

EFFICIENT FARMING

Artificial Incubation.

The first thing to consider is the parent stock. Care should be taken to select eggs from hens that are free from disease.

The shells should be smooth and uniform in size and shape. Irregular, ridged or pointed eggs should be rejected. Porous shells evaporate moisture too rapidly. They should not be over ten days old. Eggs saved for hatching should be gathered two or three times a day to protect them from chilling in cold weather.

A basement or reasonably dry cellar where the temperature is more uniform, is a good place to keep them. Many inexperienced people make the mistake of keeping them in the house, where it is warm in the day and cool at night. Day temperature starts the growth of the germ; night cooling weakens or kills the germ; the result is a poor hatch.

If an incubator is used, it should be kept in a well-ventilated room free from drafts, and with the temperature as even as possible. Try out the machine for a day or two, to see that it regulates properly and maintains an even temperature. Put eggs in the machine in the morning so as to have the temperature regulated to the proper degree by night. A temperature of 102 degrees for the first week and 108 degrees for the remainder of the hatch is about right. Every good incubator furnishes printed directions for its use.

On the evening of the second day, begin to turn the eggs. Turn them twice daily up to and including the 18th day, or until the chick begins to break the shell.

At the end of the first week the eggs should be tested. Discard all eggs that are perfectly clear and those having a decided dark ring around the embryo as these are imperfectly fertilized and will not produce chicks.

All experienced incubator operators know the value of airing or cooling eggs but some fail to understand why. The chick inside the shell is a living, growing thing, that needs fresh air, exercise and change of conditions, to enable it to expand and develop its strength. The length of time to cool the incubating eggs depends upon the temperature of the room. One expert says to leave them out until an egg placed to the eyelid feels cool. A plan we find very satisfactory is to place the thermometer, with the bulb resting on an egg, and when it registers 90 degrees turn the egg and close the machine.

Airing eggs has another merit. The shells expand and contract with heat and cold and this ripens them. Frequent expansion and contraction is said to break down fibres and make the shell brittle, so that the chicks due to hatch can get out of the shell with less exhaustion. Very often at the end of a hatch we find a number of dead chicks in the shell; this is caused by too little ventilation or too much moisture. The amount of moisture retained or supplied to the eggs affects the size of the chicks. In case of too much moisture, the chicks will be too large for the egg, cramped for room, making it impossible for them to get out and they will smother and die in the shell.

When proper judgment and good common sense are used, incubator hatched chicks from good eggs should come out vigorous and ready to care for themselves in the brooder to which they will naturally be consigned.

Feeding the Market Hog.

Brood sows and boars of correct bacon type and with size and quality are necessary to produce bacon pigs. The condition of the sow and boar at breeding has much to do with the quality, strength and size of the coming litter. Proper feed and exercise outdoors is absolutely necessary for success with the pregnant sow. The correct feeding and exercising of the milking sow is one of the most important steps in making market hogs of her litter. These steps in the making of a bacon hog aside from the actual market feeding of the sows' pig crop, but the proper appreciation of their importance is absolutely essential.

Feeding the weaning pig.

There are thousands of little pigs from the best of breeding stock raised annually through improper or overfeeding from weaning time to three months of age. Overfeeding at this stage makes a sleek, fat, dummy, poor quality hog, finished before he is heavy enough, and liable to crippling.

Start the little pig at 4 to 5 weeks of age with a creep or separate pen to feed in. Feed middlings, mixing small quantities at a time with sweet skim-milk. This gets the little pig gradually prepared for weaning. Scatter a few handfuls of good plump whole oats in the litter in good quantities. After weaning is the critical time. The following is a good ration for the weaning pig: Oats (either steam or ground well sifted), feeding stuff, or better still, ground hulls, 50 lbs.; middlings, 25 lbs.; shorts, 25 lbs.; ground flax or linseed meal, 5 lbs.; tanlage, 3 lbs. This may be varied provided that the crude fibre in the mixture is kept low, and the fat

content fairly high. For the two to three month pig of 50 lbs. feed a pound or so of the mixture daily. Soak for 12 to 24 hours before hand. Feed with 5 lbs. of skim-milk daily. After the pig is well over weaning the milk may be fed better soured (not decomposed).

Feed it scoured all the time thereafter. Do not occasionally change back to sweet milk. Buttermilk is excellent, probably the best milk by-product for the pig over 3 months.

