

# Efficient Farming

**Cleaning Poultry Houses**—Many poultrymen experience year after year continued losses from some of the most common poultry diseases, especially those that are of an infectious type, such as chicken pox, roup and canker.

Many of these same poultrymen could absolutely eliminate these diseases if they would but pay greater and more constant attention to questions of sanitation.

Though sanitation and cleanliness are important throughout the year, there is no time when they are more important than in the fall.

Too many poultrymen proceed in the manner of careless housekeepers who sweep the floor by brushing the dirt under the stove or furniture. Such haphazard methods are really worse than nothing, because they offer the birds absolutely no protection or freedom from the germs of infectious diseases.

If you have not already practiced a complete cleaning of your poultry house in the fall, make a resolution to do so this year.

Here are the steps which must be accomplished in a complete renovation and cleaning of the house:

The first step is to remove perches, dropping boards, hoppers, drinking vessels and equipment of like nature. These should be taken out of doors in the sun for later cleaning and disinfection.

The next step is to remove all litter from the house. There are a number of ways of accomplishing this effectively.

If the manure spreader can be backed up to the house and the manure loaded and hauled out on the meadow and spread broadcast, it is the quickest, cheapest and most effective way of getting rid of this material.

In the first place, the litter is rich in poultry manure and nitrogen, and will show up in an increased yield of hay the following season. In small flocks where equipment is not available the litter should be bagged in large burlap bags and hauled away and spread on the land just as soon as possible.

After having removed all fixtures and litter, the next step is to dry-clean the house. This involves the sweeping of the walls, ceiling and the entire floor carefully and completely in order to eliminate all accumulations of dirt, cobwebs and other accumulated filth.

This must be done in considerable detail to be sure to get in all cracks and crevices, and considerable pressure on the broom will sweep out much of the dirt and filth which otherwise would be overlooked.

Pains should be taken to see that dirt is gotten out of the corners and around studding, in order to get the house just as clean as possible. Mulin curtains should be beaten and swept to get all the dirt out of them. This step in the cleaning of the average poultry house is often neglected.

**Best Way to Disinfect**—Next comes the most important step in the fall housecleaning. That includes the complete disinfection of the interior of the house. This should preferably be done with a spray, although in small poultry houses it can be brushed on with paint or whitewash brushes.

The sprayer, however, puts the disinfectant solution on with force, gets in cracks and crevices where the brush application would not be so effective. Where one has spraying apparatus for fruit trees on the farm, there is nothing better than this equipment for spraying the interior of the poultry house.

For the average poultry outfit a barrel sprayer with about twenty-five or thirty foot lead of hose is very satisfactory.

For coarse sprays with which there may be mixed whitewash solutions containing lime, there is nothing better than a Bordeaux nozzle, for it can be so quickly and easily cleaned and the coarseness of the spray can be so readily changed.

For fine disinfecting sprays a whirling spray nozzle is always the most efficient, because it puts the spray on with great force and more or less as a mist, bringing about more equal distribution of the solution on the walls of the house.

Whatever type of spraying outfit is used, considerable pressure should be back of the spray in order to force it into the boards and cracks about the house.

It is a common practice, and rightly so, to include in the disinfecting solution a whitewash mixture of lime and certain adhesive compounds, not only to cleanse the house but to whiten it up and give it an extremely neat and attractive appearance.

**A Henhouse Whitewash**—There are a great many combinations of mixtures which can be used and many of them are effective, but for one who wishes to use a simple, easily mixed whitewash spray which sticks perfectly to the house and which carries with it powerful disinfecting properties, there is probably none superior to the following mixture: Hydrated lime, one-half bag; common table salt, six pounds; molasses, one pint; ground alum, three ounces; and hot water, ten gallons.

Add one quart of some good disinfectant.

The beauty of the above formula is the fact that the hydrated lime does not require slacking, as does rock

lime, but goes into solution readily upon adding the hot water.

After the house has been thoroughly sprayed it should be allowed to dry out for a day or two before the next step in the fall housecleaning is undertaken.

In the meantime the equipment which was placed out of doors should be thoroughly cleaned, sprayed with the same solution and replaced in the house. The windows should be washed outside and in. Any broken equipment or fixtures on or about the house should be repaired, and after the house has dried out the floor should be covered with four to six inches of good straw litter, and the nests should be filled to a depth of one or two inches with clean shavings.

The house is now ready for the birds. A clean, sweet, safe environment is theirs. They are not from now on handicapped by the presence of contagious disease germs in their midst.

**Keep a Record This Year**—Keep a poultry flock record this year, even if it is nothing more than a daily record of egg production. Better still, keep a record of receipts and expenses as well.

