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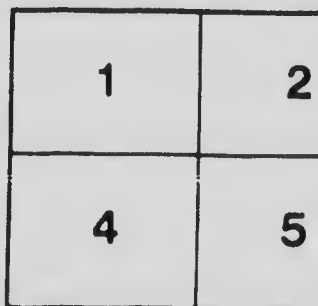
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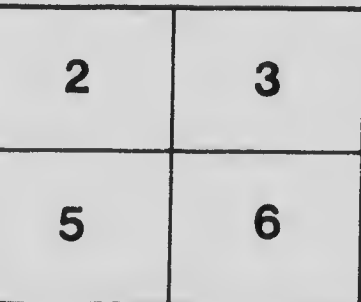
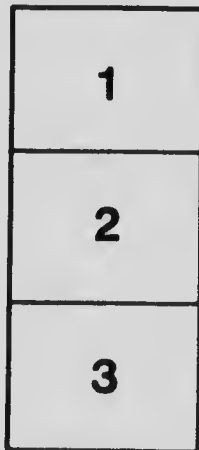
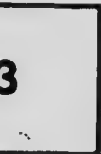
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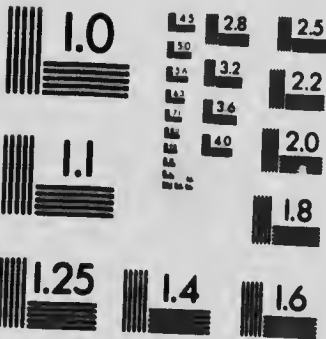
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## BROODING AND REARING OF CHICKS.

BY

Geo. ROBERTSON, Assistant.

### BROODING AND REARING OF CHICKS.

The brooding and rearing of chicks is a comparatively simple matter, but to be successful requires eternal vigilance and attention to details. Brooding may be divided into two branches, viz: *Natural* and *Artificial*. Much of the success of either system depends on having chicks that are properly hatched from healthy vigorous parents.

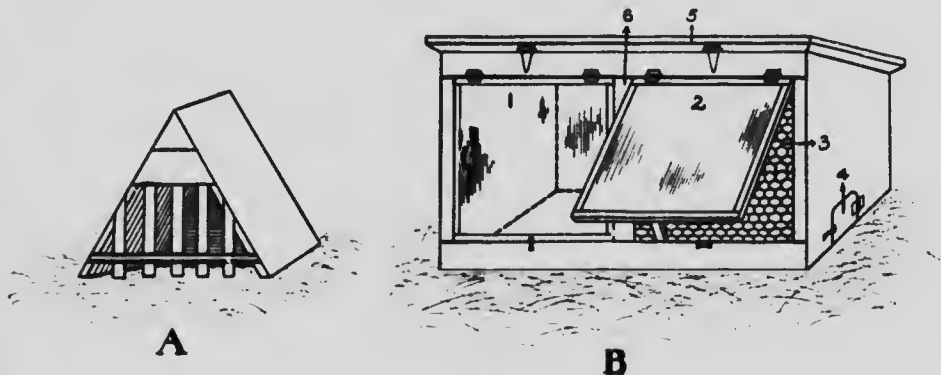


FIG. 1.—Two types of Brooding Coops.

A—A shaped coop. About 3 feet across is a convenient size. B.—Brooding and roosting coop. This coop should be made 6 feet long 3 feet wide and 3 feet high in front, giving the roof a 6-inch slope. The floor is made separate from the coop and is about 2 inches larger. Early in the season or on damp land the bottom is used, but in a dry location the coop may be placed right on the ground and shifted every day, thus avoiding the necessity for cleaning. 1. Cotton screen closed. 2. Cotton screen open. Pin hinges should be used to put these on so that they can be readily removed. 3. 3-inch wire mesh. 4. Exit door for chicks. When held used as a brood coop a lath is tacked over the opening on the inside to keep the hen in. Both ends are exactly alike. 5. Roof, which is hinged and is readily lifted to allow attendant to examine the chicks inside the coop. 6. At the point indicated, a movable partition of 3-inch stuff is placed, dividing the coop in two. When the chicks reach roosting age this partition is removed thus making one long coop; 2 roosts are then put in, about 6 inches from the floor and the chicks are allowed to remain until ready for winter quarters.

