

up all these boards, then take a broom and sweep the dirt from one manger to another till you come to the end. As there would be no corners to dig out, this would require but a few minutes, and you would then have no difficulty in keeping the mangers thoroughly clean. The hay would be fed from the passageway in front, and the slats on the fender should be far enough apart to allow the cow to draw the hay through, but at the same time prevent her from throwing it out of the manger or getting it under her feet. Pulped roots, ensilage, grain, etc., would, of course, be put in from the passage in front, while the cow can get it at the bottom of the manger from the other side of the fender. The mangers could, of course, be made of cement, and the partitions in them of thin steel or wood, which would make them still more sanitary and easier to keep clean.

"The question might arise that it would not be wise to sweep the dirt from one manger to another, on account of the danger of spreading contagious or infectious diseases. Authorities on this subject, however, claim that these diseases are spread by the germs becoming dry and floating in the air, rather than by the animals coming in contact with each other, so I think there would be little or no danger if this style of manger were adopted.

"A light wire link chain, with a snap on one end, would make the cleanest and best arrangement to put across each stall to keep the cow from backing out. These chains can be purchased for about 25 cents each, and should last a lifetime. The staple on the gate to which this chain is attached should be in a plate and put on with screws or bolts, as it would be liable to split the board or pull out if simply driven into the wood. Some hardware dealers are communicating with an eastern firm in regard to having these specially made, so anyone requiring them will be able to procure them at very moderate rates."

A BRITISH COLUMBIA DAIRY FARM.

Editor "The Farmer's Advocate":

As you get but few letters from B. C. farmers, I thought it might not be amiss to send a few lines concerning our dairy farm of 300 acres, in the Chilliwack Valley. We milk between 50 and 60 cows the whole year; about the same in winter as in summer. In order to keep up the

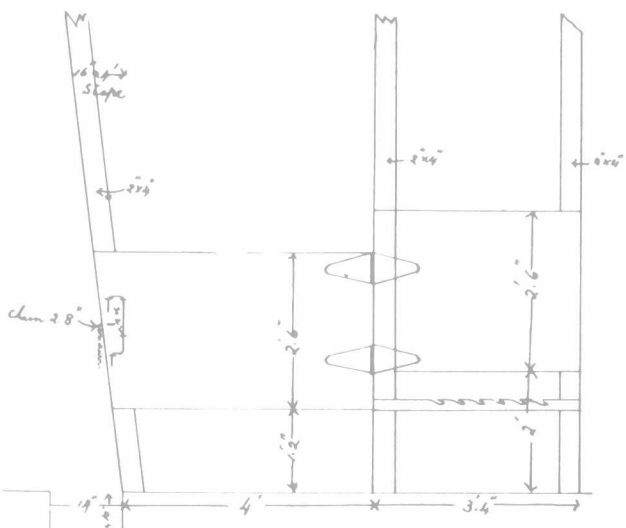


Fig. 1—Side view of Mr. Wells' cow stall.

number and secure good cows, we raise all the heifer calves. The Babcock test has been a great help in weeding out the poor cows, which we send to the butcher. In the spring cows are on the grass by first of May, and are fed a little clover hay and ground oats until the grass becomes firm. The pastures are usually green until November, and cows get nothing but grass. Sometimes, however, in the months of July and August, pas-

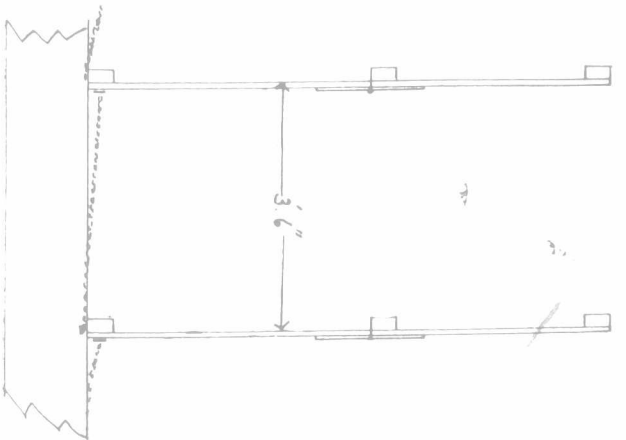


Fig. 2—Ground-floor plan of Mr. Wells' cow stall.