Considering the small amount of time required to keep a simple record of this sort, there is probably nothing that you can do which will yield a greater return in the direction of improvements in the poultry enterprise. In no other way can accurate comparison be made of one year's results with another's.

A record of past accomplishment serves to make the daily care of the flock much more interesting, for one is then constantly striving to better the previous year's record. The satisfaction that comes from gathering on Thanksgiving Day 10 or 15 per cent more eggs than the flock laid one year before can be appreciated only by one who has actually experienced it.

In a few years one will be able to establish, by means of the daily egg record, a sort of standard for his strain of hens and his particular conditions. A glance at the standard when collecting eggs will show how the flock is measuring up at any particular time.

Similarly, the income and expense record gives a measure in dollars of the progress of the poultry enterprise. If carefully studied it will give the key to many little ways of increasing the yearly returns.

## Dynamite "Don'ts"

The list should be memorized by any one who uses explosives. Before handling any dynamite, glance over this list to refresh your memory:

Don't smoke while handling explosives and don't work with them near a light.

Don't leave explosives where stock can get at them. Cattle like the taste of soda and salt-peter, but other ingredients might make them ill or even kill them.

Don't tamp in a charge with a metal bar.

Don't be in too big a hurry to see why a charge didn't explode.

Don't use chilled or frozen powerful explosives.

Don't cut or break a frozen cartridge.

Don't carry blasting caps in your pocket.

Don't try to remove the wires from an electric blasting cap.

Don't dig out a hole that holds a charge that failed to go off. Dig another hole for another charge at least two feet distant.

Don't force a primer into a bore hole.

## How to Fail in Dairying.

Don't keep records; you will have to figure and think. This is hard work.

Let the cows go dry in winter; it is hard to milk by lantern light.

Feed the cows straw instead of bedding them with it. Then you can sell hay.

Don't use balance rations. Don't have a silo. Don't use legume hay. Keep a scrub bull.

Have a fork handle ready to teach the cows their place. Keep 20 150-pound cows instead of ten 300-pounders.



Ugly Enough to Win.

Ethel—"My dear, she's a scream!" Eve—"Yes; almost homely enough to win in a beauty show."

The successful manufacturer has been studying sales ever since the time arrived when he could not readily sell all the things he could produce. With an increase in the facility of producing goods there has been an increase in competition and men have had to struggle to get the consumer to buy their goods instead of those of competitors. Unless proper selling methods are followed one is apt to find that his competitors get all the business.

# FOR HOME AND COUNTRY

## The Sault Convention.

Health, Technical Education, Program Planning, and Home and School Co-operation were the subjects occupying chief attention at the Annual Women's Institute Convention of Algoma and St. Joseph's Island held at Sault Ste. Marie in October. It was a real gathering ground for the forces of progress in that progressive part of Ontario with stimulating reports from the branches of things accomplished during the year and discussions as to future plans.

"The Women's Institutes are welcome visitors to the Sault," said Mayor Dawson in his welcoming address. "We are interested in the agricultural success of this district, are doing everything in our power to make it more prosperous, and gladly place this building and our services at your disposal now and at any time you decide to convene here."

"We must try to give more vocational guidance, help the student to find out his tastes and talents, train him, and then help him to find his right vocation in life," said Principal Williams of the new Technical School in an illuminative address at the close of which a committee was formed to secure classes in woodwork for the boys and young men of the rural districts.

"Pure water and good milk are most important factors in good health for individual and community. Chlorinate the water and pasteurize the milk if you have any doubts as to the existence of typhoid or other disease-producing germs in either," said Medical Health Officer Dr. A. S. McCaig in a very practical talk.

"Use fresh vegetables and fruit, get plenty of fresh air in the sleeping rooms. We are reducing tuberculosis and can still further reduce it by right living and treatment in the early stages."

"Cancer is not hereditary. It can be successfully treated with surgery, X-rays and radium, if taken in time. Watch all lumps or sores which do no heal and have them attended to promptly."

"The Women's Institutes of Ontario are the first attempt made by a people to set up a State Department of Home-making and Community building," said Miss Emily J. Guest of the Dept. of Agriculture, Toronto. "They represent something very fundamental in nation-building—the understanding co-operation of the man and the woman in the home, the co-operation of the homes of the community with each other, with the school, with the farmers' organizations in the Branch Institute, and the co-operation of the individual and the community with the college, the departments of State and the Government through the Institutes Branch of the Dept. of Agriculture of each province."

