

OF INTEREST TO FARMERS

RUNNING THE INCUBATOR

First of all, let us make it perfectly clear that any suggestions which we make here are purely general in nature, and that we strongly advise each incubator operator to study his own machine rigidly and carefully.

The manufacturer of an incubator is more concerned than any one else, except the owner, with the successful operation of the machine. He best understands the secrets and it is always safe and logical to follow his lead.

Temperature is the most vital factor in the care and operation of running an incubator. It is one fact that cannot be varied widely and followed with good hatching results.

The second week 102 1/2, and the third week it should be run at 103 to 103 1/2; the latter being best at the very end of the hatch. These temperatures apply when the thermometer is located above the eggs with the bulb just clearing the eggs, not touching them.

In the care of the heating unit, whether it be kerosene lamp, coal stove or gas burner, certain factors must be appreciated: The source of heat must be kept in perfect working condition; it must be systematically cared for; wicks should be trimmed regularly and kept burning evenly; coal fires should be shaken down at necessary intervals, usually twice a day, ashes completely removed at each shaking and the fires cooled evenly and uniformly.

Special attention must always be given to the heat regulating device whether they be floats in water tanks connected immediately with draft dampers, whether they be thermostats controlling circulating dampers or whether they be expansion regulators adjusting the flow of hot water through pipes, they must be constantly watched and adjusted, first of all, to see that they are clean and free, and functioning properly; secondly, to see that they are properly regulated to maintain the degree of temperature desired.

The turning of eggs in the incubator is vital to success. Why do we do it? Because the old hen does it. What is the effect of turning? It is this: It changes the position of the germ within the egg constantly, preventing the germ from coming in contact with and adhering to the shell. Turning brings the germ in contact with the fresh supply of oxygen, and during the latter part of the hatch, turning is essential to enable the embryo to assume the right shape or position in the egg.

It is not necessary to turn each egg over one half turn completely at each turning time, but simply necessary to rotate or move the egg slightly from time to time so that the position of the germ and the egg is changed. Frequent turning has been found to be very beneficial. In small lamp-heated machines they are generally turned two or three times a day, and the same is true in mammoth incubators, but with modern turning appliances, eggs by the thousands can be turned in a moment's time.

In years gone by it used to be necessary to cool the eggs in the incubator each day especially during the latter part of the hatch. Modern incubators are so well ventilated and the air changed in them so frequently, fresh oxygen supply is constantly available, and hence cooling is bound to retard embryo development.

Moisture and ventilation are two factors in artificial incubation which are closely linked up together. The real gauge of the amount of moisture and ventilation required is the size of the air cell. Without going too much into detail, it is sufficient to say that more ventilation is needed in the incubator during the latter part of a hatch. Moisture is generally helped in moist climates throughout the hatch, although this varies somewhat in the type of incubator used.

The test of proper ventilation and moisture is the air-cell of the egg. For example, when the egg is placed in the machine the air-cell is very small being only one sixteenth to one eighth inch in depth. On the third day the air-cell will be about one quarter of an inch in depth; on the eighth day about three eighths of an inch; on the 15th day about five eighths of an inch, and on the 19th day or just before hatching, about three-quarters of an inch in depth.

Be sure to candle the eggs early in the hatch to take out infertiles which can be sold for baking purposes. Any dead germs should either be boiled for feeding to the chicks or discarded. They are not suitable for human food. Testing is done, as you know, by holding the eggs before a candle, candling machine, or by passing a light under the egg tray; the infertile eggs showing absolutely clean, no germ development being present.

Be sure to keep a careful record of the hatch on special cards or records provided for each machine of each hatch. Eternal vigilance is the price of success in artificial incubation.

Those who have overflow land to handle this spring or land that has been too wet to plant to corn at the usual time, if they are in position to use a forage crop, either for pasture or hay, may be interested in sudan grass. It is not an ideal pasture grass by any means, but as an emergency crop it is one of the best available. It may be seeded any time in June, the sooner the better.

Good corn land will yield from three to five tons per acre. It will produce as much as three tons per acre, even if not seeded till the latter part of June and the hay is very palatable to all classes of livestock. It is a nonlegume and therefore not to be compared in feeding value with the legumes, which are rich in protein. But when we are speaking of emergency crops, the question is not the growing of the very best crops, but rather putting the land that had been intended for some other crop to the best possible use under existing conditions.

Soybeans make a better quality of hay than sudan grass, but the demand for soybeans for late seeding this year has been so strong that the seed is not only high in price but in many sections also very difficult to get. Sudan grass is available at reasonable prices and will appeal to many this year.

If seeded for pasture care must be taken not to use it for that purpose after frost, because of the danger of prussic acid poisoning. When seeded late on a well prepared seed bed it grows very rapidly and will be ready for grazing in five or six weeks after seeding.

In preparing a seed bed for sudan grass, proceed as for oats. Corn ground may be prepared by disking and harrowing without plowing. In fact spring plowing for sudan is not

KEEP ALL RECEIPTS No matter who takes care of the bills in your family, you should have some system of filing. There are on sale, filing boxes not much bigger than a lunch box, which are splendid things in which to keep the family archives. And if one doesn't care to spend as much there are letter files which resemble a book. They are indexed so that one can file insurance policies either under the letter "I" or under the name of the insurance company.