Here are the three fundamentals in successfully feeding the weaning pig: 1. Keep him hungry. Have him squealing for his ration an hour before they are due. 2. Keep his pen clean, but see that the bottom of his trough is the cleanest part of his pen. 3. See that he gets exercise, outdoors in the summer, or in a well bedded pen or shed in the winter or early spring.

From three to four months use a mixture of oats 50 lbs., shorts 50 lbs., middlings 25 lbs., corn or barley 25 lbs., linseed meal 5 per cent.; or equal parts of oats, shorts and barley with milk or tanlage. From four to five months a mixture of oats, shorts and barley or corn, equal parts with 5 per cent. oil meal. For the finish the corn may be increased either by feeding whole or adding to the ground meal mixture.

General rules: 1. Do not overfeed in an effort to finish a pig in record time. 2. Where milk is not available tanlage may be fed 3 per cent. to 10 per cent, depending on the pig's age. Best results are obtained by feeding it in a self-feeder. 3. Green feed, either cut or pasture, is a meal saver in summer. A few roots (mangle) are a wonderful help to the winter fattened pig. 4. If a prime bacon hog is desired, stick to a ration that will grow bone and frame for the greater part of the pig's life. Don't use much corn until the last two months.

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For Home and Country

HOW SHELBURNE GOT A REST ROOM.

Sheburne, having a large area, one of the best farming sections in Ontario, had long felt the need of a Rest Room for the women and children who had nowhere to wait except in the stores. The Town Council had made an effort to provide accommodation, which had not been successful, so about two years ago they offered to equip two toilets, a lavatory, and provide an adjoining room, heated and lighted, if the Women's Institute of the town would undertake to furnish and maintain it, an offer which was gladly accepted.

The Institutes in the county joined in with their contributions, and with these and funds from bazaars and sales of home-made cooking, the rest room was furnished comfortably and in good taste.

There is a paid attendant to clean the room daily, and the Town Council keeps on the fire. The room is closed at 6 p.m. except on Saturdays when it remains open until 10 p.m.

The cost of furnishing was \$100 and the maintenance amount to \$50 a year. The Rest Room not only serves its purpose as an accommodation, but has been a stimulus to work for the Sheburne Branch, and the means of drawing together many of the Branches in the county.

A STUMPING BEE.

Englehart held their meetings in each member's home in alphabetical order. This year they took care of a pair of motherless twins; had a sick man cared for in the hospital (who declares he owes his life to the Women's Institute); and last, but not least, had a Stumping Bee, cleaned up all the brush and planted flowers on every grave in the cemetery, concluding with a good supper and a hearty vote of thanks to the T.&N.O. Railway for their kindness to the northern Institutes.

A UNIQUE ROLL CALL.

Monteith, to meet the problem of getting all members to take some part in each meeting, have a Roll Call which is answered with a quotation, a recipe, or some item of interest.

Felling this, the delinquent page a fine of five cents.

ENCOURAGING ART.

Carlton Place Branch donated a beautiful Service Flag to the town, the names of the boys who had served overseas being worked in him, of those who had fallen, in gold. They are also encouraging Art in their schools by the donation of pictures. Expressions of appreciation for the steady good work being done by the Institute come from both town and teachers.

THEIR INITIAL ATTEMPT.

Esplanade held their first School Fair this year.

"We were too late in making our plans to get Departmental help, but as we had the idea it would likely be very small the first time, we thought we could manage and decided to go ahead."

"As the time for the Fair approached, it became evident that it would be far larger than we had pictured it, even in our wildest dreams. Our delight was tempered by consternation, and now, when it was too late, we recalled the maxim, 'Fools rush in where angels fear to tread.' However, the members of the Institute rose to the occasion. Almost the entire membership turned out and helped; also different teachers who came with their classes helped in recording the entries and later in the day watched to see that the children got back the articles they had entered. Of the two schools taking part in the Fair the public school has an enrollment of 201 and the separate school an enrollment of 410. So that we consider ourselves very fortunate that no serious errors were made. But our chief cause for congratulation lies in the fact that the great majority of the pupils, as well as the parents and teachers, are apparently satisfied that every effort was made to be absolutely fair. Such a reputation is quite an achievement in a town containing representatives of different creeds and nationalities.

"Just now we are trying to secure the fullest possible information in regard to the terms under which Mothers' Pensions will be granted, with a view to seeing that no deserving case in our own community is overlooked."

fearedly prophet only reiterated his message of doom. In particular he denounced the rich grandees who crushed the poor, and lollers in luxury on beds of ivory. They were "at ease in Zion," and felt that no harm could befall the nation. Were not the mountains, and the Lord also, about the city of Samaria? It wounded the heart of Amos to proclaim his word of woe, but he was obedient to the heavenly vision.

