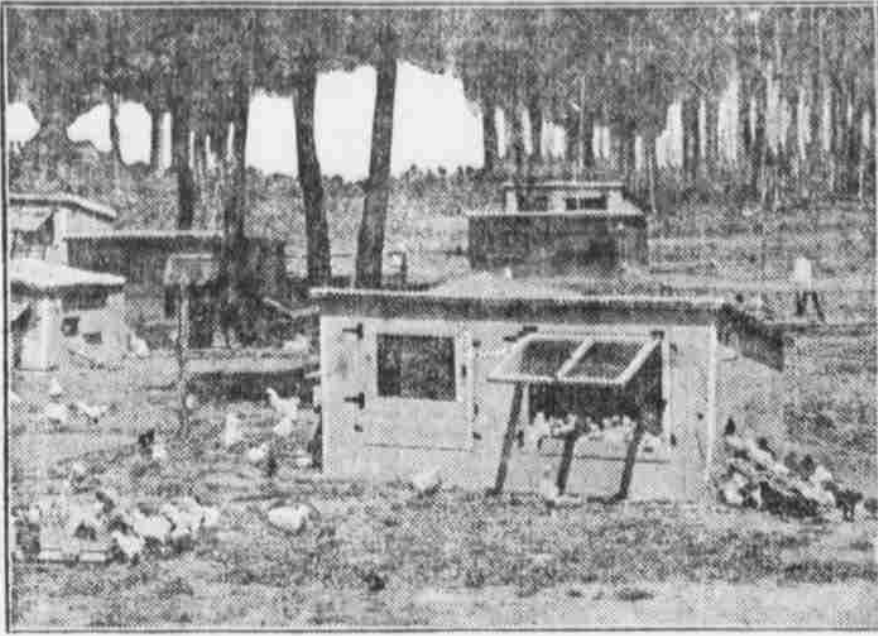


SETTING UP AND OPERATING INCUBATOR



INCUBATOR CHICKS RUNNING OUT IN SPRING.

(Prepared by the United States Department of Agriculture.)

February, March and April are the best months to hatch chickens, depending somewhat upon the individual, as well as the climatic conditions. Set up the incubator according to the manufacturer's directions, and see that the machine is perfectly level, if a spirit level is not available, a long shallow pan of water set on top of the incubator can be used as a level to assist in setting up the machine. Be sure that all parts of the incubator are in their proper positions and that the regulator works freely. Do not plane off the door of the incubator, if it sticks, until the machine has been seated up and thoroughly dried. Run the machine at about 102 degrees Fahrenheit for a day before putting in the eggs. It takes several hours for the machine to come back to its correct temperature after the eggs are first put in; therefore the regulator should not be touched during that time. See to the regulation of the temperature of the incubator before opening the door of the machine to attend to the eggs. Look to the care of the incubator carefully and regularly, but do not change the regulator any more than is absolutely necessary.

When the bulb of the thermometer rests directly on the eggs the temperature is usually held at 101 1/2 to 102 degrees Fahrenheit the first week, 102 to 103 degrees Fahrenheit the second week, and 103 degrees Fahrenheit the third week; while a hanging thermometer is operated at about 102 to 102 1/2 degrees Fahrenheit the first two weeks and 103 degrees Fahrenheit the last week. At hatching time the machine will frequently run up to 104 or 105 degrees Fahrenheit without any injury to the chickens. If the temperature has been right up to the hatching time, it is usually better not to change the regulator at that time, provided the temperature does not run above 105 degrees Fahrenheit. While the eggs will hatch just as well if the temperature is run slightly higher than noted above, throughout the hatch, the chickens are apt to be weak and hard to raise. In a good hatch the eggs will start to pip on the evening of the nineteenth day, and most of the chickens will be out of the shell on the morning of the twenty-first day. If the hatch is much earlier or later than this it indicates that the conditions during incubation have not been right. A high temperature may hatch eggs too quickly and produce weak chickens, while a continuous low temperature throughout the hatch will delay it for several hours.

Use good oil. Clean and fill the lamp once daily, trimming the wick by scraping the charred portion off with a knife or square-edged nail, or by cutting the wick with scissors.

Care of Machine at Hatching Time.

After the eggs begin to hatch, leave the machine alone until the hatch is well over. Do not open the door to see how the eggs are hatching, as it allows the moisture to escape, which is very essential at this time. Keep the incubator dark at hatching time by covering the glass in the door with a cloth or burlap sack, so that the chicks will not be attracted to the front of the machine by the light and become restless. When the chicks are all hatched, remove the egg tray and open the ventilators, according to the manufacturer's directions, and keep them in the incubator from 24 to 36 hours after the hatch is over before removing them to the brooders. If they are to be shipped a long distance away, so that they will be on the road two or three days, it is better to ship them as soon as the hatch is over and the chicks are thoroughly dry. Chicks which pip, but are unable to get out of the shell by their own efforts, rarely amount to much if helped out, although, if desired, when most of the eggs are hatched and the chicks dried off so that they will not be injured by opening the incubator door, any which have pipped may be helped out by cracking the shell and placing them back on the egg tray.