#### NATURAL METHOD.

After the chicks have hatched let the hen remain quietly on the nest until the chicks get so lively that they insist on leaving it, then remove the hen with her brood to a coop that has been prepared for her. Early in the season, before the ground is

dry use bottoms in the coops, in which case chaff or sand should be used to cover the floor. Later in the season the coops should be placed right on the ground providing the location is dry and each day moved the width of themselves, this saves a lot of work and at the same time ensures clean wholesome conditions. All coops should be thoroughly disinfected before use each season, and also between broods. The old A shaped coop shown in Fig. 1A has much to recommend it. It is simple in construction and may be made from odds and ends of lumber that might otherwise be waste.

The type of coop shown in Fig. 1B, is one that has been used to good advantage by many. It may be used as a brooding coop and later as a roosting coop. The number of chicks that a hen can take care of depends largely on the season. In mid-summer she may successfully brood as many as 25, but in the earlier part of the year half that number will result in much better success. The two greatest dangers in brooding with hens are: *Chill* and *Vermin*. A hen should be given no more chicks than she can keep comfortably warm. Hens that have been properly handled during



FIG. 2.—Portable and Adaptable Hovers.

Left: Portable. With slide back to show lamp in position. The most convenient hover to date.

Right: Adaptable. Hover placed on platform to show relative position of the lamp box (left) and the hover. This is also a good hover.

the hatching, will come to their brooding duties free from vermin, and it is advisable to dust them at regular intervals to ensure a continuance of that condition.

If A shaped coops are used it will be necessary to move the chicks to a roosting coop as soon as they pass the brooding age. In coops such as that represented in Fig. 1B the chicks are allowed to remain until ready to go into winter quarters.

#### ARTIFICIAL METHOD.

*The kind of brooder.*—For the brooding of very large numbers of chicks have a regular brooding house in which either the hot water pipe or the stove system is used, but for ordinary farm poultry operations where there would be only a few hundred chicks raised, the individual brooder will be found more satisfactory. Care should be taken in securing brooders to see that they are able to fulfil the duties required of them. A brooder should be well built so that it will be possible to produce and hold heat enough to provide for the comfort of the chicks in any weather, to ventilate easily and fully, and to provide for ease of cleaning and operation. It should be so

constructed that there will be several temperatures available for the chicks at any time. Any brooder that fulfils these requirements should prove satisfactory. The best kind of brooder for individual work is either the Portable or the Adaptable hover Fig. 2 which may be used in any well made coop or colony house. For use early in the season, place a box around it in a colony house. When used in this way it is possible to keep up sufficient heat even in the coldest weather.

*Cold brooders.*—Much has been written about cold brooders and some claim to have had great success with them, but for practical results they should not be entirely depended upon. Where hatching is carried on in the warmer part of the season, it is quite possible to obtain satisfactory results with them, but during the early part season the chicks require too much of the attendant's time to allow of the method's ever coming into general use.

*Brooding.*—The great bug-bears in the raising of chicks are: lack of vigour in the parent stock, improper hatching, and chill. The chicks should be left in the incubator until perfectly dry and care should be taken in transferring them to the brooder to avoid chill. The brooder should be heated to about 90 or 95 degrees under the hover, according to the number of chicks to be placed in it, so that when they are put into it the temperature will rise to nearly the same degree as what they were accustomed to in the incubator. It should be the aim of the operator to 'harden off his chicks' as soon as possible, but on no account should the temperature be lowered so as to cause lack of comfort to the chicks. The thermometer must be used merely as a general indicator, the chicks themselves being the proper guides for the regulating of the temperature. If the chicks crowd they are too cold, if they lie spread out on the floor with a little head here and there peeping out from under the hover the temperature is right.