In their mutual help program the Institute begins with a study of the improvement of the individual, the home and then the community; how to achieve 100 per cent efficiency in health through proper feeding, clothing, rest, recreation; in work by training and the exchange of useful experiences; in citizenship by studies of the laws and how we are governed, with surveys of the legislation passed by each government; in economics by the study of production, preparation for market, markets, fair rewards for work, and wise expenditure.

The rural women had made great advances in the last ten years. In the

matter of foods, for example, it was now a question of properly balanced as well as tothsome meals. An Ontario bachelor had recently criticized a housekeeper: "She gave us corn and rice at the same meal. What do you think of that for unbalanced feeding now?"

The Branch Institute was not just a woman's club but a home-makers' Study Centre related to the Dept. of Agriculture in much the same way as the public school was related to the Dept. of Education, locally self-governing, with its own trustees or board of directors, if in good standing as to membership, work, and reports receiving Government grants, literature, lectures and short courses. Its advantages were open to all interested in achieving better homes, finer people, a better community, a happier social life, and a more scientific agriculture.

## EFFICIENT PUBLIC SERVICE.

"We don't believe in waiting until people are dead to send them flowers in the North," remarked a delegate. "Send bouquets while they are alive to enjoy them," and the Convention unanimously passed the following resolutions:

"We wish to congratulate Mr. G. A. Putnam, Supt. of Institutes for Ontario, on the completion of twenty years' efficient service to the individual and community life of Northern Ontario. We trust that he may be spared for many years to come in this work."

And "The delegates wish to express to the Honorable the Prime Minister, the Minister of Agriculture, and Superintendent Putnam our great appreciation of the services being rendered to the homes of this area through the Institutes Branch of the Dept. of Agriculture. The literature, lectures, and short courses are practical and very valuable. If we might add a request to our thanks we should like to have a manual training course for country boys and young men added. Also, if possible, that the sewing course be given on the same terms as the other courses."

**NUGETTS FROM THE CONVENTION.**  
The big thing is the little thing. Getting the best in and for your own community is the big thing. If that is done other big things will naturally evolve in the province and will cause unnecessary things to fall away. The study and development of your own community is the big thing in the eyes of the Department—Supt. G. A. Putnam.

Hear as little as possible of what is to the prejudice of others; believe nothing derogatory until absolutely forced to it; never circulate an ill report; always moderate the unkindness expressed toward others; always remember that there are two sides to every story—Mrs. A. H. Willet, Capreol.

Canadianize the hired man. Begin there in your patriotic work—Mrs. M. J. Nixon, Convention Chairman.

The Institutes are very helpful with the follow-up work in Immigration and helping to receive and make the newcomers part of the neighborhood life.—Policewoman and immigration worker Stark.

Hilton Beach had no further use for a jail after prohibition passed, so we turned it into a public library, which the Institute helps to support.—Mrs. P. MacDougall, St. Joseph's Island.

# FOOD I SERVE ON THANKSGIVING

BY NELL B. NICHOLS.

It is not until after the what-to-have for dinner problem has been solved that I welcome the approach of Thanksgiving. No woman wants to serve a trite holiday meal any more than a man desires to eat one. Something out of the ordinary, but strictly in keeping with the occasion, is in order. And I always try to select several dishes which may be prepared before the festive day arrives.

As I recall the feasts I've made ready in my home, I find that the pleasantest ones were those which required little work at the last minute. Maybe I should not be bold enough to say it, but I venture you will agree that it is mighty difficult to be thankful for a meal if you have to spend all the morning before it is to be eaten in the kitchen over a hot, steaming cookstove. It is much more fun to help the children set the table, crack nuts, shine red apples, and pop corn.

## FIRST PREPARATIONS.

I always decide on my menu a week or two beforehand. At the same time I examine the tablecloth and napkins to be used, making certain that they do not need washing.

Then plans for the table centerpiece are made. Usually I choose a basket or dish filled with red and yellow apples, russet pears, grapes, or any fruit that is available; other times I prefer to use a large cake, which is to be served for the dessert, covering it with chocolate icing and adding tiny pumpkins cut from orange peel for decoration. One year I inserted yellowish candles in apples of the same shade, and grouped these around a small pumpkin in which four large candles were placed. Of course, colorful autumn leaves and flowers are charming. The chief thing to remember is to keep whatever decoration you use low enough so that you will not

have to peek over and around it to talk to your family.

Another bit of work I attend to beforehand is the polishing of the silver and the filling of sugar bowls and salt and pepper shakers. These are details, I know, but they cause hurry and worry if left undone too long.