2. Prosperity blinds men to danger. Israel was at the height of her prosperity when Amos burst into her religious worship at Bethel, with a cry of warning that God would no longer tolerate the wrongs that were being perpetrated in the land by the leaders and "notable men." Prosperity had hardened the hearts and blinded the eyes of the leaders. They could not believe that calamity would overtake them, for were they not "very religious?"

3. The true foundations of national life—practical religion that includes not only the worship of God but brotherly treatment of all men. The people of Israel had any amount of religious machinery, the external ceremonies of feasts, but they lacked brotherhood, mercy and justice.

4. A sin that sapped the life of the nation and destroyed the vision of the leaders and rulers in particular was drunkenness. We know what ravages the liquor traffic made with many of our own British and Canadian men during the war. The effect of the drinking habit was to render the rulers of Israel callous about the condition of the people.

The Sunday School Lesson

MARCH 12

Amos Warns Israel, Amos 6: 1-8. Golden Text—Prov. 20: 1 (Rev. Ver.)

Lesson Foreword—Amos was the first prophet whose discourses we possess. Very little is known of his personal life (see ch. 7: 10-17). He had been a shepherd in Tekoa, in the wilderness of Judaea, southeast of Bethlehem. Used to a shepherd's simple life in stern surroundings he was indignant at the corruption and luxury of town life among his countrymen. The main idea in his gospel was that God is a righteous God and that nothing short of righteousness in his people could win or hold his favor.

I. The Godless Rich, 1-3.

V. 1. Amos pronounces woe upon both Zion, the capital of the southern kingdom and Samaria, the capital of the northern kingdom, because they were living in a false security. Their sense of security was due to at least three reasons: First, Assyria, their enemy, seemed to be on the decline and its armies were unoperative in the neighborhood of Palestine. This allowed Israel to live at peace and to prosper and expand. Second, both Zion and Samaria were situated on high hills which were considered almost impregnable against the attack of an invading army. Third, Jehovah was on their side with His protecting power; they were His special people and as long as they worshipped Him with costly ritual He would never deliver them over to their enemies. Chief of the nations. Amos is here addressing the well-to-do aristocracy to whom the people came to render homage and for the settlement of their disputes.

V. 2. Calneh; probably a prosperous city-state in Northern Syria near Aleppo. It was captured by the Assyrians in B.C. 738. Hamath the Great; situated on the Orontes river at the entrance to the Lebanon mountains. It was finally subjugated by the Assyrians under Sargon, in B.C. 720. Gath; one of the five royal cities of the Philistines. It was the home of Goliath (see 1 Sam. 17: 4), and for a time the refuge of David (see 1 Sam. 21: 10). It fell before the Assyrians, about the same time as Hamath. Be they better, etc.? The meaning seems to be—great and prosperous as these kingdoms were, they were subdued by their enemies. How then can your kingdom which is no greater than theirs escape a similar fate?

V. 3. The evil day. The contemporaries of Amos believed that there would come a day when Jehovah would intervene on their behalf against their enemies. It would be a day of judgment for the surrounding nations but of great blessing for Israel. This was the popular notion. Amos did not deny that the day of the Lord would come but he declared that it would be a day of judgment for Israel as well as for the heathen. It would be an evil day for all wrongdoers and such were the whole nation of Israel. (See ch. 5: 18-20.) When the wrong-doers heard this they tried to make themselves think that they would be exempt from it. They refused to see the "signs" of the times. The day of visitation. This denoting refers to the mal-administration of justice.

II. Luxurious Living, 4-8.

V. 4. Beds of ivory; high night with ivory. Ivory was imported into Palestine by the caravan trade. It was regarded by the stern prophet as an unnecessary luxury. Stretch themselves upon their couches. This was a mark of indolence and effeminacy. Eat the lambs, etc. They were glutted and were satisfied only with the finest delicacies.

V. 5. They enticed their feast with music. "Idle songs were sung to a strumming accompaniment." Like David. David was popularly supposed to have been a musician and to have invented musical instruments. While these debauches may have been chained to have been the example of David, they forgot they were profaning music by using it at their drunken carousals while David employed it for the service of God.

