

they have been accustomed to. While the hardening-off process should be carried out by degrees, the chickens should at the same time be encouraged to perch as soon as possible. It is all against the birds making sound development to allow them to huddle together when hot-weather conditions prevail.

It is commonly believed, and rightly so, that early perching will cause crooked breast-bones. This trouble, however, will be reduced to a minimum if wide perches are provided. A board about 4 in. wide will serve for the purpose. Do not allow the chickens to sleep on a hard floor, as probably this is the most common cause of crooked breast-bones.

The floor should be well bedded down with perfectly dry straw. Grass hay should never be used for this purpose, as it is apt to heat and bring on a sweated condition of the chickens, with serious results. The chief trouble caused in this way is an inflammation of the veins. It first makes its appearance in the hock-joints, which become discoloured. Then a gangrenous swelling follows. In a few days the wings become affected in a similar manner, and later the neck and head swell. At this stage death is usually near at hand. There is no cure for this trouble; it is only a question of prevention. Do not overcrowd, provide ample ventilation, keep the floors clean and dry, and check everything that tends to create a moist atmosphere.

EGG-SHELL QUALITY.

At this period of the year, when the great majority of the birds are laying to their full capacity, weak-shelled or shell-less eggs are apt to be produced. These not only mean a direct loss, but they also encourage the birds to acquire the habit of egg-eating. Such eggs are easily broken, and once the hens have tasted the substance it will probably not be long before they learn to break the shells of the normal eggs for themselves.

Weak-shelled or shell-less eggs are usually caused through the bird's inability to secure the necessary lime as a shell-forming material. Losses through thin-shelled eggs, &c., can be considerably reduced by keeping the birds well supplied with fresh crushed oyster or other sea-shell, while broken burnt bone is also valuable for this purpose. Bleached shell, such as is often collected from the sea-shore, is not so good, as it does not contain the necessary lime to produce the desired strength of egg-shell. It is a mistake to provide the shell—or, indeed, any kind of grit—in a narrow receptacle. The best plan is to place it in a shallow box at least 1 ft. square. In this way the birds are given an opportunity of scratching it about and securing pieces they like best.

The lack of lime is not always the cause of weak or soft-shelled eggs. The overfeeding of rich food, such as meat and meat-meal, are often responsible. Thus, where a liberal supply of egg-shell-forming material is available to the birds, and eggs with poor-quality shells are produced, it will be found a wise course to reduce the amount of forcing diet. Of course, even on the best-managed plants an odd bird may lay imperfectly shelled eggs owing to an overfat condition preventing the reproductive organs from functioning in a normal way. Obviously, such birds should not be retained on the plant.

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