Fruit cake and plum pudding are traditional Thanksgiving Day desserts, and the next best thing about them, after the taste is considered, is that they can be made several weeks before being used. A custom in my home is to make either the pudding or the cake every year in large enough quantities for Thanksgiving, Christmas, and New Year's days. If stored in a tightly covered stone jar, both the pudding and cake improve with age.

In cooking poultry, game, and fresh pork, I like to start with a hot oven, and just as soon as the meat begins to brown I lower the heat and complete the cooking very slowly. An oven thermometer is used in my kitchen; I place the meat in the oven when it registers 400 deg. F., and then lower it to 324 degrees.

Water and salt are not added until the meat or poultry has cooked thirty minutes. If water is used before this, it steams and stews the meat, and prevents the formation of the much-desired crisp, brown crust, while salt extracts the rich juices, destroying the flavor.

While searching in my recipe files, I found several dishes that have been served successfully in my home on Thanksgiving days. I am passing some of them on to you with special recommendations for those which can be made ready in advance.

## APPLE PIE.

Six apples, 1½ cups water, 1 cup sugar, 1 lemon.

Place the sugar, water, and the

# The Sunday School Lesson

NOVEMBER 9

The Feeding of the Five Thousand, John 6: 1-15. Golden Text—1. am the bread of life.—John 6: 35.

## ANALYSIS.

I. MAN SHALL NOT LIVE BY BREAD ALONE, 1-7.

II. MAN LIVES BY THE WORD OF GOD IN CHRIST, 8-15.

**INTRODUCTION**—The feeding of the multitude by Christ has a symbolic or mystical significance. It is connected by John the Evangelist, with Passover time, and thus a religious meaning is imparted to it. Jesus acts by compassion, but not in compassion only. He wishes to give a "sign" of spiritual things. The sign is that men do not live by bread alone, but by the word of God spoken through him. It is the blessing of Christ which in the present incident makes the bread sufficient. Indeed Christ himself is the true bread of God. We ought, therefore, to think of the breaking of the bread in the wilderness after the same manner in which we think of the Lord's Supper. Both incidents had apparently a sacramental significance.

I. MAN SHALL NOT LIVE BY BREAD ALONE, 1-7.

This follows from the fact that the provision of ordinary bread in the present case is not sufficient. It has to be made sufficient by the blessing of Jesus.

Vs. 1, 2. The eastern shore of the Lake of Galilee, to which Jesus here repairs for rest, is a wild and uninhabited district. Nothing but an excited religious expectation would have induced a great multitude to follow Jesus there, but, as the evangelist explains, such an expectation existed. The multitudes were excited by Jesus' miracles of healing in which they saw evidence of divine power. They are sure that great events are at hand, and that the kingdom of God is at hand. But their expectation is still materialistic and worldly.

Vs. 3, 4. Jesus sits down on the hillside to teach. This is his method of dealing with the excited hopes and with the ignorance of his hearers. He wishes to wean them from materialistic thoughts of God's kingdom. The salvation which God is now awaiting to bestow is not an earthly, but a heavenly or spiritual good. The evangelist explains that the Passover was at hand. This indicates that in what now follows, Jesus is thinking of the Passover. He is to give the multitude a sacramental conception of the kingdom of God.

Vs. 5-7. The first need of the multitude at the present moment is food. They have come the long journey without making any provision for bodily necessities. Jesus asks Philip how they are to obtain bread for all these many mouths. The question is not due to any perplexity on Jesus' part, but to lead Philip and the other disciples to a deeper understanding of what Jesus now means to do. Philip answers by saying that the total resources of the disciples amount only to 200 denarii (that is about \$45), and that even this amount spent on bread would not be sufficient to provide a meal for the whole company. Apart from Jesus, therefore, the existing provision of bread is totally inadequate.

II. MAN LIVES BY THE WORD OF GOD IN CHRIST, 8-15.

Vs. 8-10. Here now is Jesus' opportunity. It is reported by Andrew that the existing provision, which is in the hands of the serving-man, amounts to five barley cakes and two fishes. Jesus asks the disciples without further delay, to command the

people to be seated on the grass in preparation for a meal. This is at once done, the green lawn of the hillside serving as the table where the Lord is to dispense the bread.

Vs. 11. Jesus takes the five cakes and the fishes—the scanty provision which the disciples had despised,—and gives thanks to God. This aspect of the matter, the goodness of God in providing these supplies, had been overlooked by his followers. The latter had complained of the scantiness of what they had. He dwells reverently on its greatness. By his action, Jesus gives the bread and the fishes a symbolic or sacramental significance. As he prays, a deeply religious impression steals over every soul. Then Jesus distributes the bread, and to the wonder of all, it is found sufficient.