V. 6. Drink wine in bowls. The word "bowls" emphasized their debauchery. Instead of the ordinary drinking vessel, the cup, they used the larger sized bowl for their wine. This shows how far their self-indulgence had gone. Anoint themselves, etc. Oil was rubbed on the skin to allay the irritation caused by the heat and to conceal the odor of perspiration. These dandies, not content with mere oil, must have used extravagant perfumes. They are not grieved for the affliction of Joseph. So absorbed in their luxury and pleasure were these dissolute leaders of the nation that they were indifferent to the morally unsound condition of their nation.

III. The Inevitable Punishment, 7, 8.

V. 7. Part of Amos' work consisted in exposing his nation's sins and part also in announcing the doom which was sure to come upon them. God was about to undo all that he had done for Israel. He was going to cause them to be taken captive out of the land which he had once given them. They shall go captive with the first. The debauched leaders of the people whom Amos had been denouncing will be the foremost among the captives to go into the scowls of exile. And the banquet, etc. In the day that Israel is carried into exile all its mad carousals will cease; it will be a time of sorrow rather than of revelry.

V. 8. The Lord hath sworn by Himself. (See Jer. 51: 14.) Elsewhere Amos says that God swears by His holiness (see ch. 4: 2). The meaning is that since God is a righteous God he can do nothing else but punish Israel. I abhor the excellency of Jacob. The excellency of Jacob would be the things in which Israel gained themselves: their rich palaces and strong cities. I will deliver up the day. This refers to the coming stage and capture which Amos foresees will be the outcome of the nation's wickedness. No specific mention is made by Amos of the nations which is to work God's punishment on Israel but there is little doubt that he had in mind the mighty Assyrian Empire.

Application.

1. A faithful prophet—what a contrast to Japan. Amos was a shepherd from the south country, and his stern duty was to expose the vices and injustices of his nation. This denoting refers to the mal-administration of justice.

II. Luxurious Living, 4-8.

V. 4. Beds of ivory; high night with

SMOKE OLD CHUM

The Tobacco of Quality
1/2 LB. TINS
and in packages

Can Your Child Come Home to Dinner?

BY MARGARET A. BARTLETT.

How far do you live from school? Are you within a mile? If so, how often do your children come home for dinner? Never? But why not? There are many, many town and city children who have to travel from half a mile to a mile to school, yet who never think of taking their dinner to be eaten cold at noon. If they can go back and forth each noon, why cannot the country children who are fortunate enough to live within a mile of the school?

The fact is that it is the custom for country children to take their dinners and it seldom occurs to the majority of parents to have their children come home at noon, even though they live within a few minutes' walk of the school. Indeed there are some mothers who are not pleased at this suggestion because of the extra work it would make for them; yet, if they realized the good it would do the children to get away from school for an hour in the middle of the day they would consider the work a privilege.

In good weather, what is a mile walk to an active child? If you think it a long walk, just put a pedometer on your child and see how many miles he covers in an hour of "just running around." A brisk walk makes the child ready for a "square" meal—a meal that will furnish him with the fuel necessary to take him through an afternoon of hard mental labor.

A Widespread Custom.

In a certain country school with which I am familiar, it was the custom, as it is in nearly all such schools, for the children to bring their dinners. Two or three of the boys and girls went home each noon but they were children who happened to live almost across the street from the school. A large percentage of the children lived within a mile yet not one ever thought of coming without his dinner pail. The school, as a result of this practice, was counted as a one-session school, although it maintained the regular hour's nooning.

On the older children, accustomed for years to school life, the long hours away from home seemed to make but little impression; but on the younger pupils, the strain was very noticeable—they were pale, undernourished little bunch of farm children.

All through the many weeks of cold or windy weather, the children congregated by corresponding with the Seed Commissioner, Ottawa.

Feeding Stuff Found to be Impure.

Misrepresentation and fraud in the compounding of certain stock feeds has been clearly demonstrated by examination under the microscope, according to the Seed Commissioner of the Department of Agriculture at Ottawa. A product that was offered for sale as barley meal at \$4 a bag, was found to actually contain no barley whatever; the mixture consisted of ground corn, sorghum, bean meal, and ground oat hulls. Another class of food called Feed Flour that retailed at \$4.50 a bag, was found to contain ground rice hulls, pulverized oat hulls, with some sorghum and corn. What was named Oil Cake consisted largely of ground onion shells, with a little linseed meal and barley flour. To the naked eye it was practically impossible to determine that any of these foods were fraudulent mixtures. These discoveries prove that it was high time central attention was being given to the enforcement of The Feeding Stuff Act which has been entrusted to the Branch above referred to. Farmers with purchased feed in their possession of which they have doubts, may, if they wish, have samples analyzed on terms that may be ob-

tained by corresponding with the Seed Commissioner, Ottawa.

gated in the overheated, poorly aired schoolroom. Their vitality was quickly lowered. "Colds" ran rampant through the school; contagious diseases spread in the same manner and there were always several on the sick list.

