

contents are absorbed within the system of the chick. If this yolk sac has not been properly absorbed, bowel trouble will result, the chick being unable to properly digest its food. The growth of the chick within the egg takes place comparatively rapidly. The many different organs of the chick's system are formed within the first few days of incubation, and in the last few days the growth of the complete system is fulfilled, and generally on the twenty-first day the chick pips the shell.

THE INCUBATOR.

There are many different kinds of machines used in hatching eggs. They are nearly all constructed on similar principles and along the same lines. Machines which are giving the best satisfaction are the hot air and the hot water machines. The hot air machines are of the radiant diffusive, and a combination of the radiant and diffusive types. Some of the machines have an up-draft circulation of air, while in others other means of ventilation are employed. Many manufacturers send out moisture pans with their incubators, while others do not advise the use of moisture.

The best place for an incubator is one where there are no draughts of air, and yet where the air of the room is absolutely pure at all times. It is desirable to have an even temperature in the room, although throughout the greater part of the Province such precautions need not be taken as in the East, since the climatic conditions at hatching time are not very changeable. The fact may here be mentioned that success with hatching chicks depends to a large extent upon the method of handling the incubator the first week of incubation.

The incubator should be started for a day or so before the eggs are placed in the egg chamber, so that an even temperature of from $101\frac{1}{2}$ degrees to 103 degrees may be readily maintained. In different localities and in different seasons of the year a slightly different temperature will be found most desirable. The exact position of the thermometer has a great deal of influence upon the degree of heat in the egg chamber. In some makes of incubators the bulb of the thermometer is placed in an artificial egg, while in other makes a hanging thermometer is provided.

The eggs require to be turned frequently—a few poultrymen claiming that once a day is sufficient, while others claim that twice a day is none too often. It is not known exactly how many times