

Any creamery which has not already done so, may secure a bonus of \$100 by erecting a cold-storage according to plans and specifications supplied free of cost on application to either of the above officials at Ottawa.

**New Short Course at Eastern Dairy School.**

An act recently passed by the Ontario Legislature states that, after January 1st, 1911, all persons who wish to act as head cheesemakers or head buttermakers in the Province of Ontario must first possess a certificate or diploma of qualification from the Department of Agriculture; and before a maker is granted one of these, he must demonstrate that he is fully qualified to manage a cheese factory or creamery successfully. There are a considerable number of makers in the Province who will require to brush up in knowledge and methods in order to qualify. To accommodate the larger number of students, and assist them in preparing to meet the above requirements, the Eastern Dairy School at Kingston has decided to add a short course to its regular schedule. The two objects in doing this are: First, to afford makers who cannot take the long course an opportunity of refreshing themselves before reopening their factories or creameries in the spring; and, secondly, to avoid interruption of the regular long course by students coming into it for short periods. The long course will commence on Monday, January 3rd, 1910, and close March 9th. The short course will open March 10th, and close March 30th, the instructors' course commencing March 31st, and closing April 8th. The 1909-1910 Calendar is now out, and obtainable on application to the Superintendent, G. G. Publow, at Kingston, Ont.

The oil test, as a basis for distributing proceeds among patrons of cream-gathering creameries, is being steadily supplanted by the Babcock, which is more accurate, and therefore fairer. Last year, only 13 out of 73 creameries in Western Ontario were using the oil-test churn. This year the number is reduced to 10. Chief Dairy Instructor Frank Horns is calling a meeting at Ayton, for November 4th, to discuss with officers and directors of the four neighboring creameries the advisability of discarding the oil test and adopting the Babcock.

**POULTRY.**

**Profit in Winter Eggs.**

**AN EDITOR'S EXPERIMENT.**

Eight dollars and ten cents profit from twelve chickens kept on a city lot during four months and one week in mid-winter, the eggs being sold at barely market values, with all feed bought at city feed store retail prices, and everything purchased, even to the litter they scratched in, is the writer's answer to the question, "Do Winter Eggs Pay?"

Partly with a view to demonstrating the profitability of winter egg production, and partly for the pleasure of having domestic animals about him, one of our editors, whose occupation imposes on him the disadvantage of urban residence, erected last fall a cheap but modern poultry house in his back yard, and purchased a dozen hens and pullets to put in it for the winter, keeping accurate account of every cent of expenditure and income.

**HOUSE AND STOCK.**

The house, situated along a board fence, which formed one wall, was protected from north winds by a high railroad embankment, and, to some extent, from west winds by a neighboring barn. Though plain in appearance, it embodies the essential principles of modern poultry-house construction. It was built with a shanty roof, and facing south, so as to get full benefit of the short winter sunlight. A poultry house should always, if possible, face south or south-east. The dimensions were 7½ feet wide, by 8½ feet, inside measure; height from the earth floor to the roof at the back, 4 feet; front height, 5½ feet. This is rather too low for convenience, but very snug and comfortable for the hens. The floor area allowed an average of 5¼ square feet per hen. The walls consisted of a single ply of lumber, lined with tar paper around the west, north and east sides. The ceiling was of wire netting, stretched from the back plate to a corresponding height in front, and supported by a scantling. The space between this and the board roof was filled with sweet-corn stalks and tree leaves, in lieu of straw. The roof was a single ply of boards, with cracks battened, and with a slant of about 1½ feet. In front was a base-board, while the front of the loft was boarded, leaving, however, a horizontal crack for ventilation, a board with a bevelled edge being nailed above it to keep out snow and rain. Of the remaining front space, one-half in the center was glass, with a strip of cotton on each side, the strip on the right side being tacked

to a removable frame, and serving as a door. The lumber used was second-hand stuff, purchased at about \$15 per M. Following is the itemized cost of material: Lumber, \$3.85; window, \$1.00; cotton, 50 cents; netting for ceiling, 60 cents; nails, 15 cents; total, \$6.10.

A day's labor by a handy man would knock together such a house. The perch was a scantling, with slightly-rounded edges, extending across the back, a foot above the dropping-board, which, in turn, was 18 inches above the floor, with four loose nest boxes underneath. A dust box inside the window, and a hopper for grit and bran hanging to the wall, completed the interior appointments.

