with the replacing through live stock the fertilizing ingredients of the crops you raise supplemented with those from purchased foodstuffs. By adhering to this principle your farms are becoming more productive and, therefore, more valuable year after year.

You are aware that of all animals a good dairy cow provides the most dependable and most profitable market for the grains and grasses grown upon your farms. Of all farm animals she is the most economical and profitable producer of human food. The evidence of this fact is specifically cited through an experiment carried on many years ago by Laws & Gilbert. It was this experiment which demonstrated that the cow yielding 10 quarts of 4 per cent. milk daily was producing as much fat and fat equivalent ,in seven days as the steer that was gaining 15 pounds in the same time. In addition to this, the cow's production contained six times as much

mineral matter and six times as much nitrogenous material, which are the nutrients that render skim milk so valuable in the growing of young animals. She accomplishes this by consuming the roughage or cheap food largely with a small amount of concentrates or expensive food, while her brother, the steer, makes his gain largely with concentrates or expensive food and a small amount of roughage.

Stability of Dairy Prices You have given consideration to the fact that the market for dairy products does not fluctuate in the uncertain manner that markets for other farm products do, and therefore provides a more certain source of profit without a risk of loss. The feed given the cow to-day is returned to her owner to-morrow, and can be marketed at once. The certainty of dairying has been mac impressive to you by the fact that once a month, once a week, or every day, if he so chooses, the dairyman may have a cheque for the work his cows did the month or week or day before, ensuring permanent and steady prosperity.

You need not be told, for you have learned from experience, that the demand for productive cows has provided you as breeders of dairy cattle a most profitable business, for the farmer in all parts of America as well as other countries is rapidly becoming convinced that there is a vast difference be tween the profits yielded by a common cow and a cow whose ancestors have been bred for econ omical and profitable production for hundreds of years.

A Glimpse Into the Future Although since 1875 the number of milch cows has doubled, prices

"A selection from an address delivered by Prof. Van Pelt.

for dairy products have steadily (Concluded on page 13)

house, of Winter Fa is just as going to ! year owing put under provinces. lar than fo on all side means that

The Ou

cultivate th "From I In 1878 the tinued to nineties, pr reached abo once more their highe creased uni in 1910 and bought to-d prices paid good trade It was a ba they sold th kept to bree The mai

many of ou there is stil be some tin to the high "Where th cities, the m including th traffic has be

1900 to 191

Canada.

"The war as much as made a dema can be purch horse that t United States to both Great help the price Canada, as l have entered border

"Looking a conditions we advice is to k should aim to breeds the bes

"The draug

will be almost farmer who is the right kind before long th fitable. After and France n continent for their foundatio these countries States, where i stock of the b believe that w kind of horse w countries also. in the United S will be certain

"Much is bei a horse that is

Cement Construction is Permanent



Cement construction is the most economical form of permanent construction and is coming in for almost universal adoption on the farm. The two illustrations-firewith show how it may be utilized in constructing small buildings, on the farm. The upper illustration shows the completed structure; the lower illustrates the method 1 making molds and arranging windows.

