

Crooked Breast Bone.—There is no bone in the body of a chick just hatched, but the material which is to develop into bone is a pliable substance called gristle and is very subject to injury. The best authorities state that crooked breast bone is hereditary and no doubt it is and only those birds with straight breasts should be used in the breeding pen; but many of the crooks are the result of injuries and care should be taken to see that the entrances to the brooder houses are by inclined planes rather than by steps. If chickens have to climb over the sharp edge of a stick of timber such as a door sill, they are likely to injure the breast and cause the developing bone to become crooked.

Bumble Foot.—If the roosts are high or the floor hard the birds are likely to hurt their feet in alighting from the roosts. The injury occurs in the centre of the foot and appears as a hard lump with a core. The remedy consists in lancing the lump and removing the core, care being taken to wash the wound with an antiseptic wash, such as a five per cent. solution of carbolic acid. According to the plans as described in this bulletin, the roosts should not be more than thirty inches from the floor and at that height bumble foot should not occur.

PARASITES.—The same conditions that induce disease are most favourable for lice and mites. They thrive in filth and gain a greater foothold as the body of the bird becomes weakened. Although some lice may be found on most flocks, yet with clean, light, healthy surroundings they are in such small numbers as to be scarcely worth consideration. To be on the safe side it is necessary to exercise some precautionary measures which vary for the particular case.

Body Lice.—There are several varieties of lice which trouble poultry, as anyone may easily see if he examines birds at the head, below the vent, and the quills of the wings. Besides those which are peculiar to different parts of the bird there are two varieties of wandering lice, which may be found on any part of the birds or on the roosts. A good dust bath is of first importance for the treatment of lice and this should consist of light, friable earth. The fowls should be dusted with a powder containing a high percentage of finely ground tobacco or any one of the preparations on the market for killing lice. To dust a bird effectively it should be suspended by the feet with one hand and the powder sprinkled on while the feathers are thus open.

Roost Lice.—The roost lice feed on the birds at night, returning to the crevices of the roosts and walls during the day. Dust baths do not reach them and they can only be reached by treating their hiding places with solutions. An effective solution for the roosts, walls and other fixtures is kerosene emulsion, or any of the spraying solutions mentioned in this bulletin, or a solution of carbolic acid. These solutions do not destroy the eggs, consequently treatment, to be effective, must be repeated every few days for a couple of weeks, so as to catch the young as they are hatched.

Scaly Leg.—Poultry kept in dirty houses are often troubled with coarse scales on the legs. These are due to the presence of mites, which have burrowed beneath the scales. They are air breathing insects and