Vs. 12, 13. It is not said that the bread and fishes were miraculously multiplied. But from the statement that the quantities of broken pieces which remained filled the baskets of all the twelve disciples, it is apparent that this is the thought by which the event is explained. Yet if we only think of the miraculous multiplication of the material elements, we fall short of a true understanding of the incident, and some have thought that we ought to look on the whole incident as a sacramental meal, signifying that it is not bread alone that satisfies, but Christ. This is in any case the final truth taught by the incident.

## THE BREAD BROKEN.

In Palestine bread is made in loaves that look like big, heavy pancakes; one of them may be enough for a meal. They are half an inch thick and nine inches in diameter. They are not cut to be eaten; it is regarded as wicked to use a knife on bread. It is always "broken" with the fingers. The Bible never speaks of "cutting" bread; bread is always "broken." Lamentations 4:4 gives a picture of desolation and penury.

Infants ask for bread, and no one is breaking it for them. When our Lord fed 5,000 people with five of these loaves we read that after a blessing he "broke and gave the loaves to his disciples"; and he hid the same when seven loaves were used for 4,000 people. So in the Upper Room Jesus "took bread, and blessed and brake it, and gave it to his disciples." When he was with the two disciples at Emmaus, "he took the bread, and blessed, and brake it, and gave to them." The Book of Acts tells us about believers "breaking bread from house to house, and the apostle Paul speaks of the "bread which we break."

## APPLICATION.

This is the only miracle recorded by all four evangelists. It must consequently have been of very great importance as to immediate purpose and spiritual significance. What do we learn from this wonderful story?

How human in his sympathies was the Lord Jesus Christ. He had such a passion for human souls that we are far too apt to think he cared about nothing else. He cared greatly about the bodies of men, their physical weakness and hunger. He had a true body himself, and was often weary and worn and hungry.

How superhuman in his essential nature was the Lord Jesus Christ. Some of Jesus' miracles of healing might be explained away as examples of faith cure. But here, in the feeding of the five thousand with five loaves and two fishes, there is an unmistakable display of divine power.

juice and rind of the lemon in a saucepan, and cook until it is a fairly thick syrup. Peel, quarter, and core the apples, and place them in the cooled syrup. Simmer until the fruit is clear and transparent; then lift them carefully to the serving dish. Just before serving, top generously with whipped cream, decorated with bits of bright red cranberry jelly.

## MARSHMALLOW SALAD.

Two cups marshmallows, 1 cup English walnuts, 1 cup pineapple, ½ cup whipped cream.

Cut the marshmallows in fourths, add the broken nut meats and diced pineapple. Stir in the whipped cream, and serve very cold on lettuce leaves. This salad may be made a day before being used if left in a cold place overnight.

## HOLIDAY JELLIED SALAD.

Two tbs. gelatin, 1 cup cold water, 1½ cups boiling water, ½ cup lemon juice, ½ cup sugar, 3 small tart apples, 1 cup celery, ½ cup nuts.

Soak the gelatin in the cold water ten minutes, and dissolve in the boiling water. Add the lemon juice and sugar. When the mixture begins to stiffen, stir in the apples, which have been pared, cored, and cut in small dice, the celery cut in small pieces, and the broken nut meats. Turn into one large or six small molds, which have been wet in cold water. Chill overnight. Serve unmolded on a bed of lettuce, with salad dressing.

## FRUIT CAKE.

One-half cup butter, ¾ cup brown sugar, ¾ cup seedless raisins, ½ cup currants, ½ cup citron (finely cut), ½ cup molasses, ¾ tsp. orange extract, 2 eggs, ½ cup milk, 2 cups flour, ½ teaspoon soda, 1 tsp. cinnamon, ½ tsp. allspice, ½ tsp. mace, ¼ tsp. clove.

Cream the butter and add the sugar, beating the mixture until it is light. Then stir in the beaten egg yolks, molasses, and the milk, adding the flour in which the soda and spices have been mixed, alternately with the milk. Add the chopped and lightly floured raisins, currants, and citron, and the extract. Fold in the stiffly beaten egg whites. Bake slowly in a deep pan or pans one and one-fourth hours.

## PUMPKIN PIE.

Two cups steamed pumpkin, 1 tsp. cinnamon, ½ tsp. nutmeg, 1 tbs. bread crumbs, 1 tsp. salt, ½ cup sugar, 2 eggs, ½ tsp. ginger, 1 cup thin cream, 1 cup chopped raisins, 1 orange.

Add the sugar, spices, and salt to