Finally one mother, discouraged at the lowered vitality of her little first-grade girl, called up the teacher and asked if it would be all right for Muriel to come home to dinner. Consent was given. Muriel ran most of the way home, arriving in high spirits and hungry as a little bear. By the time she had washed up, her pulse was normal and she was ready for dinner, which her mother made sure was always ready for her on time. There was sufficient time to eat properly and WALK back to school.

Increased Efficiency.

Muriel's increased efficiency in the afternoon was quickly noticed by the teacher; her rosy cheeks and sparkling eyes were commented upon by several mothers of the district. The "cold" which had troubled her for weeks, disappeared, and she did not "catch" a new one on the first provocation. She was getting to be as healthy and robust a little girl as she always had been before she started in school.

It was not long before Muriel told us of other children who were going home to dinner. Finally one day she announced that beginning with the next term they were to have an hour and a half nooning, just as they did in town, so as to allow pupils to go home to dinner.

Soon, all those who lived within a mile and a quarter of the school went home at noon and the general health and efficiency of the school quickly jumped several points. Improvement was noted in practically every child who went home to dinner. Even those who had to eat dinner from a lunch pail benefited by the change as there were fewer children in the room and consequently less excitement and more attention to food.

There would be fewer cases of spinal trouble, anaemia, stunted growth, nervousness, poor scholarship and naughtiness, if every one remembered that children, like young and very tender saplings, need continuous care until the body is entirely built. It is the duty of parents to see that teachers do right and the duty of teachers to help parents.

Care of Milk Vessels.

It is much easier and better to keep bacteria-breeding material away from the milk vessels; than to get rid of the bacteria after the vessels are infected. Have a good supply of wash cloths, so that each one needs to be used but once before laundering. If only a few are at hand they must be scalded after each time they are used.

Those who use earthenware crocks for milk should always rinse the crock first with cold water and then wash in clean, hot water. Place crocks in the sun; thorough airing is nearly as important as sunning.

Corn fed through cattle and hogs is worth sixty to ninety cents a bushel at present market prices, says college economists and feeders. That's a lot more than it's worth in the furnace.

When Uncle Owen Hall asked Alvy which side to milk a cow on, Alvy said he thought it would work best on the outside. But Alvy set the gull under the cow and tried to work her tail like a pump handle to get the milk, which proves he didn't know much about the dairy business.

ROSY CHEEK HEALTHY

Know the Full Value of Red Blood

Robust, healthy, red seldom worry. The mind and body is sure rise above the causes anchoy and brooding, with weak, water thrown into nervous annoyances that grow imagination that grow must scream to relief. A woman's health when her blood is weak. The stomach is all appetite vanishes, their strength and so regular and does not rest. A state of weakness creases gradually ab cause for worry. Good sary to every woman pale and weak, and Dr. Williams' Pink Pills of great benefit, beca and purify the blood, anaemic, suffer from pitation, headaches, tacks will find new st a fair use of these pl women who have provi this medicine is Mrs. I ket's Cove, N.S., who two years ago I began and was very weak, and all run down, and weak and watery. I every month, I take Williams' Pink Pills and do for the blood, and low condition I decid. By the time I had fin box I found to my gr I was a great deal st blood a deep red color of work to do besides my little one, and with I enjoy it, and I can owe this condition to Pink Pills.

Dr. Williams' Pink tained through any n or may be had by mail, cents a box or six box. The Dr. Williams' Med ville, Ont.

MacCAUSLAND'S

Variations—MacCasto Anlan, MacAnselan, Racial Origin—Scottish Source—A given name. You would not think the family name of MacAnselan. But it has. The forms MacCauslan appear to be the quently met with to-day. Will often run across the names are all derivatives given name of "Anselm" equivalent to "Anselm" ing the "Teutonic form" as the Latin name. It is interesting to note rection that many give been developed? Indep Gaelic and Teutonic, virtually parallel lines, trace back the connect find it until you arrive toric and misty specula fore the Celts and the ed off from the par and subsequently ep many races and later tive analysis of Celtic tongues, as well as of Greek shows that a of their fundamental stripped of their variat and changes, are from

He has a good...

