Resessassassassassassassas Proper Food and Treatment for Young Chicks

A. G. Gilbert before Standing Committee at Ottawa

The chicks whether hatched by hens or incubators will give best re-sult when hatched out in the first two weeks of May. In one of my two weeks of May. In one of my reports it has been shown where the reports it has been shown where the wives of farmers have used incubators and brooders with great success. In the case of the hen-hat-hed chickens the latter were permitted to remain in their nest for fwenty-four
or thirty-six hours, when with the
mother hen they were placed in a
slatted coop on the grass outside.
The coon was so arranged that if The coop was so arranged that it could be securely closed at night while Through the ventilation was secured. slats the chickens could run on the grass outside, while the hen remained inside. On the floor of coop was dry earth to the depth of two inches. On taking the mother hen from her nest she was given food and water. She had been probably thirty-six hours on the nest bringing out her chickens and deserved the attention, Apart from this she would be more likely to brood the chicks contentedly, after being fed, than if hungry or thirsty. How important it is to have early chicks carefully brooded well known to all experienced breeders.

FEEDING OF THE CHICKS

First day.—Little or no food is equired. Towards end of the day a few stale bread crumbs may be fed. Second day—Stale bread soaked in milk and squeezed dry may be given in small quantity. Feed a little at a time and leave none on the platform. A little hard boiled egg finely cut up be added with benefit. this for a day or two and add gran-ulated oatmeal; finely crushed wheat may be given at this time. Continue granulated oatmeal granulated oatmeal for ten days, when finely crushed corn may be added to the foregoing with advantage. After 14 days give wheat in small quantity at first. whole

As the chickens grow older they hould be given a mash composed of stale bread, shorts, cornmeal, ground meat, etc. Finely cut bone or meat meat, etc. Finely cut bone or meat will be found a great incentive to growth at this stage. On the chick-ens becoming eight weeks of age their rations may be dropped to three a day. Care should be taken that they are generously fed at last ration. For drink give skimmed milk and water.

When fully feathered the mothers of the hen-hatched chickens should be removed from them. The chickens will be found to return to their coops as usual, and they are allowed to re-main in them until removed to more commodious quarters in colony houses. On the incubator-hatched chickens becoming too large for the brooders they should be removed to colony houses.

FATTENING FOR MARKET

Should the farmer desire to specially fatten his chickens before sale, or shipment, his simplest and speediest plan is to put his birds at 3%



POULTRY YARD 4 or 4½ months of age, in slatted coops or crates divided into compartments to hold one, or a number of birds up to four. These coops partments to noid one, or a number of birds up to four. These coops should have V-shaped feeding troughs in 1ront. The following fattening ration has been found most effective in our poultry department: Two parts finely ground oats; one part inely ground barley; one part ordinarily ground oatmeal. After 15th day add beef suet in proportion of one ounce to every four birds. Mix with skim milk. If the milk is made near boil milk. If the milk is made near bouling point the tallow, which should be
chopped fine, will be melted by it
when poured on the ground grains.
Or the tallow may be melted in the
hot milk. The birds should be fed
all they will eat twice a day. Carefully collect all uneaten food. Leave none to turn sour, and feed none in that condition.

Care should be taken to free the This may be done by rubbing sul-phur well into the feathers, or by one of the lice-exterminating powders

Incubation of Chicks

Bulletin 163 of the Ontario Depart of Agriculture, is devoted en-to the Incubation of Chick-

The first article is from the pen of W. R. Graham, poultry manager at the Agricultural College, Guelph. The professor discusses the question of the heavy losses in flocks of artificially hatched chickens, and endeav ors to locate the cause as far as his studies and experiments have gone

The first advice is to "carefully onsider the methods of selecting eggs for incubation, as well as the methods of feeding and brooding the chickens before drawing conclusions. Series of experiments have been conducted, both with the eggs from the college pens, and eggs procured from an ordinary flock. The results have an ordinary flock. The results have been mostly in favor of the hen for an incubator, as against the mach-ines. Whether the fault lies in the incubation, feeding and brooding, or is from inferior breeding stock, is the point yet undetermined in the mind point yet undetermined in the mind of the professor, and his assistants, at the college. Rather Liore satisfac-tory results appear to have been ob-tained since the use of Zenoleum has been adopted, and special comment is made on this point.

During incubation, the thermom-eters were kept as near 101 degrees as possible, and many experiments as to the amount of moisture necessary, e conducted.

were conducted.

The method of feeding was the same for both brooder and hen-raised chicks, but not much difference in vitalify was noted. Interesting experiments were made in order to produce a sufficient quantity of dioxide in the incubators, by the use of a certain bacteria culture in milk, but the success of the trials is not yet definite enough to be given as authority. The use of buttermilk for moisture, however, apeared to be beneficial.

Complete tables of the records of all experiments are given, and make interesting data.

The second article on "Humidity, in Relation to Incubation," by W. H. Day, lecturer in Physics, is a scientific dissertation on the moisture in the air, and a study of the moisture in incubators and under hens when incubating.

It was found that under a hen the



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tion of air under the hen, than that

in the incubator. C. C. Thom, Demonstrator in Phys-C. C. Thom, Demonstrator in Fays-ics, also adds a scientific article on the "Relation of Carbon Dioxide to Incubation," giving the results of the experiments thus far, but states that while the use of Carbon Dioxide seemed beneficial, he was not sure but that the same results, could be obbut that the same results could be ob-taind by the use of some other sub-

Professor R. Harcourt, and H. L. Fulmer, Demonstrator in Chemistry, conducted experiments in chemiconducted experiments in chemi-cal work in connection with incubation problems. They do not draw any conclusions from their tests, but It was found that under a nen tee moisture was 25 to 50 per cent, greater than in the incubator, but at the relation between the lime content of the chick and its vitality. Further same time evaporation of the egg under the hen was greater than in the machine, a fact that could apparently only be reconciled by the existence of a better circulas one of importance. state that there appears to be some relation between the lime content of

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