

made mounds of loose earth, on top of which he placed pieces of sacking to keep the mounds intact. This, of course, was to provide a soft landing-place for the fowls. That this little attention was appreciated was proved by the fact that every bird would walk to either end of the house in order to alight on the mounds.

The hard landing of birds compelled to jump down from a perch is the cause of most disorders of the feet, especially corns, and is obviously not to the advantage of a high-type layer in the flush of her laying period. A breeding-pen rooster that has once contracted corns is generally of little or no use.

#### DUCKLINGS.

All hatching-operations should have now ceased, except in the case of ducklings, which by reason of their early maturity can be hatched even up to the end of this month for eggs, and even later where table-poultry is the objective. At this period shade is imperative, for with ducklings hatched in hot weather sunstroke is a common source of loss.

Several correspondents have had trouble in hatching. The cause is an old one. They have failed to provide sufficient moisture, and the membrane next to the shell has in consequence been too tough for the bird to pierce in its effort to reach the world. It is only of late years that the necessity of extra moisture for duck-eggs has been realized. After the fourteenth day the eggs should be sprayed with water at a temperature of 103 degrees. Do this after the eggs have been turned, and immediately place the eggs back in the machine. They should not be cooled after the spraying. The cooling should be done at night and the spraying in the morning. This process should be repeated daily after the fourteenth day until pipping-time, when, if the temperature has been maintained at the right degree throughout, the hatching-process should proceed satisfactorily. Where, however, the eggs hang fire it will generally be found—in fact, it is quite safe to assume this is the case—that more moisture is demanded. The most effective method of providing this is to take a piece of thin flannel the size of the egg-tray—dipped in hot water and wrung lightly—and place this lightly over the eggs. The flannel may be left on for, say, an hour. If not too thick the birds will have no difficulty in hatching under it. During the final stages it may be rolled up and left in the end of the machine next to the heater. This will assist in maintaining the desired moisture in the machine, necessary at this crucial stage.

Disastrous losses in the brooder have been reported to me this season. Generally the trouble has been with ducklings from five to ten days old. The main cause has been incorrect and irregular temperature, as well as insufficient ventilation. In the work of brooding in general artificial heat is necessary to the best results under varying conditions; but it must be a healthy heat, a heat which, while providing the desired temperature, does not force the delicate duckling or chick to breathe a vitiated atmo-