TODAY

By ARTHUR BRISBANE The federal reserve reports cheerful business conditions. Production of steel ingots increased 25 per cent. in January, general manufactured products increased 6 per cent. This country is in good shape, richest, most prosperous, most fortunate on earth.

The government will put some of its surplus to work on the Mississippi and the Boulder dam development, all will be serene. Distributing water and fertilizer makes farms productive, distributing cash makes nations prosperous.

The Rev. Rodolph Pettey, devoted missionary on the northern Cheyenne reservation in Montana, is translating the Bible from Hebrew and Greek into the language of the Cheyenne Indians. Translating the New Testament must be difficult. Fighting Cheyennes did not talk the language of Christianity.

The reverend translator can sympathize with old Maimonides who translated the Greek Philosophers into Hebrew. He had to invent Hebrew words to express abstract Greek ideas that did not exist in the Hebrew language. Because he did that the Green synagogue in Spain excommunicated him.

That did not worry the justly revered "Rambam." He had a good job as physician to the ruler of Egypt, and lived safely with that wise and tolerant Mohammedan.

In California, with 40,000 people that might be better employed, looking on the powerful Basque Uzdun, from the Pyrenees, fought the huge negro prize fighter Godfrey. The Basque weighed 195 pounds, the negro 235 pounds, the negro winning.

To this Uzdun, member of a strange race of origin unknown, all men look alike. Our high spirited white American fighters, whose ring time is worth \$500 a second, are more cautious. It would take a steel cable to drag one of those heroes gently into the ring with a negro even smaller than Godfrey, unless they were certain that he had been paid, or "he down" that he couldn't fight, or that disease had rendered him powerless.

It may be repeated that a small sized gorilla could take Uzdun, Godfrey, Dempsey and Tunney at their best, all four together, and pick them to pieces at leisure.

Pope Pius in a ceremony honoring the memory of the venerable Elizabetha Mora refers to the immodesty in dress of some modern women as "insults to the eyes of God and cause for temptation or distrust in the eyes of the world."

That is no exaggeration. It took women a million years to learn to dress modestly. They overdid it with their veils, hoop skirts, bustles, etc. Now they are rapidly going the other way. A strange, daring sex.

The late Albert Brisbane, more than 30 years old, suggested that large apartment houses with central heating plants and water automatically distributed should be built as an improvement on "the isolated household." Some, old fashioned, who knew little, did not mind seeing their wives carry water from the pump, said "Americans" will never live herded together.

Now Dr. Albert E. Douglass of the University of Arizona, exploring the Pueblo Bonito in New Mexico, finds an early American house about 1,000 years old, that housed 2,000 early Americans.

Dr. Douglas can tell by rings in trees that have grown up since its abandonment, how old the apartment house is.

Mrs. Eva Dugan, aged 50, convicted of killing a man in Arizona, must be sentenced to hang. Arizona has never hanged a woman. Will that state officially kill its first woman in 1928? A woman of 50 can be disposed of with safety to the public, without subjecting the state to the degradation of choking an old woman to death. It should be difficult to find, in Arizona, any man willing to undertake that job.

Miss Fannie May Davis, one of many interesting religious workers who make California better and brighter, dies, leaving to her relatives "the priceless memory of companionship with me," and leaving \$15,000,000 to a gentleman friend, Isaac J. Isaacson. Her will says that giving the money to Mr. Isaacson is "not an act of human mind but a direct order from Providence." A wise judge will investigate that statement.

Seven men and six women were engaged in an interesting train robbery in Chicago. "Limpy Charlie" Cleaver drank too much and talked too much. He is in jail, and a criminal lawyer is held, accused of planning and directing the crime. The police are hunting a politician also involved. It was a typical well thought out crime, netting \$133,000. The lawyer and politician make it worth mentioning.

Q. What did the Indians use to scent or perfume smoking tobacco? J. L. H. A. Kinnikinnick, an Algonquian word signifying "mixed by hand," is used to designate a mixture of tobacco with some other plant, either for the purpose of imparting a more pleasant odor or to reduce its strength, as the trade tobacco alone is commonly too strong to suit the fancy of the Indian. Among the western tribes tobacco ordinarily used by mixing with it gum, sumac, and bearberry, the bark, leaves, and roots of two kinds of willow, manzanita, leaves, Jamestown weed, touchwood, dogwood bark, arrowwood, and a variety of other woods, barks, leaves, twigs, and even insects.

A Good Start. From Passing Show. Diner—That young waiter is looking very proud today. Head Waiter—Yes, sir; you see he's just miscalculated his first bill. With or Without? From Answers, London. Entering the restaurant, the stranger flipped a chair with a silk handkerchief and carefully sat down. "Yes, sir?" asked the waiter, proffering the menu. "I'll begin with a dozen oysters," said the precise one, "and mind they are natives. I want them on the deep shell, not too large and not too small." The waiter bowed.

