GOVERNMENT OF THE PROVINCE
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DEPARTMENT OF AGRICULTURE

PORTABLE COTTON FRONT POULTRY HOUSES

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(By R. K. Baker, E.C.)

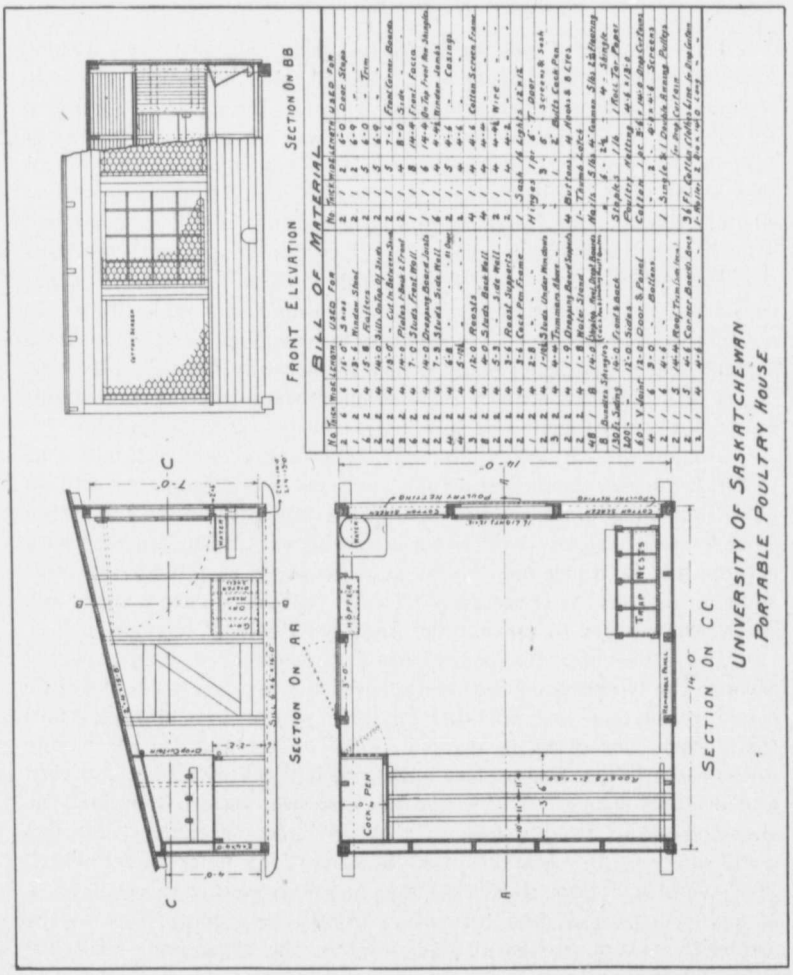
The cotton-front poultry house has been called a "cold house." For this reason a good many of our poultrymen have been afraid to try one. Cold is merely a comparative term. We measure the degree of cold by a thermometer, but the way in which people or animals feel cold or are affected by it, depends on whether or not they are in good health, well fed and warmy clad. It depends also on whether the air is dry or damp and on whether it is still or in motion. To a healthy man in this country a still day in winter, with the thermometer at 15 below zero, is no hardship. The temperature is not considered worth mentioning. Because the air is dry and still, we do not mind the cold. But 15 below zero in New York or Halifax causes a great deal of hardship, many people being badly frozen. The same degree of cold here with a high wind blowing becomes unbearable except for a short period of time unless we can keep exercising.

Compared with a carefully-built, stove-heated poultry house, the cotton front may be termed a cold house, but when compared with an almost air-tight, damp poultry house, or a draughty house, the cotton front house if properly built is not a cold house. When provided with a drop curtain which may be let down at night to protect the birds while on the roost it is necessary to leave ventilating spaces above and below this curtain to prevent the birds from getting too hot.

