

once a month during cold weather and twice a month during warm weather.

The same disinfecting material should be used on all apparatus and utensils. Every incubator should be thoroughly disinfected before and after every hatch. Every brooder and all parts of the brooding equipment should be disinfected before any chicks are put with the brooder, and disinfection should be carried on regularly throughout the season. All drinking vessels and feed troughs should be regularly disinfected. It is only by paying particular attention to details and endeavoring to keep everything scrupulously clean that best results are secured.

#### EXTERNAL PARASITES

Unless disinfection is done regularly, lice and mites will increase very rapidly. Poultry infested with lice or mites are not profitable, because these parasites live on the blood and tissues of the poultry. The lice stay on the poultry most of the time, while the mites visit the poultry at night and remain under the roosts or in other secluded places during the day.

A good method of ridding fowls of lice is to treat them with mercurial ointment U.S.P., made with a lard base. On each fowl rub three small pieces of ointment, each piece about the size of a pea, one beneath the vent and one under each wing. Rub the ointment on thoroughly and the fowls should be practically free of lice. An effective dusting powder is made of three parts gasoline, one part crude carbolic acid (90 to 95 per cent. tar acid), and enough plaster of paris for the preceding liquids to moisten. This is mixed thoroughly and then allowed to dry and is stored in air-tight containers. When dusting, rub the powder well into the feathers. Every fowl should be individually treated when put in the laying pen in the fall.

#### VICES

There are three vices, egg eating, feather pulling and toe-picking, which flocks often contract, particularly among confined flocks kept under unsanitary conditions. When once started, these vices usually spread rapidly; therefore, every effort should be made to keep the flocks under the most sanitary conditions and to provide means for the birds to take plenty of exercise.

**EGG-EATING.**—To prevent the egg-eating vice from developing, provide dark nests. Feed the scratch grain in the litter which should be six or eight inches deep. The mash mixture should contain meat food of some kind, such as beef or fish scraps. Feed plenty of green food and keep oyster shells or some other source of lime supply before the birds at all times. If sour milk or buttermilk is available, provide it regu-