

never grow to the desired size, and consequently lay small-sized eggs. Apart from this, it will generally be found that the late birds are more subject to disease than those hatched at an earlier period.

Where the natural mother has to be depended upon for hatching purposes I realize the difficulty in securing the desired number of broodies when they are most required, for the broody propensity is being bred out of the majority of the utility stock more and more each year. Rather than delay the hatching operations on this account the only safe course is to resort to artificial methods, either by purchasing an incubator or by securing day-old chicks. The day-old-chick method of rapidly establishing a flock has much to recommend it, provided the chicks purchased come from approved and selected laying-stock. Especially does this apply when the chicks are forwarded in a fireless brooder in which they can be reared to a safe age.

The novice who is making his first attempt this season to work an incubator would be well advised to follow closely the book of instructions supplied by the maker. I realize that it would be very useful to many of my readers to lay down the general principles to be observed in managing an incubator; but, unfortunately, there are so many styles of incubators in use and methods of working them that any definite instructions given in these columns could not be applied generally. Correspondents when asking for information regarding the troubles they encounter in the work of artificial incubation should, therefore, always give the name of the particular machine they are using.

#### THE SITTING-HEN AND THE YOUNG BROOD.

When the chicks are to be hatched and reared in nature's way care must be taken to set the hen away from the fowlhouse, in order to guard against vermin as well as to prevent the hen from being disturbed by other fowls. A good plan is to set the hen in a watertight coop with a run attached, where the chickens may remain so long as the hen requires to brood them. The nest should be made on the ground; in fact, natural conditions should be provided as near as possible. Nothing but a little hay should come between the eggs and the earth, and if there is some moisture in the earth so much the better. The common trouble of dead-in-the-shell, where the natural mother is being used, is invariably due to the want of moisture. It is always a good plan towards the pipping-stage to lift the hay, or whatever nesting-material is used, and slightly moisten the earth. This will greatly assist the