

section dealing with Thread Lung Worm will help improve the condition of lambs. Shepherds should realize that animals with "wormy" lungs are weaklings and as such require good nursing treatment if they are to make gains or at least hold their weight while the infestation is dying out. Pure air, dryness underfoot and good feed are essential to recovery.

### Hair Lung Worm (*Synthetocaulus capillaris*)

This Hair Lung Worm is smaller than either of the two Lung Worms previously described in this bulletin. The females are less than an inch long and brownish-red in color. The males are the same color and about one half inch in length. This Lung Worm spends the greater part of its life in the minute air channels.

The embryonated eggs are released in the bronchioles to complete their incubation. The released larva migrates out by way of the trachea, reach the soil, go through a moult and then become infective to any sheep that may take them up while feeding.

When the adult worms have completed their life work they bore into the lung tissue and become encapsulated. The nodules so formed may be felt with the fingers near the edge of the lung. They are small and rarely exceed the size of a pea.

Infection takes place as with the Tread Lung worm, so the same hygienic measures of control apply equally to this Hair Lung Worm. Bronchial antiseptics, a good tonic and clean dry living conditions for the infected sheep are helpful.

### The Liver Fluke of Sheep (*Fasciola hepatica*)

**Description.** — In appearance the Liver Fluke of Sheep is a flattened, leaf like, oval shaped parasite that is less than an inch long. On the under surface at the head end there is a conical process in which is located the mouth surrounded by a sucker disc. Just back of the mouth a ventral sucker is to be found. The body surface of the Liver Fluke is covered with very minute spine like processes all of which point backwards from the head end. The purpose of these spines is to enable the Fluke to hold its position and also move forward in the bile ducts. In color the Liver Fluke resembles liver. The eggs of the Liver Fluke are very large, round-oval in outline and colored brown.

**Life History.** — The sexually mature Liver Fluke resident in the bile ducts of a sheep's liver, releases its eggs. The eggs are carried with the bile to the gall bladder, ultimately to the intestine and to the outside with the feces of the sheep. One Liver Fluke may produce 100,000 eggs. The eggs under suitable conditions of moisture and temperature go through an embryo producing process and eventually release a small organism that is capable of living for a short time in surface water. This organism attacks a snail of