



How to Make an Egg Candler

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Q: What is candling an egg?

A: Candling an egg is placing a bright light source at the large end of the egg to observe the contents. This helps to determine if the egg is developing during incubation.

Q: Why would you want to candle eggs?

A: If you leave eggs in your incubator that are infertile or dead, they may go rotten. Rotten eggs may explode, contaminating your incubator.

A: Candling allows you to observe how the embryos are developing and growing during the incubation process.

Q: What is needed to candle and egg?

A: You need a bright light and a dark room. For the bright light, you can use a commercially available candler, a flashlight, or a homemade candler.

Q: How Do I Candle an Egg?

A: Turn off the lights in the room and aim the bright light at the large end of the egg. You will point your light upward from the bottom of the large end of the egg. This will allow you to see if the embryo inside is viable. It is easiest to see the embryo after at least a week of incubation.

Creating your own candler

Wooden Candler

Materials

- 1 60-watt bulb
- 1 light socket
- 1 piece of stock lumber—1 in. by 6 in. by 38 in.
- 2 No. 8 round wood screws, 1 in. in length
- 1 piece of plywood—½ in. by 6 ¾ in. by 6 ¾ in.
- 1 male electric plug
- 4 small brads
- 6 ft of extension cord
- 16 seven-penny coated box nails
- 2 small wooden cleats

Procedure

1. Cut four pieces of the stock lumber. Each piece should be 8 inches long from the 1 inch by 6 inches board.
2. Drill a 1-inch hole in one of the pieces of stock lumber.
3. Bevel the edges of the hole by sanding them down.
4. Nail the four pieces of stock lumber together to make a box.
5. Cut the remaining piece of stock lumber board to fit inside the box as a bottom.

6. Before nailing the bottom piece into place, screw the porcelain socket to the center of this piece.
7. Wire the socket with extension cord and then nail the bottom in place. The light socket will have additional directions for safe installment.
8. Drill a hole in the back of the candler for the extension cord and wire the male plug to the cord after feeding the cord through the hole.
9. Nail two small wooden cleats to the 6 and $\frac{3}{8}$ inches by 6 and $\frac{3}{8}$ inches plywood. The cleats allow the box to fit and stay centered. This piece will act as a removable top and be held in place by the cleats.

“Coffee-Can” Candler

Materials

- 1 or 2 lb coffee can or similar metal can
- 1 light socket
- 1 60-watt bulb
- 1 4 to 6-ft extension cord
- Tape

Procedure

1. Remove one end of the can. Cut so that the heavy rim of the can remains on the removed end. This can be done quite easily if the can opener is reversed from the usual method of end removal. This will make it much easier to replace later. If the can has a plastic lid, darken the lid with a marker or another method.
2. Drill a hole approximately 1 inch in diameter in the end of the can that has been removed – or in the plastic lid.
3. Mount the light socket on the inside of the remaining end of the can.
4. Drill a small hole through this end and attach the extension cord to the terminals of the socket.
5. Screw in the light bulb.
6. Replace the end of the can where the large hole has been drilled. Secure this end with tape securely or use the plastic lid that has been darkened.