The heated house for poultry has never been satisfactory, probably because the temperature has been allowed to vary too much and little or no ventilation was provided for. No matter how warmly built, the air-tight house will be damp in winter. One man reports having fowls frozen to death in a place built with four ply of lumber and with two dead-air spaces. The writer has used the cotton front and the glass-and-cotton front houses in this Province for eight years. No doubt many poultrymen have used them here for a much longer period. We have always been able to get eggs in winter, and have yet to learn of anyone who has used the cotton front house, going back to the artificially heated, or the all-glass front or the expensively built air-tight house.

The poultry house requires more ventilation in proportion than any of the other farm buildings, because practically all of the water which the fowls drink is given off by their lungs and skin directly into the air as watery vapor. Ventilation is required to remove this damp air from the house.

Ventilator shafts on poultry houses have not been satisfactory. They are usually either so small that they become choked with frost in cold weather, or so large that they let off all the warmed air from the house. A fairly large shaft, fitted with a damper might be made to work, if the attendant could arrange to go and regulate the damper every time the temperature or the direction of the wind changed.



Cotton windows have given the best satisfaction at the least cost for material and labor, of any method of ventilation yet tried. The number and size of the cotton windows varies with the type of house and with the locality. In the East one square foot of cotton window to ten or fifteen square feet of floor space is advised by some winters. We have used one foot of cotton to six of floor space and in some houses one square foot of cotton to four of floor space, with good results.

Portable vs. Permanent Poultry Houses

There is a good deal of uncertainty in the minds of our poultrymen as to the need for or the use of portable houses for fowls. The custom for hundreds of years has been to have a permanent poultry house. For a small flock, when only a limited area of land is available so that the fowls travel all over it every day, there is little advantage in making a house portable. Under these conditions it becomes necessary after the first season to plow or dig up the land once, or better twice each season and to plant some quick growing crop to make pasture for the birds. Plowing turns up clean earth and a fresh supply of grit and mineral foods. It turns under the manure and the disease germs. When oats, rape or winter rye are sown these plants use up part of the manure that has been turned under thus cleaning the soil, and at the same time they furnish a good supply of green food for the fowls.

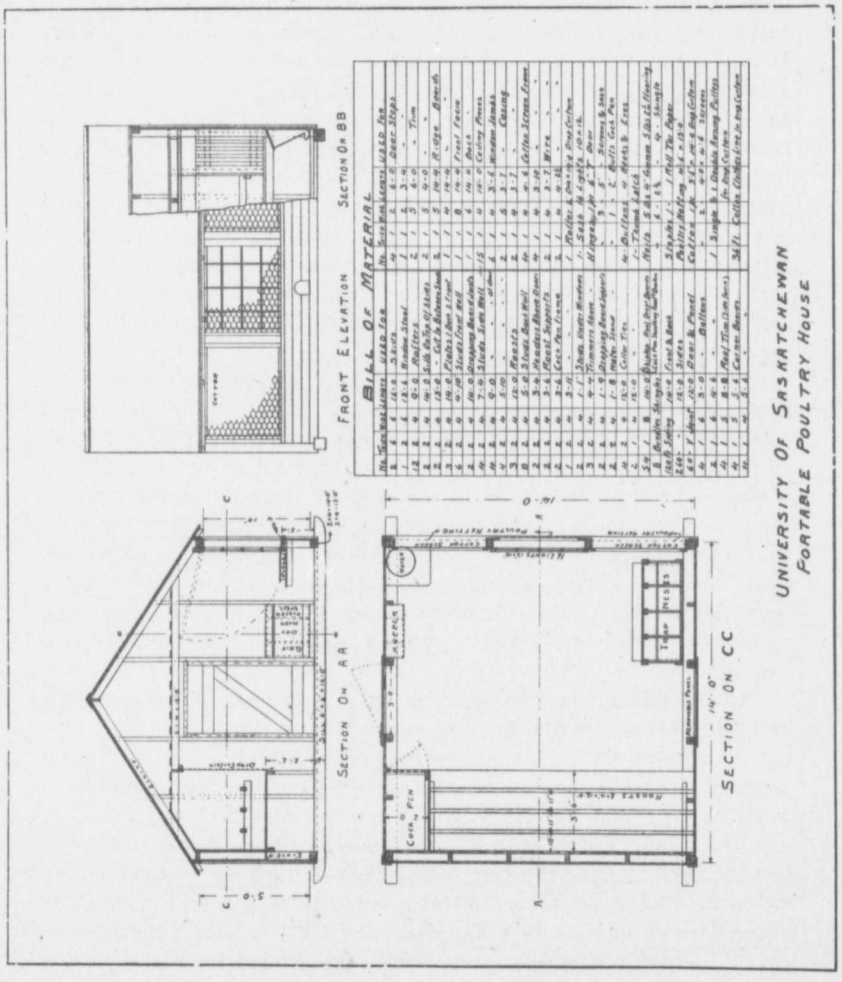
In this country people have lots of land; and as a rule keep larger flocks of poultry and allow them to range. If the poultry house is a permanent one all the birds start from the same point every morning and travel over the same ground day after day till all the mineral food is used up, all the meat food, in the shape of bugs and grasshoppers is gone, and the soil is so contaminated by the droppings that the flock gets run down and diseased. The only way to give the birds a fresh start would be to plow up all the land they range over, including the lawn and the barn yard. Most people would prefer to move the hens a hundred yards or so. With a portable house this could be done in a few minutes.