Turning and Cooling the Eggs.

Eggs should be turned and cooled according to the directions furnished with the incubator. The eggs are usually turned for the first time at the end of the second day of incubation and twice daily through the eighteenth and nineteenth day, or until the chicks commence to pip. After turning the eggs, reverse the egg trays end for end, and from one side of the machine to the other in two-tray incubators. Keep the incubator door closed while turning the eggs, unless

the directions state that it should be left open. The length of time to cool eggs depends upon the temperature of the incubator room. A good general rule is to leave the eggs out of the incubator until they feel slightly cool to the hand, face, or eyelid. Cool once daily after the seventh and up to the nineteenth day. Place the trays of eggs on the top of the machine or on a table in such a position that they are not in a draft, and so that the tray does not project over the edge of its support, thereby allowing part of the eggs to cool much quicker than the rest. Moisture is used extensively in hatching in the South, in high altitudes, and in places where the incubator is run in a dry room. Many methods are used to supply moisture in incubators, such as sprinkling the eggs with warm water at about 70 degrees Fahrenheit, or placing a pan of water, a receptacle containing moist sand, or a wet sponge below the egg tray. Another common method of supplying moisture is to sprinkle or soak the floor of the incubator or to place a pan of water under the lamp.

The eggs are tested with the large end up, so that the size of the air cell may be seen as well as the condition of the embryo. The testing should take place in a dark room. The infertile egg when held before the small hole with the lamp lighted inside the box will look perfectly clear, the same as a fresh one, while a fertile egg will show a dark spot, known as the embryo, with a mass of little blood veins extending in all directions. If the embryo is living; if dead, and the egg has been incubated for at least 46 hours, the blood settles away from the embryo toward the edges of the yolk, forming in some cases an irregular circle of blood, known as a blood ring. Eggs vary in this respect, some showing only a streak of blood. All infertile eggs should be removed at the first test. The eggs containing strong, living embryos are dark and well filled up to the fourteenth day, and show a clear, sharp, distinct line of demarcation between the air cell and the growing embryo, while dead germs show only partial development, and lack this clear, distinct outline.

Follow Directions.

Follow the manufacturer's directions in setting up and opening an incubator.

See that the incubator is running steadily at the desired temperature before filling with eggs. Do not add fresh eggs to a tray containing eggs which are undergoing incubation.

Turn the eggs twice daily after the second and until the nineteenth day. Cool the eggs once daily, according to the weather, from the seventh to the nineteenth day.

Turn the eggs before caring for the lamps.

Attend to the machine carefully at regular hours.

Keep the lamp and wick clean. Test the eggs on the seventh and fourteenth days.

Do not open the machine after the eighteenth day until the chickens are hatched.

RATION FOR EGG PRODUCTION

Good Combination Made of Grains and Ground Feed—Supplement With Milk or Beef Scrap.

A good ration for egg production can be made with a combination of equal parts by weight of wheat and corn, or in the winter time twice as much corn as wheat may be used. For ground feed, a mixture of equal parts of bran, shorts, and cornmeal may be used.

Efficient egg production requires also that this ration be supplemented with either sour milk—all that the birds will drink—or in case sour milk is not available, commercial beef scrap. One-fourth of the ground feed should consist of beef scrap in case this is used.

FOWLS FOR BREEDING FLOCK

Among Necessary Characteristics Are Short Heads, Stubby Beak, Broad Back and Strong Legs.

Select birds with a short head, stubby beak, prominent eyes, long broad back, strong legs, set well apart, smooth and glossy plumage and a fiery red and well-developed comb. The male bird that proves the best fighter and can crow the loudest and longest, if he possesses the other necessary breed characteristics, may be placed at the head of the breeding flock.

DADDY'S EVENING FAIRY TALE
BY MARY GRAHAM BONNER

SLUSH AND A DREAM.

"It was pouring," said Daddy, "and the Gnomes were delighted."

"There is nothing so nice," said Peter Gnome, "as a nice slushy day. We can all put on our high rubber boots and have a good old walk."

"Fine," shouted the rest of the Gnomes. "Let's go a-calling on Mr. Giant."

"All right," said Peter Gnome. They all put on their high rubber boots and off they started. The rain kept pouring down and the snow was melting fast.

"I hope," said one of the Gnomes "that all the Snow won't go."

"If it does," whispered a little Snow Flake, just before it was melted by some of the Raindrops, "our old Snow King will see to it that we come again. Winter has only just begun really, and we shall have lots and lots of good times yet."

"That's good," said the little Gnome. "I love the Snow."

"We all do," said Peter Gnome, "but today we are going to enjoy the slush." "They started off on their walk to Mr. Giant's Cave. They splashed through the melting snow-drifts and had a very jolly walk.

