

changeable weather, dampness, especially if the houses are located on low and undrained land. Lastly, fowls being too much in-bred, causing delicate constitution. All fanciers must quite well know, fowls to stand our changeable climate must be bred so as to have a strong and robust constitution, which cannot be obtained by too close in-breeding. Weak, delicate birds are very liable to Roup and other diseases, and much worse to cure than a strong robust bird.

FROM C. MASSIE, PORT HOPE.

Consider the most prevalent causes of roup to be.—Bad ventilation, exposure to draughts, keeping in damp, unclean, crowded quarters, where they do not get plenty of *sunshine*; coming in contact with diseased birds at exhibitions, and, breeding from rousy stock.

To cure, place in a dry, sunshiny pen free from draughts, feed principally on grain, wash the head and nostrils occasionally with warm water, and of the following, give a pill, (about the size of a bean) every night, viz. 2 parts flour, 1 part cayenne pepper, mixed with castor oil. Also add a few drops tincture iron to drinking water. In very bad cases of long standing, I think the best cure, is to take their heads off.

FROM H. H. WALLACE, WOODSTOCK.

Cause—cold, wet and damp weather but more especially draughts on the fowl from broken windows and apertures in the building. Also introduced by the disease being carried from fowl purchased from outsiders which should be isolated from your own flock at least one week. Through the latter cause I lost hundreds of fine fowl and would *strongly emphasize* this precaution.

Cure—immediately separate infected birds even though only slightly affected wash head and nostrils with either strong vinegar or coal oil and with a small syringe inject either of those liquids in the nostril, and if very bad swab the throat with a few drops carbolic acid diluted in water; then placing

your fowl on the roost fumigate them by burning sulphur on an old iron pan with a few drops carbolic acid. Put a little sulphate of iron in their drinking water.

FROM G. R. BRUCE GUELPH.

You ask me questions on a subject of which I have had no experience, so I cannot venture to give a cure when I have never made a trial. The only reason I can give for my fowls being free from disease is that I give them my personal attention they receive their feed and water as regularly as I do myself, with good wholesome quarters and lots of pure fresh air I think they are not liable to contract disease. Such has been my experience with a limited number of fowl for the past seven years.

FROM T. H. SMELT, BOWMANVILLE.

In answer to your enquiry I may say that anything affecting the health of a fowl such as bad food bad ventilation or filthy houses may cause roup, but the most prominent cause is from exposure to cold and wet. This form of roup is easily cured if taken in time but the worst form of roup and probably the most prevalent, in my opinion, is transmitted from breeding stock that have been affected with roup and is almost certain to come out in the offspring sooner or later and cure is almost impossible. The majority of breeders seem to lose sight of this cause. For ordinary case of roup the best cure I have found is to coop the birds singly bathe the head twice a day in salt and water and give Guest's Roup pills as directed.

FROM T. COSTEN MONTREAL.

Roup generally commences in the fall with young stock by allowing them to run out on wet cold days, they contract cold which is incipient roup and soon develops into such in its worst form and all the more quickly if there is overcrowding.

For the cure of Roup I never use anything but coal oil, inject with small oil tin (sewing machine one) into

nostrils and opening in roof of mouth then with thumb nail press and squeeze out matter until all is clean then apply coal oil again repeat two or three times I never found it to fail.

FROM R. HAMILL, ST. CATHARINES.

Top ventilation, poor feed, allowing the young stock to run late in the fall, when the cold winds are prevalent, and sleeping in damp filthy coops.

Shut the stock up before fall rains begin, feed good sound grain, such as wheat and corn. Keep dry and their quarters clean, cure 1st stage one tablespoonful of each coal oil, lard and ten drops carbolic acid, inject three or four drops in nostrils and throat with small oil can; 2nd and 3rd stage *the axe*.

NATURE versus ART.

BY STANLEY SPILLETT.

Having tried to answer or give my opinion on the cause of roup or croup in fowls, it seems to afford to my mind room for a few additional remarks upon the subject. First, I would like to ask who among your numerous readers have ever known a common fowl kept about the barn, &c., in the ordinary way having the Roup? and if not, why not; is it because a scrub is any more free from disease than a pure bred? It don't look to be a reasonable conclusion to come to. But it may be the constant exposure that accounts for this immunity of the scrub from these diseases which carry off so many pure breds. Now it appears to me that when the cause for any effect is complex, or arises from a variety of causes all acting in the same direction, the solution of the problem generally eludes research for a long time, as a man is most likely to fix his mind upon one thing as the cause, when, if by observation and experience, he finds his conclusion weakened in that direction and turns his mind away from the first apparent cause, and fixes his eye upon another which his further experience has brought to light. While, if the