

Seasonable Printers For Farmers

Good Healthy Chicks Got By Artificial Incubation

A Good Deal Depends On the Choosing and Operating of the Incubator—Good Healthy Breeding Stock Is More Than Half a Successful Hatch.

As the hatching season approaches the following notes on artificial incubation, by F. C. Elford, Dominion poultry husbandman, will be of timely interest:

BUYING AN INCUBATOR.

If more than 100 chicks are wanted, an incubator, as a rule, will be found more satisfactory and more profitable than sitting hens. Better not buy an incubator, however, if you are not prepared to give it proper care and attention, and when you buy it get the cheapest incubator you can get simply because it is cheap. The best is none too good, and cheap machines are usually better than expensive ones. Cost is nothing compared with the expense of keeping a poor machine supplied with eggs. Buy also from a reliable firm, and as near home as possible.

HOW TO TELL A GOOD MACHINE.

Nothing but results is an absolute guarantee that a machine is good, but still there are certain marks that indicate the probable value of a machine for hatching. The first of these is the general appearance. It should be well made, good workmanship and good material entering into its construction. The doors should hang true and fit without friction, the glass large and clear, and neatly put on. The paint should be of a good color, and the machine should present the appearance of a finished piece of furniture. Good insulation is absolutely necessary. See that the walls are double, and likely to maintain a comparatively even temperature. There are, besides the above, a number of other points of more or less importance. The lamp should have a large enough bowl to last at least 20 hours, convenient to fill, easy to take out and replace, good workmanship, and chimney, the mica opening so placed that the whole of the flame is readily seen when the observer is standing. The heater well insulated, and made so that it can be cleaned. A reliable thermometer and thermostat, egg trays that slide in and out without catching, and the height of the machine should be convenient for working.

THE SIZE TO BUY.

As a rule not more than three hatches can be taken off in one season, and usually two hatches are better, therefore get an incubator large enough to hatch in two seasons all the chicks desired. With an ordinary farm flock a 125-egg capacity machine is a convenient size to buy. If more accommodation is wanted another incubator can be purchased. A new system of hatching has lately been introduced into Canada, that of custom or co-operative hatching. Usually mammoth incubators are used for this purpose, and those who would rather pay a small fee than tend their own eggs bring them to these machines and call for the chicks when incubated. This custom is being tried out in some sections, and apparently is proving satisfactory.

A well-ventilated cellar, with a fairly even temperature, makes a suitable location for the incubator. If this is not available, a room in which a moderately even temperature can be maintained without artificial heat will answer. Fresh air is necessary, but so is a draft, it draughts should be avoided.

OPERATING THE INCUBATOR.

The operation of the machine will be considered under the following heads: Heat, moisture, cooling, turning and testing, but it must be borne in mind that, as a rule, the general directions given by the manufacturer should be followed fairly closely, at least until they have proven unsatisfactory for local conditions, and any general changes should be adopted only after several tests, though these tests may be in a small way only. One of the reasons why first hatches often are so successful is because the operator has followed the directions closely, and by the time the operator has run off two or three hatches he begins to think he knows more than the manufacturer, and makes rules of his own, which are sometimes followed by disastrous results. Therefore, whatever may be said under these various heads is to be taken in a general way, and not to replace direct instructions intended for any one.

STRENGTH WILL RETURN TO WEAK PEOPLE USING THIS TREATMENT

You are discouraged. You feel old and worn. You are sick, but not aware of the fact.

You can drag yourself around—but work is impossible.

With your stomach crying out for assistance and the nerves all on edge why not try Ferrero's? It will surely do you good.

Ferrero's is a wonderful combination of vegetable extracts, fortified by excellent tonics for the nerves and stomach.

When you feel despondent, Ferrero's cheers you up.

When languor and oppression weigh you down, Ferrero's braces you up.

When sleep is impossible, Ferrero's calms the nerves and gives you rest.

For bounding health, good looks, good spirits, nothing equals Ferrero's; makes the weak strong and the sick well. Good for men, women and children; try Ferrero's. It can work wonders, as it did for Mrs. Mary Melong, of Harbor Bouche, N. S., who writes:

"Ferrero's built me up. Before using it I scarcely knew what work was."

"I was just as miserable and weak as any woman could be."

"Tired from morning to night, bothered by trifles, uneasily nervous."

"The first box of Ferrero's improved my blood, gave me appetite. In a short time I was like a new person. Now I rejoice in abundant good health."

Try Ferrero's. It will make an unexpected improvement in your looks, your feeling.

Whether anemic, nervous or suffering from secret disorders—if you want cure, use Ferrero's. Price 50c per box or six boxes for \$2.50, at all dealers or direct from The Catharine Company, Kingston, Ont.

CATARRH OF THE BLADDER relieved in 24 HOURS by **SANTAL MIDY**

ONE OF ELGIN'S FINEST TOBACCO FIELDS.



This patch of tobacco grown on the farm of Reeve N. A. Roszell, near Ridgetown, is said by experts to be practically perfect and the finest in the district. The men in the photo are Guy Roszell, Bruce Graves, Reeve Roszell and John Davidson.

