

Poultry Department

Conducted by Uncle Joe.

RAISING CHICKS.

As the hatching season is about due, for those who operate incubators at least, a few thoughts along this line may prove interesting to those who have bought, or contemplate buying a machine this season.

Years ago, like many a novice, I thought I "knew it all" when I ordered my first incubator and brooder, but as seasons came and passed, I began to realize that "theory" was one thing and practice another, and I found that only by adhering to "nature's laws" could I successfully hatch and rear chickens at any season. To hatch them was the simplest thing about the business, but after they were placed in the brooder and began to droop and die by the scores, the majority from bowel disorders, I found that this business required extraordinary care and observation. I found, however, that the fault laid entirely with the incubator. A varying temperature in the out-building where I operated my first machine caused a varying temperature in the incubators and while the regulators would during the day work properly, I found many mornings the thermometers registering 105 and sometimes 106, sometimes 107, and I further found in almost every hatch my birds came out on the nineteenth and never later than the twentieth day. These birds would never do well; few of them would live more than the period it took to hatch them. I always count on raising any that live twenty-one days; in fact, now count

on raising 75 to 80 per cent of all I hatch and in a few hatches lose none.

By carefully watching my machines, and keeping the thermometer at 102 first week, 103 second week, and third week, or 103 second the whole period, I succeed in hatching almost every egg that is alive on the eighteenth day, when I make my final test. These birds come out almost invariably on the twenty-first day—as nature intended they should—strong, hardy, and vigorous. For thirty-six hours during very early spring, they are left in the lower tray of the incubators, brooders being prepared in the meantime with a litter of finely cut straw or chaff, a tin of grit, another of fine granulated charcoal, and another of clean, fresh water into which is placed a few rusty nails. Iron gives the chicks vigor. After a few hours—a total of about forty since they first broke the shell—they are fed oat flake or rolled oats. This is fed for the first week two hours in small quantities, and also give them fresh water at each feed.

Second week feed every four hours, beginning at 7 a. m. and giving them a good fill at 6 p. m. I also give them very finely cut peavine leaves in lieu of clover daily after the third day—a necessity chicks as well as hens must have bulk. After they have passed their fourteenth day they can be fed any good wholesome grain provided it is not too large. I neglected to say that after the first week I give them a tin of beef scrap, and always keep this with charcoal and

grit before them at all times. Cleanliness is another essential, hence brooders should be opened up every day that is favorable so that the sun, than which there is no better disinfectant, may pierce its rays into every corner of the brooder, and should be thoroughly cleaned every second day.

Chicks thus attended to almost invariably attain maturity—a marketable state—and in quick time. In incubation there must be close attention paid to the moisture problem, this "being the rock on which many an incubator is wrecked," if I may use the phrase in these words—the point on which they are condemned, but this problem soon becomes a science' where careful observation is exercised. Every person operating an incubator has seen a chart of an egg; they now come with most incubator instruction books, and should keep one close at hand always as they show the correct amount of air cell needed on the fifth, tenth, fifteenth, and eighteenth days. It is a very easy matter to obtain this when a man, or woman, becomes competent to manage his or her incubator. I always start mine with ventilators wide open, if air cell is of correct size on the day; when first test is made I leave ventilators open. Every day as I turn the eggs I look at a few with the tester, and if air cell is right again on the tenth day, I do not touch ventilator. If it is too large, I close the ventilator about half and then watch the air cells each night. If the air cell is too small, the only way to increase it is to cool the eggs longer, never allowing them to become chilled. Most of my machines are hot air and it is seldom that I have to add moisture in the egg chamber. I simply watch the air cell which is the only certain "moisture gauge" and keep open or closed, but

never at any time wholly closed—the ventilators—or cool the eggs longer. Of course, if the air cell becomes too large and closing ventilation does not do reduce the development of its enlargement, moisture must be added, and this is best done by placing a saucer of warm water in the machine while the eggs are cooling, taking out when eggs are placed in.

I might also add that on the eighteenth day I always take a cloth, cotton cloth, dip it in water of about 105 temperature, wrung fairly well out, spread it over the eggs and shut these up for five minutes, after which I open and quickly lift cloth off eggs and shut the door. By following out these suggestions, the result of costly and embarrassing experiences I have little doubt but that those who adopt my plan of work will succeed, not only in hatching but rearing their feathered pets.

I have omitted to say anything about cooling, another important feature of artificial incubation. I place my eggs in the machine in the morning after I have satisfied myself the machine has run the night previous at 100, the first day do nothing with the machine but time the lamp and fill it, second day the same, third day the same, but on the evening of the third day I take the eggs out and cool them for ten minutes, and then turn each carefully and put it back in. On the morning of the fourth day cool them fifteen minutes. Every ten minutes, fifth day, cool them twenty minutes in the morning and test them at night, taking out every egg that does not show a strong living germ. On the morning of the sixth, seventh, eighth, ninth, and tenth day, I cool them half an hour, and in evenings fifteen minutes, testing out again on evening of tenth

Farmers Union Trade System

INFORMATION BUREAU

For the purpose of supplying information to individual members, local and county business agents, in regard to the purchase of Provisions, Farming Implements, Buggies, Wagons, Fertilizers and Articles of General Merchandise, The Trade System Information Bureau is established to furnish information for the benefit of members of the Farmers Union.

This office is prepared to give you information as to the best place to buy and sell, according to your location, and any member of the Farmers Union who desires information along this line should cut out the coupon and check those items on which you want information, mail to us and we will do the rest.

This Bureau is designed not only to give you much valuable information, but to save you money on everything you wish to buy and make you money on everything you wish to sell.

TRADE SYSTEM INFORMATION BUREAU

Box 342.

RALEIGH, N. C.

COUPON

I am interested in and intend to purchase within a reasonable time, the machines or articles checked below and will be glad to receive information concerning the same:

Check Here	Check Here
.....Automobile	.....Piano and Organs
.....Buggy	.....Plow
.....Breakfast Food	.....Potato Digger
.....Carpet Sweeper	.....Potato Planter
.....Carriage	.....Pump
.....Cement	.....Roofing
.....Churn	.....Sewing Machine
.....Cook Stove	.....Seeds
.....Corn Sheller	.....Shoes
.....Corn Shredder	.....Suits
.....Cream Separator	.....Telephone
.....Cultivator	.....Threshing Machine
.....Gasoline Engine	.....Traction Engine
.....Ensilage Grinder	.....Wagon
.....Flour	.....Washing Machine
.....Fanning Mill	.....Watch or Jewelry
.....Grain Drill	.....Wind Mill
.....Grain Binder	.....Lumber
.....Harness	.....Wire Fencing
.....Harrow	.....Paint
.....Harvester	.....Stump Puller
.....Hay Forks	.....Drill
.....Hay Loaders	.....Organ
.....Hay Rakes	.....Gate
.....Heating Stove	.....Cotton Chopper
.....Incubator	.....Cans
.....Manure Spreader	.....Spray
.....Mower	.....Fertilizer

Name

P. O.

R. F. D. No.

Local..... No.....