

This set me on another line of thought, and convinced me that the cause was in the treatment of the cows in some way, and the only difference in the work between the two stables was in the milking, and I soon had the trouble corralled. About this time there was a discussion in *Hoards Dairyman* about the bad effect of manipulating the cow's udder except immediately in advance of milking, for the reason that it stimulated the secretion of milk by the cow, and nature's effort was not assisted by relieving the cow of the milk as secreted, and the effect was a damper on nature's effort that resulted in a decrease of the flow of milk. After due deliberation I changed my plan of work in cleansing the udders, so that now I have a man who does nothing but cleanse the udders, and does it just in advance of the milkers. The results are now satisfactory. Here is a wonderful field for thought and intelligent action. To help nature or, if we cannot help, prevent getting in the way while she is doing her work. When we study our own systems we can see how easy it is to work against nature, and do mischief that is beyond calculation, as it has to do with human life.

The Poultry Industry of Canada.

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(Continued from last week.)

BUILDING A POULTRY HOUSE.

The first consideration towards a successful career as a poultry breeder, is to have a suitable house. It is absurd to suppose that fowl will lay well during the cold winter months unless they are warmly and comfortably housed. Select as a site a high and dry location, and the building should face the south. I have seen and built a considerable number of poultry houses, but none have pleased me better than the last two which I have erected. I will endeavor to detail the manner in which a building capable of accommodating from seventy-five to ninety fowl should be constructed, so that any person could build a similar one. The building should be forty feet long, and sixteen feet wide (which includes a passage way five feet six inches wide), five feet high at the lowest side, and running to a height of eight feet, and then dropping to seven feet.

Posts were put into the ground three feet apart, upon these 2 x 4 scantlings were placed, which answer well enough for sills. Uprights three feet apart were placed upon these sills, and the crown was made of two 2 x 4 scantlings; rafters, three feet apart, were then run from front to rear. Tarred paper was then put upon the outside horizontally along the uprights on both front, rear and ends; lapped over about two inches, and then tacked to the uprights. The outside boards (rough) were then nailed on over this paper, and the cracks battened with half inch strips. The roof, composed of ordinary decking, was then put on. On top of this decking was placed a single thickness of tarred paper put on horizontally. The whole roof was then shingled with second class shingles, allowing five inches to the weather. Three ventilators were placed in the roof, and these were run to within eighteen inches of the floor. After this was completed the inside of the building was looked to, and tarred paper was again run horizontally upon the inside of the uprights, and the whole of the inside of the building lined with tongued and grooved sheeting, running in the opposite direction to the outside boards. This left the building boarded and battened on the outside, and lined on the inside with tongued and grooved lumber, with two thicknesses of tarred paper between. You will also observe that this left an air space of four inches between the outer and the inner walls, which, in my opinion, is as serviceable to keep out cold as if an extra thickness of boards was put on and all nailed solidly together. The floor is of boards upon which is scattered about three inches of chaff. This is cleaned out as often as it becomes fouled.

Three windows were placed in the south side of the building, about eighteen inches from the ground. These should be placed in the centre of

each pen and to be large enough to admit of plenty of sunlight. Be sure that the windows are doubled, and construct them so that they may be opened at any time or taken out altogether. The outer doors are doubled—one opening inside and the other outside. Holes are cut in each pen to allow of the fowls coming into the yards. These are closed by means of slides, which work by pulleys from the inside of the building.

I would divide this building off into three pens, each pen being divided by a solid partition, two feet six inches high, to prevent any chance of fighting, and the balance of the space is wired to the roof. A door, on spring hinges, opens into each compartment.

I would arrange the roosts and nests so as to have them combined. The top of the nests could be used as a drop board, the roosts being placed about nine inches or a foot above the board. This is a combination which is very extensively used, and, to my mind, is about as complete as it is possible to make it. The roosts tip up, to allow of easy access in cleaning the drop board. The bottom of the nests is cleated and hinged to the wall, and when it is desired to clean the nests all you have to do is to let down the bottom by unhooking it. The bottom extends about a foot to enable the fowls to fly upon it, and then enter their nests. In each of these three divisions into which I would divide the house I would keep from twenty-five to thirty fowl. I do not think more could profitably be kept, as I am of the opinion that this number would keep in better health and lay more eggs than a greater number kept in the same space. Outside runs should, of course, be provided.

A poultry house should be kept scrupulously clean. The oftener it is cleaned the better, but it never should be left for more than a week at a time without being thoroughly cleaned out and coal oil put on the roosts.

The Township Fair.

