

the genus *Limnaea* and burrows into its body. While in the snail's body it undergoes a further development to a stage known as the cercaria. It leaves the body of the snail, swims about in the water for a time and finally comes to rest on a blade of grass, where it becomes encysted. These cercaria cysts are about one-sixteenth of an inch in diameter, white in color and circular in outline. Sheep grazing over swampy ground or along ditches pick up the blades of grass with the attached cercariae. The grass going the normal route into the stomach carries the cercaria cyst with it. The young fluke is released from the cyst, passes on to the intestine, which it penetrates to enter the abdominal cavity, here it wanders at large until it reaches the surface of the liver, which it penetrates to enter a bile duct. The little flukes

migrate in the bile ducts to suit their growing needs, going from the smaller to the larger ducts.

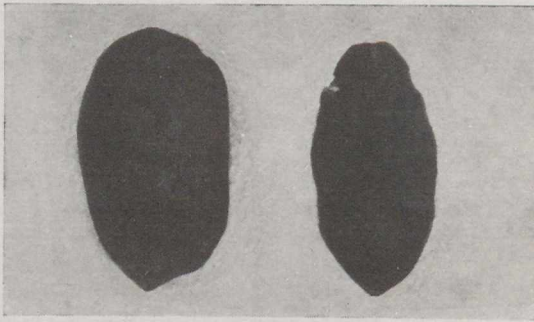


Figure 15.

*The Liver Fluke of Sheep. Mature specimens taken from the large bile ducts of the liver of sheep. In color, these oval flattened, creatures resemble liver.*

**Distribution.**—The Liver Fluke depends upon the snail, and conditions favorable to the snail. So its presence in Eastern Canada is confined to the districts where the snails of the genus *Limnaea* flourish. Both the snail and young forms of the Liver Fluke require water and perish under dry conditions. Sheep

grazing around water holes, sloughs and marshes, ditches and flood lands are very apt to be infested with Liver Fluke.

**Symptoms.**—A few Liver Flukes in a sheep's liver will not bring about any noticeable symptoms to indicate their presence, but heavy infestations will bring about a condition known as "liver rot." Sheep heavily infested lose condition, the appetite becomes poor, the animal is listless, dejected, the respirations are feeble and quick, edematous swellings may appear under the jaw, the brisket or the belly, and diarrhoea is usually present. Sheep may make fair recovery if the infestation is light.

An examination of a fluke infested liver will reveal the following, a soft rotten condition, an uneven or roughened surface, areas of scar tissue and enlarged bile ducts.

**Treatment and Prevention.**—Sheep should not be permitted to graze over ground known to be infested with Liver Fluke. The draining of wet pasture areas, to rid the land of the snails that serve as hosts for the develop-