Middlesex Leads Ontario in Poultry and Cattle Raising

The County Contained 565,846 Poultry Last Year and 146,168 Head of Cattle—There Were Also 32,455 Horses and 30,456 Sheep and Lambs on the Farms.

The importance of the county of Middlesex as a farming district is not sufficiently recognized, even by the people who live in it, but it is nevertheless a fact that in the number of its live stock and the quantity of its produce it more than holds its own with the rest of Ontario. For example, the quantity of wheat grown in this county last year was 1,574,588 bushels, while the spring wheat came to 21,593 bushels. Of barley, 13,051 bushels were grown, and of oats 5,392,386 bushels. Rye came to 735,721 bushels in Simcoe, the largest of the other counties, and 12,725 bushels to 21,670, and beans to 3,814.

The cultivation of flax is also receiving increased attention, and last year the yield in this county was 13,700 bushels, while 717,669 bushels of mixed grains were produced. Of corn for husking there was grown 797,302 bushels, in the ear, and of grain fodder corn 121,751 tons.

In the growing of potatoes Middlesex was the third highest in Ontario, the quantity being 1,046,678 bushels, to 1,385,721 grown in Simcoe, the largest of the province. Middlesex also produced 483,353 bushels of mangels, 334,648 of sugar beets, and 8,000 of carrots. The county likewise yielded 13,725 bushels of alfalfa, and 162,321 tons of hay and clover.

Of cleared pastures there were 234,943 acres in this county last year, 15,071 compared with 43,457 in other counties. The number of stallions being 147, mares 15,168 geldings 11,778, colts and fillies, making the total number of horses 22,465.

The total number of bulls was 2,646—297 milch cows, 30,697 calves, 15,071 compared with 43,457 in other counties. The number of stallions being 147, mares 15,168 geldings 11,778, colts and fillies, making the total number of horses 22,465.

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Common Calving Troubles And How to Prevent Them

It Is Highly Important That the Mother Receive Every Attention—Much Serious Loss Is Caused Owing to the Careless Handling of Cows Prior to Calving.

(Experimental Farms Note.) The most common calving troubles are (a) retention of the afterbirth; (b) congestion of the udder with its attendant possibilities, inflammation and garget; (c) milk fever; (d) the retention of the uterus, all of which can be prevented to a greater or lesser extent. It is the intention of the writer to deal with the preventive measures only, treatment of cases coming within the province of the veterinarian.

The cow, of all our domestic animals, is especially subject to retained afterbirth. This is accounted for partly by the firm connection of the afterbirth to the interior womb by means of numerous stylodes, partly by the fact that the retention is associated with the disease, contagious abortion, and partly through low vitality in the animal, this showing particularly in the inability of the womb to contract, after calving, with sufficient force to expel the afterbirth. With the first of these factors it is not the purpose of this article to deal, other than to state that, if successful treatment for contagious abortion should also help to prevent retention of the afterbirth. The last factor mentioned is one which can be overcome to quite an extent by liberal feeding and proper conditioning of the animal previous to calving time. A dose of Epsom salts a week or so before calving and a laxative grain ration, such as bran, from time to time, will be found helpful. Avoid giving cold drinking water or cold feed just after calving, and do not disturb the cow until the afterbirth has been expelled, provided it is not retained unduly long.

Constriction of the uterus is in itself a comparatively simple trouble brought on by a combination of heavy feeding, over-exercising, high condition, and a sluggish lymphatic system. The former is to be desired, but the latter is not. Congestion will usually yield readily to the same treatment as outlined above, namely, preparatory dose of salts and laxative feed, together with an occasional ounce dose of saltpetre in the drinking water. Exercise, particularly walking, and after calving a dose of salts, is also beneficial. To prevent congestion developing into inflammation and garget avoid standing cow in drafts and milk often, rubbing the udder gently with camphor and ointment after each milking. If there is any indication of a more serious trouble developing give a row strong laxative—Epsom salts, 1½ pounds, molasses, 1 cup and ginger 1 ounce—followed after purging ceases by a row strong laxative.

Milk fever occurs more often with mature heavy milking cows than with any other class. Predisposing factors are heavy feeding, previous milk fever, and constipation, while one of the most common causes, is milking a cow out too thoroughly too soon after calving. If the cow is properly prepared for calving as outlined above and only a little milk is taken off at the first milking, drawing a little more at each subsequent milking until all the milk is drawn at about the end of the third day, very little trouble will be experienced with the udder. Should a case develop call a veterinarian at once, or, if one is not available, apply the air treatment yourself. Briefly, this treatment consists of pumping air into the udder by way of the teats by means of a bicycle pump or other contrivance, care being taken to sterilize the teat tube used by boiling in water, and to purify the air pumped in by passing it through sterilized absorbent cotton.