At the annual meeting of the Provincial Fairs Association held recently in Toronto it was almost the unanimous opinion of the delegates present that the local Township Fair should be done away with. No definite scheme was evolved in regard to this matter with the exception that a number of the local fairs unite to form one good show in each district. This is along the right line, and as we have pointed out several times before in these pages every interest would be better served if the moneys now expended on township fairs were put into one good show in each county. There would then be greater inducements for farmers to make exhibits, a better class of exhibits for visitors to see, and the educational value of one good district show would be one hundred per cent. greater than that of a dozen small township fairs.

The township fair no doubt served a good purpose when first organized, as it helped to stimulate the breeding of better stock among the local farmers. But in the meantime facilities for travel have improved, the larger fairs have developed and are visited by nearly every farmer in the country. At a large fair the farmer not only sees stock and products from his own locality on exhibition, but he sees exhibits from other sections far removed from his own and to this extent he is a broader man and has a wider knowledge of his business. The only good reason advanced for not amalgamating the township fairs into county or district fairs seems to be that they afford an opportunity to the farmer to make exhibits, who might be timid about exhibiting at the larger fairs because of greater competition. This in itself does not appear to be a sufficient reason for the continuation of the local township fair, which means the expenditure of a large amount of money for the benefit of comparatively few people. The educational value of a township fair is not as great as many would make out, and comparatively speaking it is not nearly so great as a good county or district show.

In many instances stock breeders who take prizes at the larger shows exhibit their stock at

the local shows in their own locality and carry off the honors, which, according to some people's reasoning, should go to the farmer who does not exhibit at the larger fairs. Thus it is that if the township fairs were amalgamated into county or district fairs the farmer who does not make a business of exhibiting at the larger fairs would stand about as good a chance of winning prizes as he does now at the local show.

Agriculture in the Yukon.

The Department of Agriculture at Ottawa has just issued a bulletin on the possibilities of agriculture in the Yukon district. According to information gathered from several sources, chiefly from the reports of Mr. Wm. Ogilvie and Dr. G. M. Dawson, of the Geological Survey, the possibilities for agriculture in the Klondike are not very bright. The bulletin points out that in the district of which Dawson City is the centre the summer climate is too cold to admit of much being done in the way of growing grain, fodder, plants or vegetables. The temperature during May ranges from 32° to 50° F.; during June from 40° to 60°; during July from 40° to 70°; during August the average is about the same as in July, and during September from 40° to 60°. In 1896 the hottest days were July 1st and 2nd, when a temperature of 81° was recorded. Coupled with these low temperatures is the liability to frost during the summer. There is usually frost during the early part of June and again before the end of August, which makes the growing season very short. Along the margin of the rivers the conditions are a little more favorable, and admit of agriculture being carried on in a small way. Here the soil is warmer and sandy.

If it were possible to grow fodder crops for horses and cattle the interests of the country would be greatly assisted. The native grasses are scarce and make very coarse fodder. The bulletin states that a variety of millet known as Hungarian grass might probably be raised as a green fodder crop. Some other varieties of grasses are also mentioned and some detailed information is given regarding the kinds of vegetables and grains which might possibly be grown to advantage in the district which should prove of value to those contemplating trying their fortunes in the Klondike. We would recommend such to write to the Department for a copy of the bulletin.

However possible it may be to practise agriculture in the Yukon there is no likelihood of any one going there for that purpose. The quest will be for gold and for gold only. Though large quantities of the products of the farm will be required to sustain life, these will have to come from the vast prairies of the west and the older provinces. The prospects of a large trade with the Yukon will stimulate agriculture in some sections of the west that have not been interested before, and in this way the agricultural interests of the country will be greatly benefited.

The Growing of Sugar Beets.

In the manufacturing of beet sugar, beets having a sugar content of 12 per cent., with a purity coefficient of 80, can be worked with profit. A purity coefficient of 80 means that of the total solids found in the juice, 80 per cent. is sugar. Experiments made by the Ohio Agricultural Experiment Station last year show that the sugar beet thrives best in those regions where the average summer temperature is about 70 degrees, provided the conditions of soil and rainfall are suitable. A number of samples of beets were tested from the southern part of the state, which showed an average sugar content of 12.8 per cent. and a purity of 75.3. This was too low for profitable working. The samples tested from the centre of the state showed an average sugar percentage of 13.9, with a purity of 78. Samples from the northern section showed an average percentage of 14.3, with a purity of 79.4. From these experiments it will be seen that a warm climate is not a necessity for the growth of sugar beets. In fact, the best results were obtained from the beets grown in the most