Continuous laying houses which have been made in varying sizes from fifty feet to five hundred feet long can be so constructed as to give splendid conditions for laying hens in winter, but all attempts to keep breeding stock continuously and to raise chickens by this system have failed.

The colony system as it was developed in Rhode Island consists in keeping each flock of twenty to thirty-five fowls in a small house, spreading these over a considerable area of land. This plan gives splendid conditions for breeding stock and for the rearing of chickens in any country but is not a convenient arrangement for winter in this country. Most successful poultrymen in the East keep their breeding

stock on the colony plan, and rear the chickens on free range. They keep their laying hens in the long houses and move the young stock into these houses in the fall. This plan necessitates a large outlay in buildings, some of which are idle at any season of the year. The colony houses are empty all winter, and the long houses are empty or only partly filled during the summer.

At the College of Agriculture we have been trying to work out a system which would give us the advantages of the colony system in summer and the advantages of the long house in winter without the expense of two sets of houses. We are using a house so designed that



it may be used as a colony house in summer, and when fall comes may be drawn in near the farm residence, granary and water supply and used as one section or unit of a continuous laying house, which may be made any required length.

Two types of house are shown, one a single slope or "shanty roofed" type and the other a gable roofed type with a small straw loft. Either may be made in any convenient size, those in use at the College being 14 feet square, to accomodate 50 birds in winter, 12 feet square for 35 birds, and eight feet square for 12 to 15 birds. During spring and summer the two larger ones are used as breeding pens; twenty females and two males being put in each, or if required they are fitted up with portable hovers to accomodate 300 chickens.

These differ from the usual portable house only in having the skids put on the ends so the house may be moved forward or back, in having no projection or overhang to the roof at either end, and in having a door 3 feet wide in the centre of one end and a removable panel of equal size in the centre of the opposite end. By removing the extra doors and panels any number of these houses may be placed end to end, to form a continuous house, the open door ways giving a passage from one pen to the next. If more than one breed of fowls is kept, light swing doors may be made to divide the house as required. On the outside, strips of tarpaper and 1x6 inch lumber cover the cracks where the different sections come together.

Lumber floors are always draughty. Cement floors can be used only in permanent houses. We are using earth floors in all our houses. For winter we fill in with earth so as to raise the floor six inches above the level of the ground outside. This will ensure dryness in the spring when the snow melts.

In severe weather some frost accumulates on the ceiling of the shanty roofed type house. This does not seem to affect the birds till a warm spell makes it melt and drip down, then the house has to be cleaned and fresh straw put in. A layer of straw eight or ten inches deep, put on the roof outside and weighted down by a few poles will do away with this frost trouble almost altogether.