

Mixing Lime-sulphur and Arsenate of Lead.—When using these sprays in combination it is preferable to mix the ingredients separately, using half the total quantity of water for each and then pouring them simultaneously into a third vessel, as in making bordeaux. Otherwise remove sufficient water from the bulk in which to thoroughly mix the arsenate. Add the lime-sulphur to the bulk of the water, and follow with the arsenate-of-lead mixture. Stir well, and in either case use as soon after mixing as possible.

POULTRY - KEEPING.

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BROODER MANAGEMENT.

WHILE there are many different styles of both heated and fireless brooders for rearing artificially hatched chicks, none have yet been discovered to perfectly take the place of the natural mother. This is chiefly because, whatever the weather conditions, the little ones can always enjoy under the hen that absolute uniformity of warmth demanded by them, and at the same time breathe the fresh air so essential to their welfare. While this is true, yet with the up-to-date brooder appliances now available, and the exercise of ordinary common-sense care in their management, the rearing of chicks by artificial means has been made a comparatively simple matter, and they may be made to do practically as well as when raised in the natural way. To be successful in brooding chicks the attendant must largely take the place of the natural mother. He must by study and observation seek to provide conditions resembling the natural method as closely as possible.

In brooder-work the great essential is to prevent the little ones from becoming chilled. Thousands of chicks are lost annually through no other cause. While there are many ways in which chickens become chilled, the most common cause is undoubtedly overheating and insufficient ventilation in the brooder-box. A most common experience in artificial brooding is that the early-hatched chicks do exceptionally well—that is when cold weather is being experienced. On the other hand, as the season advances and the weather gets warmer heavy mortality takes place. In nine out of ten cases the cause of this is mismanagement in neglecting to provide more ventilation to suit the warmer weather conditions. Perhaps the most important fact disclosed by modern study of poultry-keeping is the necessity of fresh air for the birds, and if this is so in regard to adult stock it is even more the case with chickens. In the artificial rearing of chickens the greatest success will never be achieved unless the poultryman can control temperatures and ventilation at all stages of the process. The brooder should be so constructed that extremes of heat and cold may be prevented, while at the same time stuffiness or draughts must never be allowed to exist.