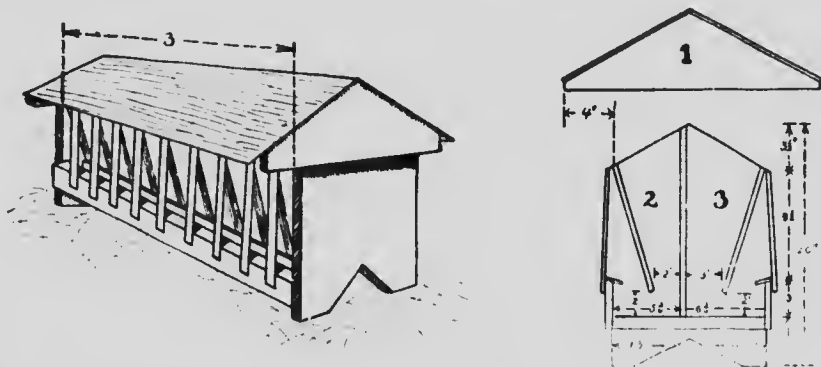


FIG. 3—Range Hopper.

Left: Hopper ready for use.

Right: Cross section showing: 1, cover, 2, Lopper for grains, and 3, hopper for dry mash.

Fifty chicks are enough to place in one of the ordinary hovers and it will be found that where half that number are put in they will generally do even better than the larger number.

The chicks should be confined close to the brooder for the first few days, then, as they become used to their quarters they may be given more and more liberty, until at last they may be given free range. They should be allowed on to the ground as soon as possible. If owing to weather conditions this is not found advisable, a sod should be placed in the house where they can tear at it.

As soon as the chicks are old enough to do without the hover it should be removed; at the same time it is advisable to place fine wire netting anglewise across the corners of the house to prevent the chicks from crowding. Roosts should be put



in the house which will then serve until the birds are put into winter quarters. Begin culling as soon as possible. If the chicks are of one of the lighter breeds the surplus cockrels should be sold for broilers.

*Feeding.*—A mistake, that even a great many experienced poultrymen make is the feeding of the chicks too soon. When a chick leaves the shell it comes into the world with a sufficient supply of nourishment, in the form of egg yolk, to last it for several days. Therefore, what a chick requires at that stage of its existence, is not feed, but warmth and rest. It is not wise to be dogmatic about feeding, as, given strong healthy chicks many systems will prove successful but the following may be used as a guide. When the chicks are removed to their brooding quarters there should be some coarse sand or fine chick grit scattered where they can have free access to it. They should then be left until they show positive signs of hunger which would be between two and three days after hatching. They may then be given some bread crumbs that have been very slightly moistened with milk this may be scattered on clean sand or chick grit. If being brooded by a hen she will see that no food is allowed to lie around, but if in a brooder, what the chicks do not pick up in a few minutes should be removed, as nothing in feeding causes so much trouble as leaving food of that nature around until it is sour. The chicks should be fed five times a day. The following system may be adopted or altered to suit conditions: first feed, bread crumbs moistened with milk; second, finely cracked mixed grains; third, rolled oats; fourth, moistened bread crumbs; fifth, finely cracked mixed grains. If too early to get the chicks out onto the grass at once, green food should be supplied in the form of young lettuce, sprouted grains, or any other tender succulent food that is acceptable. After the chicks are ten days to two weeks old, coarser foods may be allowed. All changes should be made gradually. The infertile eggs may be boiled and mixed with mash food and the bread and milk discontinued. Hoppers in which is placed cracked grains and dry mash or rolled oats should be put where they can have free access to them. As soon as they become accustomed to the hoppers, the hand feeding may be reduced to the mash feeds and if the chicks are on range it will be found that after a time they will get careless about coming when called it may then be dropped and dependence placed entirely on the hopper feeding. Place grit, water, also, if possible, a dish of sour milk where the chicks will have free access to it. Nothing provides animal food in better form than does milk, the chicks like it and thrive on it.