Evolution of the uterus or throwing out of the calf bed is, like retention of the afterbirth, due to the failure of the womb to contract after expulsion of the fetus. In some animals the evulsion takes place just after calving without any previous warning. In others evidence of likelihood of this trouble at calving is given for some weeks previous to calving, in that more or less of the womb protrudes from the vagina whenever the cow lies down. Large cows tend to retain the uterus, and their buttocks hang over the edge of the gutter when lying down are most inclined to this trouble. Any animal showing such signs should be placed on a higher level than her front feet. Be with her at calving time to assist her if necessary, as the expulsion of the fetus may be difficult when in this position. If continued straining and pressing after calving is noticed tie a rope fairly tightly around the animal's body just in front of the udder and hook bones. This will reduce the straining and make the evulsion of the uterus impossible.

Attention to the details outlined in the preceding paragraph will not take much time or money, and may well mean the difference between a cow off to a good start and one badly crippled for the most of the lactation period. If not lost altogether—George W. Muir, Animal Husbandman.

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Merchant,

What of Your Stock?

How fine it looked when you bought it.

How pleased you were at the thought of the trade you would attract with it.

And you did.

But, stay! Was the trade as good as you expected?

No! Then what was the reason?

Conditions against it? Maybe, but the reason goes deeper than that.

You used good judgment when you bought and your selling prices were right. The reason was that the public—that is, sufficient numbers of "him" or "her"—did not know it.

Your stock had no more attraction to them than that of any other merchant. So they did not come to you to buy.

That's all. No more, no less.

You know very well that if you could have attracted a sufficient number of people into your store, and an average proportion of them had become purchasers, you would have sold all of your season's goods.

"Very well," you say, "but how am I to get the public into my store in the sufficient numbers that you speak of?"

Advertise!

"But," you answer, "I do advertise."

True enough, but do you put the same quality of brain into your advertising that you do into your buying?

This is not meant to be impertinent. It is said in all seriousness, in the desire by newspaper publishers to have their newspapers be of the greatest possible service to you.

In other words, the more care and the more study you give to your local newspaper advertising the less care and the less thought will you need to give to the selling of merchandise after season.

Not to use your local newspapers with all the skill and judgment that you can command is to deny yourself the services of the greatest trade promoter within the use of man.

The publisher of this paper will give you the benefit of his advice on all matters pertaining to the typographical arrangement of your copy and, whenever possible, assist you in the preparation of it.

Issued by The Canadian Daily Newspapers' Association, Toronto.

L. A. I.

tops should be dry, but the roots in moist soil, hence if watering is necessary great care should be taken not to wet the tops.

It is not difficult for a farmer to care for his vegetables in winter, as he has, as a rule, a good, cool cellar, but in cities cellars are usually too warm for most vegetables; hence, where the main cellar is too warm, wherever possible a part of it where cool air can be admitted should be partitioned off from the rest for a vegetable room.—W. T. Macoun, Dominion Horticulturist.

THE HORSE STILL THRIVES.

Motor power has largely invaded the province of the horse, but the animal still lives and thrives and still has its widespread usefulness. The great war has had its devastating influence on the horse, and also developed the value of machinery in its place. But experience has proven that there are still uses to which the horse can be better applied than motor or steam power.

When the traction horse was to be used to public service a crippling blow was dealt the horse. When the bicycle became a future the horse became an object for scorn. When the automobile and, later, the tractor appeared, the horse was to vanish, but he maintained his ground. His numbers are not decreasing to any notable extent, while his quality has ever an upward trend. Breeding stations are being established and every effort is being made to maintain breed type. Saskatchewan's success in winning championships at the recent international stock show in Chicago is an evidence of the marked success that has been met with in Canada.

The horse is still in good condition in a very dry place, yet one beast is fairly dry is better than one that is inclined to be damp, particularly if it is rather warm and not well ventilated. Bees keep the bees apart with a stand many degrees of frost. Squash and pumpkins, if kept in a cool place, may have rotted by this time, but if they are still in good condition they will keep much longer if put in a room where the temperature is above 50 degrees Fahr.

If celery has begun to rot, the plants should be all gone over and diseased parts or plants removed, and when replanted, see that the tops are kept dry as long as the plants last, and if there is room have a small space between the top of each plant. To keep celery in good condition during the winter, the

be mainly used for breeding of its particular type of horse. There are at present 67 French-Canadian horses on the farm, all registered. Entries were made at some of the more prominent fairs in Quebec, and in each instance first prizes and championships were won.

When the bowels are allowed to become constipated, the stomach gets out of order, and the liver does not do its work properly on account of holding back the bile, so that it does not pass through the bowels, but is allowed to set into the blood, thus causing a poisoning of the whole system.

If you would escape constipation, sick and bilious headaches, heartburn, flatulence, indigestion, the liver, coated tongue, foul breath; the nasty irritations, bleeding, itching and protruding piles, you should keep your liver stirred up by the use of Milburn's Laxa-Liver Pills.

These pills, being purely vegetable, keep your liver working actively, helping it to resume its proper functions, and thereby removing the bile that is circulating in the blood and poisoning the whole system.

Mrs. H. Barrows, Enfield, N. S., writes: "I was troubled with such headaches and constipation. One day a friend told me of Milburn's Laxa-Liver Pills. I got two vials, and found they did me a world of good. I therefore have great faith in them."

Milburn's Laxa-Liver Pills are 35c a vial, at all dealers or mailed direct on receipt of price by The T. Milburn Company, Limited, Toronto, Ont.

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