tures become short, then the cows get newly-cut clover hay and morning in the stable while they are being milked. Our winter feed is: Ensilage, 500 pounds; cut straw or clover, 100 pounds; pulped mangels, 300 pounds; bran, 75 pounds;

oats, ground, 75 pounds—the whole well mixed at least 12 hours before using. The heavy milkers are fed from 5 to 10 pounds each of ground oats and bran per day, according to the quantity of milk given. This grain is fed with the roughage, so that it will be all eaten together. We have been trying for 15 years to arrange the cow stalls so that we could keep the cows clean and free from manure, which so much disfigures the

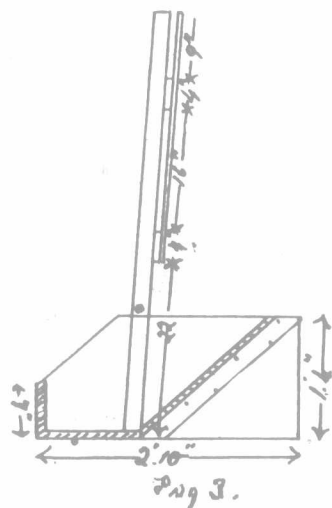


Fig. 3—Cross-section of manger.

cow, and makes it so hard to get clean milk. We have at last succeeded. We put in new stalls in winter of 1905-6. Since then we have had almost perfect success. If the cow in her stall is properly managed, it is impossible for her to get herself dirty. Each cow has a stall. The manger is movable, so that whether the cow is long or short, the stall is made the right length, so that the hind feet are near the gutter, and to

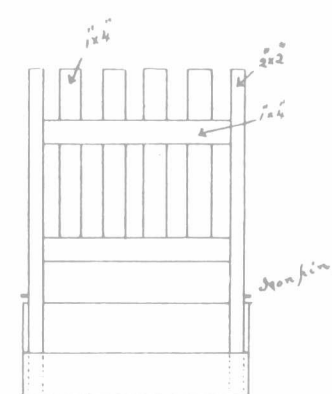


Fig. 4—Front view of Mr. Wells' cow stall.

prevent her backing into the gutter a small rope or chain is hooked across behind, just above her hocks. The gutter is ten inches deep and twelve inches wide; the top is half an inch below the level of the floor; the floor slopes a little to the gutter so that liquid will run to gutter. The cow has perfect liberty. Not being tied, she can stand or lie at will without soiling herself.

ALLAN C. WELLS.

AN AMBITIOUS DAIRYMAN.

Editor "The Farmer's Advocate":

I have been keeping individual milk records for something like two years. It takes me one minute per day per cow to weigh her milk and set down the weight. I keep a spring balance and a sheet with each cow's name or number directly back of my cows. I started this record to ascertain, if possible, which cows were paying me a profit and which were not. I also have a four-bottle Babcock tester, and test my herd once a month; it takes four minutes per month for four cows, and a definite knowledge may be had of which cow really pays. I have learned in these two years that the cows I should have called very good ones before, are fit only for the butcher.

I think, if a man will begin to weigh each cow's milk morning and night, and see what a small amount of time it takes, he will soon get interested in each cow, will feed better, take better care of his herd, and, therefore, receive a larger income. I will here give an instance of two of my cows. One was a grade Shorthorn, of which I was proud, the other a small grade Ayrshire. The Shorthorn would eat twice as much as the Ayrshire (this was when I began my records). She was giving 35 pounds per day; her test was 02.3. The Ayrshire was giving 25 pounds per day; test, 04.6. The Shorthorn would go dry four months out of twelve, the Ayrshire one and a half out of twelve. Now I am

getting my herd where they are giving a better flow of milk, and a good-testing herd. In 1904 I got an average of 3,000 pounds of milk per cow per annum; in 1905, 4,000 pounds; in 1906, 4,800 pounds; and still a good chance to gain. This was done simply by weeding out my poor cows. I am in hopes to soon reach the 8,500 mark, with 300 pounds butter-fat. I think, by using the spring balance, the Babcock test, saving the heifer calves from my best milking and testing cows, and using a pure-bred sire from a good milking strain, I can soon reach the mark I am aiming for.

