

# CANDLING INCUBATED EGGS AND "MAKING YOUR OWN CANDLER"

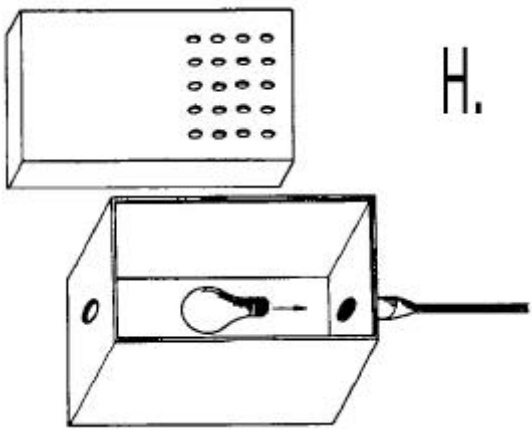
## CANDLING INCUBATED EGGS

### *Why candle?*

Incubated eggs are candled to determine whether or not they are fertile and to check on the growth and development of the embryo. Fertility is more easily determined in white-shelled eggs, which may be candled on the 3rd or 4th day of incubation. Brown shelled eggs can be checked on the 5th to 7th day of incubation.

### *What do you use to candle the eggs?*

Egg cinders may be purchased from poultry equipment dealers and they are fairly inexpensive or you can make your own. You can also use one of the new smaller type flashlight with a high intensity bulb. To make your own candler, a shoe box lined with aluminum foil and small holes cut in the top of the box over where the light bulb will set (to let heat escape) may be used. An opening cut in the long end of the box, 1 inch to 1.25 inch in diameter should be cut to hold the light bulb. See Diagram H below.



### *How to candle:*

Candling needs to be done in a dark room.

When checking the embryo development, the large end of the egg should be placed to the opening of the candler. This will put the egg in a horizontal position therefore it is very important not to twist or twirl the egg because this can damage the embryonic membranes. Handle with care. If flashlight/profession candler is used hold the egg in an upright position; the light should be put on the large end of the egg. This is done because the embryo will be found near the air cell.

### *What you are seeing:*

Candling eggs on the 3rd or 4th day the embryo gives the appearance of a large red spider.

Infertile eggs will appear "clear" with no embryo development. These eggs show some yolk shadow but are, in general, uniformly light in appearance. They should be removed immediately from the incubator and destroyed. Do not eat these eggs!!

In some eggs the embryo will die after a few days of development, but before there is blood formation (before 2 days of incubation). Then candled from the large end after the third day, these eggs will be light in the large end and darker on the small end, but the embryo will not be visible. When the embryo dies after blood is present, the blood will accumulate at the outer ends of the blood vessels and will form a blood ring or a streak. This will turn darker as the eggs start to decompose. If left in the incubator these eggs will eventually explode, spread bacteria throughout the incubator and will be absorbed into other eggs and most likely kill the embryo. Remove all eggs in question and destroy.