"Soon they arrived at Mr. Giant's Cave. They knocked three times, and a deep voice said, 'Come in! Enter!'"

"In walked all the Gnomes, and how Mr. Giant did laugh when he saw their high rubber boots.

"Well, you're not afraid of a bad day," said Mr. Giant.

"It's not such a bad day," said Peter Gnome. "In fact, it's quite a good day. I don't consider a day naughty that gives us as much fun as this one does."

"I never heard before of a day being called naughty," said Mr. Giant.

"Well," said Peter Gnome, "you said it was a bad day, and a bad day means a naughty day, doesn't it?"

"Perhaps," agreed Mr. Giant. "But it's not usually called naughty. That's all."

"We're never usual," said Peter Gnome.

"True, true," said Mr. Giant.

"Will you come and take a walk with us?" asked Peter Gnome.

"Delighted to, I'm sure," said Mr. Giant. "Let me get my boots."

"From a high part of the Cave he reached for his tall boots.

"They only made him look more enormous than ever and the Gnomes looked very tiny as they walked about him while he was putting on his great boots.

"Where are we going?" asked Mr. Giant.

"We're going," said Peter Gnome, "to call on a little Boy who has been ill. He hasn't been able to play in the Snow all this winter. And when he sees a day like this he will be so discouraged. He will feel that he is never going to get out to play. But we shall wait until he is in bed and asleep and then we'll give him a play-time."



Off They Went.

with us. A real dream of slush and fun. He'll think he is falling down and getting soaked, and that it doesn't hurt him at all. You must stand outside the window—for you can reach from the ground floor up to his window, and you'll whisper suggestions for us."

"Then I must put on my thinking cap that Witty Witch gave me," said Mr. Giant. And he reached in another part of the Cave for the thinking cap which he put on his head, and which made him look very, very tall.

"I'm ready," said Mr. Giant. Off they went. By the time they reached the House they were going to visit it was quite dark.

"Such wonderful play dreams as they gave the little sick Boy and the next morning when he woke up he was no longer discouraged. He knew he would get well soon and be able to play in the slush and have a good old time just as every Boy could have."

The Boy Knew.

"If I cut a beefsteak in two," asked the teacher, "and then cut the halves in two, what do I get?"

"Quarters," answered the boy.

"Good. And then again?"

"Eighths."

"Correct. Again?"

"Sixteenths."

"Exactly. And what then?"

"Thirty-seconds."

"And once more?"

"Hamburg," cried the boy impatiently.

Beat Business Boys.

Business men are looking for boys who work well when the boss is not looking.

WASHINGTON NAVY YARD GATES CLOSED TO VISITORS



The gates of the Washington navy yard, where all the guns for the United States navy are assembled, are closed and guarded for the first time in the history of the yard. Work is being rushed to the limit. At the right of the illustration is Rear Admiral J. H. Glennon, commandant of the yard and superintendent of the gun factory.

SITE FOR NEW NAVAL BASE ON THE PACIFIC



This is Hunters Point, near San Francisco, selected as the site of a new base for the United States navy.

HURRYING THE OCEAN MAILS ASHORE



Haste is the watchword of the United States post office department, and nowhere is this more clearly emphasized than on the arrival of a mail steamer from Europe. This photograph shows how mail sacks are rushed directly from a liner to a mailboat in New York harbor.

VICTIMS OF THE U-BOAT WARFARE



A remarkable news picture that tells its own story. A swamped small boat slowly sinking into the water, and men dotting the sea striving their utmost to keep afloat. These struggling men are Britishers who, when their transport, the Ivernia, was sunk by a torpedo, took to the boats and dropped into the seething waters of the Mediterranean. The heavy seas running swamped the boat.

A HERO OF THE DARDANELLES



Mark Alexander of Roanoke, Va., an American, who was within a short stride of death during a battle at the Dardanelles. He was fighting in a trench with six other men, and was just ready to hurl a trench-bomb which he had fixed so as to be ready for explosion when a bullet from the Turks hit his hand, causing the bomb to explode. He lost both his hands and his left eye, and his clothes were stripped from his body by the explosion. He had the presence of mind to bend over and stop the concussion of the shell, thus preventing his comrades from being mortally wounded. He is thirty years old and left for England in 1915. He was in a hospital 11 months recovering from his wounds. Alexander has been decorated with a medal of honor by King George and also been recommended for the Victorian cross.

Offended.

"I can't understand why Miss Langsyne is angry with me. She told me yesterday that it was her twenty-fifth birthday, and when I wished her many happy returns of the day she said I was a horrid old thing, and she hasn't spoken to me since."

"I don't blame her. You see, yesterday was about the fifteenth return of her twenty-fifth birthday, and she's getting a bit sensitive about it."

Helpful Person.

"Do you believe that truth crushed to earth will rise again?" asked the moralist.

"Oh, yes," answered the cynical man. "There are always a number of people in every community who want to get at the truth because they think it's going to hurt somebody."