The stock were purchased on the city market about December 10th, and a very common, ordinary lot they were. A better-looking bunch could be picked up in almost any farmer's barnyard. It was desired to purchase pullets, but enough of these not being available, the number

it was discontinued. Three and a half bushels of wheat were fed, at prices ranging from \$1.00 to \$1.20. A small quantity of linseed meal and shorts was used in mash. Meat and bones were obtained cheap from a neighboring butcher-shop, and fed in rather plentiful quantities towards the last. The birds also had table scraps from two small families, for which a few dozen eggs were allowed. The general system of management was as follows: At night, a feed of buckwheat, millet, barley, or sometimes wheat, was thrown in after the birds had gone to roost, and raked into the litter. This provided an early-morning feed. It is cruel and unprofitable to compel a flock to stand moping around in the morning until some tardy riser comes to feed them. A second feed, also raked into the litter, was given after breakfast, and the water dish kept filled during the day. At noon, either more grain, some table scraps, or a mash, was fed. The mash consisted usually of shorts and linseed meal (oil cake would be cheaper, and probably as good), stirred into a

broth made by stewing bones and meat scraps obtained from the butcher shop. A few table scraps were also worked in sometimes, with a pinch of salt, pepper and onion to season. As a rule, green bone was fed at noon, by smashing it up into scrappy flakes with a hatchet or ax on an up-ended block of wood. It is intensely interesting to feed a flock in this way, as they are greedy for the bone, endangering their necks by snatching the scraps off the block. Anyone, however, who is caring for a flock on a commercial, rather than a recreative basis, should buy a bone-grinder. The evening feed, given between three and four o'clock, consisted of corn, substituted by wheat towards spring to prevent the birds getting too fat. It is well that the evening feed should be of some appetizing grain, to insure the chickens going to roost with full crops. The litter used was principally timothy-hay chaff, from a livery stable hay mow, though clover or alfalfa chaff would be much better, as it would furnish many leaves. It was changed at least once a week; every other day would be better, especially in warm, damp weather. The dropping-board was cleaned off every morning, the droppings being carried outside and the board sprinkled with coal ashes. Cleanliness and fresh litter are important factors in avoiding bowel trouble and other forms of ill-health. The dust box was kept full of ashes, and the small double hopper supplied with oyster-shell and bran. Ventilation was secured through the cotton front and the leaf-loft overhead. The interior atmosphere was always dry and congenial. A curtain was provided to hang down in front of the glass window on cold nights, but was used only twice last winter. The birds were allowed out whenever the weather was such that they cared to leave the shelter. No combs were frozen, and no birds sick. No cock was kept with the flock to eat his head off, and, with a few exceptions, toward the last, little broodiness was manifested. We mention this point because an inquirer last winter wondered whether hens would not show marked tendency to broodiness if kept without a male. There was no sickness, because all the conditions were such as to promote health.



**Poultry House for a Dozen Hens.**

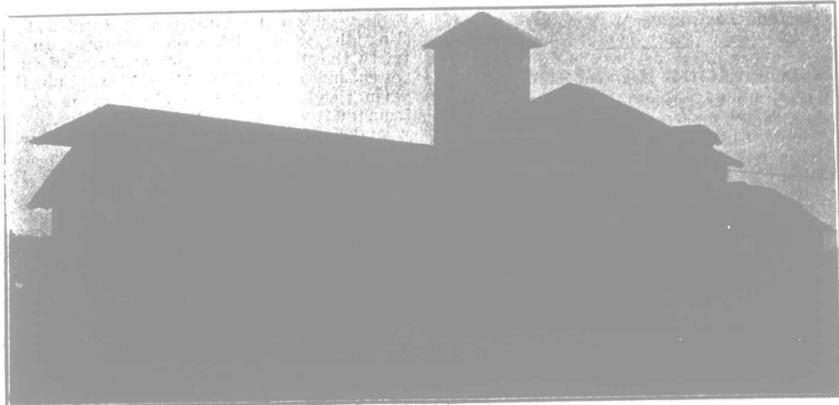
Plain-looking and rough, but embodying correct modern principles.

was filled out with eight hens of uncertain age, from one year upward. The four pullets were rather late-hatched, fine-boned Rocks, and cost \$1.00 per pair. The hens, secured at 75 cents per pair, were obviously of mixed breeding, with evidence of Rock and Wyandotte blood. Surprising to state, the hens commenced laying before the pullets, and laid the greater number, as well as much the larger-sized eggs. The total outlay for stock was thus \$5.00. When purchased, their combs were commencing to redden, but they were lean, not through with their moulting, scaly-legged, and, doubtless, lousy.

**FEEDING AND MANAGEMENT.**

When brought home, the hens were, first of all, dusted with insect powder under the wings, about the head, and in the fluff—this as a precaution. The scaly legs were treated by washing with warm soap-suds, and then rubbing the legs carefully with a cloth dipped in kerosene. This almost completely exterminated the scaly-leg mite, so that the legs of all but one hen were soon clean and smooth. This one should have had a second treatment to make her perfectly clean. The grain feed at first consisted largely of corn and wheat, the object being to flush the hens up and get them started to laying early. Wheat, even at \$1.20 a bushel, is economical hen feed to use in part. Corn is good for cold weather, but should be fed sparingly toward spring. Variety was sought in the grain ration, the following kinds being fed in greater or less quantity: wheat, corn, barley, buckwheat, millet, and peas, though, as the fowl did not take kindly to the latter grain,

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**Storehouse and Sheds for Crate-feeding at Macdonald College.**