

Trials and Tribulations

THERE are a few troubles which nearly everyone will encounter when running an incubator for the first time. They can easily be avoided, provided the attendant knows what to watch for.

The beginner will probably have the most trouble with the lamp. It may smoke, refuse to heat the machine properly or even go out. The first thing to do is to be sure the wick is clean, free from moisture and long enough to reach the bottom of the reservoir with some over. From two to six inches of wick will be required per hatch. Allow no charred bits of wick or other refuse to collect on the gauze at the base of the burner. The small flue running up beside the wick tube must not become plugged.

Most lamp troubles come from improper trimming. To trim a lamp properly, first pinch off the charred top, then rub the wick down level with the top of the wick tube; now turn the wick up about one-eighth of an inch and round off the corners slightly. This may be done by rubbing up and over with the finger. If done properly this will prevent smoking, but if the corners are rubbed down and not up, the lamp is very apt to smoke. Smoking is caused by the flame having a long "tongue" or "ear" at one or both sides, which touches the side of the chimney causing a deposit of soot. This soot becomes hot, the smoking gets worse and the machine will finally catch fire. In a bad case of this kind as much as half a cup of soot may be found in the smoke flue. The machine will continue to smoke until this is removed. To clean it, remove the smoke flue, partly fill it with clean, dry sand and shake. This will cut out the soot and the flue will again be ready for action.

The lamp should be looked at about a quarter of an hour after it is trimmed, as it may run up. Never leave it until you are satisfied that it is working properly. Draughts in the incubator cellar are bad, as a very slight wind, coming from the right angle may put out a lamp.

The beginner will also find some trouble in regulating the heat. This is all done by the nut on the regulator rod, on top of the incubator. When the machine is cold this rod should have, roughly, half an inch of play. Light the lamp, put in a thermometer and in about six hours the heat will be up. To cool the machine, turn the nut to the left; to heat it, turn to the right. About half a turn will usually vary the temperature about one degree, but that is only an approximate guide. When the heat is right the disc on the regulator arm should be about one-eighth inch above the flue.

If the machine is too cold, it may be that the thermometer is set too low or the lamp may not be high enough. If the disc is down on the flue, the lamp is not high enough; if it is up then it must be lowered until the heat comes up. Outside of this it is not safe to attempt to regulate the heat by turning the flame up or down.

Turning and cooling the eggs may bother the beginner. This begins the night of the third day and ends the night of the eighteenth day. In turning, handle the eggs very carefully—a jolt or jar, especially during the early part of the hatch, is very apt to kill the delicate germ. It is not so essential that the eggs be left on the opposite side so long as they are moved in order that the germ may not become attached to the shell. Do not cool longer than

(Continued on page xxv.)