

be maintained in a thoroughly dry condition. The foundation or wall plate of a poultry-house should be at least 6 in. to 8 in. above ground-level, and the inside filled up with well-rammed earth. This will aid in keeping the house dry, a condition which is imperative for the welfare of the growing chickens. Another cause of the trouble is bedding the chickens with hay, which heats and brings on a sweated condition. Hay may certainly be used to advantage as bedding-material in a heated brooder, because it is there prevented from becoming damp, but in a fireless brooder or a colony coop or house it should never be used, otherwise trouble may be expected at any time. Straw, straw chaff, sand, or dry earth is always to be preferred.

There is no cure for the trouble referred to ; prevention is the one and only way. The essentials for prevention are avoidance of overcrowding, provision of ample ventilation, keeping the quarters clean and dry, and checking anything likely to create a moist atmosphere. In addition, encouragement of the birds to perch at an early age is always a safeguard against the trouble making its appearance.

In connection with early perching it may be mentioned that where a chicken is encouraged to perch at an early age the breast-bone is apt to become deformed, especially where very narrow perches are provided. On the other hand, if broad perches of, say, not less than 3 in. in width are used the number of birds affected with this trouble will be reduced to a minimum.

—F. C. Brown, Chief Poultry Instructor.

THE APIARY.

QUEEN-EXCLUDERS.

THE coming month should prove the advantages to be gained by the use of excluders. In the colder districts they are of inestimable value in enabling the beekeeper to finish extracting before the hot weather has altogether departed. Generally speaking, they should only be used during the main honey-flow. All sealed brood should be raised above the excluder, and the queen confined in the brood-chamber on drawn-out combs. After a few days the brood in the super should be examined in case queen-cells have been started, as it is almost impossible to find brood-combs which do not contain a few eggs, and the bees will often raise queen-cells on brood from which the queen has been separated. The queen will continue to lay on the empty combs provided, and, as the brood in the upper story hatches, the combs will be filled with honey—a great boon to the beekeeper who does not wish to extract brood-combs. By delaying the use of excluders till the main flow has started, one of their chief disadvantages—the promotion of excessive swarming—is largely obviated, as in most localities swarming stops automatically when clover blooms freely.

EXTRACTING.

By the end of December extracting should have begun in the warmer parts of the Dominion, though farther south it may not