"Choose them very carefully," went on the customer, "and be quite sure you do not bring me any that are not plump and firm." "Yes, sir," replied the waiter, "certainly. And—er—will you have 'em with pearls in 'em or without, sir?"

If Back Hurts Flush Kidneys

Drink Plenty of Water and Take Glass of Salts Before Breakfast Occasionally

When your kidneys hurt and your back feels sore, don't get scared and proceed to load your stomach with a lot of drugs that excite the kidneys and irritate the entire urinary tract. Keep your kidneys clean like you keep your bowels clean, by flushing them with a mild, harmless salts which helps to remove the body's urinous waste and stimulate them to their normal activity.

The function of the kidneys is to filter the blood. In 24 hours they strain from it 500 grains of acid and waste, so we can readily understand the vital importance of keeping the kidneys active.

Drink lots of good water—you can't drink too much; also get from any pharmacist about four ounces of Jad Salts. Take a tablespoonful in a glass of water before breakfast each morning for a few days and your kidneys may then act fine. This famous salts is made from the acid of grapes and lemon juice, combined with lithia, and has been used for years to help clean and stimulate clogged kidneys; also to neutralize the acids in the system so they are no longer a source of irritation, thus often relieving bladder weakness.

Jad Salts is inexpensive; cannot injure; makes a delightful effervescent lithia-water drink which everyone should take now and then to help keep their kidneys clean and active. Try this; also keep up the water drinking, and no doubt you will wonder what became of your kidney trouble and backache.

Names of the Months

January derives its name from Janus, Latin god of the year; February, from Februa, Roman festival of purification; March, from Mars, god of war; April, from Aperio, meaning to open; May, from Maior (greater), month of growth; June, derived from Junius, the name of a Roman family; July, named for Julius Caesar; August, named for Augustus Caesar; September, October, November and December were the seventh, eighth, ninth and tenth months of the Roman calendar, from the Roman words for the numerals.

America Far in Lead

The United States leads the world in the production of electric horse power, according to a survey just completed by the Department of Commerce. Forty per cent of the total power of the world is generated in the United States. Similarly, with respect to the manufacture of electrical goods, America leads, producing about 50 per cent of the world's total.

Only 2 per cent of the trees struck by lightning in national forests catch fire, but this causes 17 per cent of the forest fires.

A girl never tries to extinguish the spark as long as a man has money to burn.

Message of Victory Likened to Caesar's

Charles R. Flint, the New York banker whose marriage was recently announced, is known as "the father of the trusts." He is, in fact, the father of American Woolen, United States Rubber and American Chicle. He is also, as the "father" in the title might suggest, a great friend of children, and he possesses a store of anecdotes of childhood.

"We all know," he once said at a dinner, "Caesar's famous message of victory to the Roman people—I came, I saw, I conquered." Well, that message was wonderfully to the point, but a boy beat it the other day.

"This boy came home from school with his hand cut.

"What's the matter with your hand?" his mother asked.

"The young Caesar puffed out his chest and answered:

"Them was darn sharp front teeth Bill Jones used to have."

The Talker

Sinclair Lewis, the novelist of attack—Mr. Lewis attacks ministers, doctors, small towns, everything and everybody—is the hero of a story.

It appears that at a dinner party he was seated next to a movie actress whose celebrity is greater than his own. Being an eloquent talker he naturally talked to her. He talked and talked. He had never been in better form for talking. But suddenly the actress said:

"Everybody looked at her, and she added:

"That's a word in edgeways."

'Ear, 'Ear!

"Girl routs masher with wallop behind the car," says the New York Evening World. That's hitting the male on the head, all right.—Farm and Fireside.

Somewhere in a lifetime, all the thrills have worn out.

If one has a clever son, of course, there is a whole lot in heredity.

WESTERN GIRL STRENGTHENED

By Taking Lydia E. Pinkham's Vegetable Compound

Manchester, So. Dakota.—"I was first a terribly weak and run-down condition when a friend told me about Lydia E. Pinkham's Vegetable Compound. I began taking it and after a short time I felt better. We are a family of five and live on a 200-acre farm, so I have quite a good deal to do both indoors and out. I can do anything and had to have a good deal of strength. I finally gained my strength back and also gained considerable in weight. I will gladly consider letters from women in regard to your medicine."—Mrs. OTTO J. GREY, R. F. D. 1, Box 20, Manchester, So. Dakota.



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SIoux CITY Ptg. Co., No. 13—1928.

Hubby's Argument

Mrs.—That woman turned up her nose at my coat. Mr.—Probably just showing her contempt, my dear, for a man who'll pay so much money for one.

There may be scorn for gold, but those who have the gold are sure to think it is envy.

If a man once uses porous porcelain he is likely to become attached to them.

Advertisement for W.L. Douglas Shoes, featuring an illustration of a man's face and various styles of shoes. Text includes 'FOR MEN WOMEN & BOYS' and 'LATEST SPRING STYLES'.

IF YOU KNEW all about the different grades of leather and shoemaking, you would know that W. L. Douglas shoes are good shoes. Naturally you will judge quality by the service you get out of a pair of shoes. On that basis thousands upon thousands of men and women all over the country turn to Douglas for assurance of shoe quality and values that cannot be equalled.

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