Stanstead Co., Que.

L. S. COLT.

TEN - COWS RECORD.

Editor "The Farmer's Advocate":

Hartman Snider, who lives about one mile from Ernesttown Station, G. T. R., in the County of Lennox, drew \$695.95 from Farmer's Friend Cheese Factory for the product of ten cows, this being an average of \$69.59 each, besides keeping the Sunday morning's milk for butter part of the season. The factory started April 11th, 1906, and closed December 1st. His cows are grade Holsteins. This does not count calves or spilt milk.

Lennox Co., Ont.

HARVEY LUCAS.

POULTRY.

RAISING TURKEYS.

ELEMENTAL INSTRUCTIONS.

A Huron County subscriber asks us to give a few instructions on the raising and feeding of young turkeys. This subject was admirably covered in a series of three articles by W. J. Bell, of Simcoe, Ont., in "The Farmer's Advocate" of March 15th, March 22nd and April 5th, 1906. However, for the benefit of new readers, we shall undertake to summarize Mr. Bell's points, and will also be pleased to hear from anyone who may find time to contribute a helpful letter, based upon personal experience.

We all know that turkeys require ample range. It is well not to keep more than one bird for each two acres of land in the farm. Turkeys are great foragers, and will glean a good part of their living from waste grains and grasshoppers in the fields, if given a fair chance. Overstocking increases the amount of extra feed necessary, saturates the premises with some chemical or bacteriological material or other that militates against their thrift and greatly increases the chances of loss by specific germ diseases, such as blackhead and roup. The more fowls, or, for that matter, the more stock of any kind, kept together, the greater the chance of introducing diseases, and the greater the damage sustained if they are introduced. This is the greatest obstacle to the success of special poultry-farming, and it applies more to turkeys than to any other kind of poultry.

Needs in the way of shelter are easily supplied. An airy building is sufficient for the worst weather. Close buildings are injurious to health and thrift. The ordinary henhouse is too warm and stuffy. Basement barns are especially to be avoided.

The age of breeding birds is unimportant, but good strong, healthy, well-matured females of medium size, mated to a good-sized, long, vigorous male, will prove the most prolific mating, and on an average five females will be required to make sure of fifty poults. Some undertake successfully to break up the hen from hatching after laying her first clutch of eggs, set these under a hen, and have her lay another lot; but the plan is open to objections. A turkey is the best mother for her own poults, and an early-hatched turkey is worth much more than a late one. The latter are the first to contract disease, and often introduce it into a flock that would otherwise remain healthy.

The breeders should be in only moderate flesh, and to prevent the females becoming too fat, grain should be withheld from them towards spring. The male should have a good feed of oats or wheat each day. In selecting breeders, give the preference to those long in body and short in leg, as they do not show such a prominent breastbone when dressed as do the deep, short-bodied specimens.

Regarding the matter of inbreeding, Mr. Bell claims that in the beginning of his turkey-raising experience he selected his birds for many years, and bred them irrespective of relationship. He found the size was actually increased, but admits that deformities, such as crooked toes, wry tails and crooked breasts, were becoming common. To obviate this evil, he now buys an occasional female from a good flock and mates her to one of his best males. From the produce, he takes the best female and mates the following season to her sire. From this progeny he selects the best male to mate with his original females. Mr. Bell claims that the untoward effects of inbreeding come from selecting the worst specimens as breeders and sending the best to market. For our