A New Skin-parasite (Louse) of Sheep.

Edward Jollie

nosus muscle over the tuber ischi. It is sometimes inflamed and distended with fluid.
   Prepatellar Bursa is about ½ to 1 inch in diameter from between the skin and the upper third of the patella, found frequently in old horses. It is affected occasionally in injuries (bursitis of the prepatella bursa).
   Subcutaneous Bursa over the Point of the Hock is inconstant. It is oval in shape, and about 1½ inches long and ½ inch broad. It is formed between the perforatus cap over the point of the hock and the over-lying skin, and facilitates the alteration in the arrangement of the skin during the movements of the tibio-tarsal joint. It lies on the level with the upper extremity of the tuber calcis. This bursa is affected in superficial capped hock.

Mucous Bursae of the Head, Neck and Trunk.

Bursa of the Funicular Portion of the Ligamentum Nuchae is occasionally found in the old animal, between the funicular portion of the ligamentum nuchae and the atlas, about 4 or 5 inches behind the occipital crest. It lies between the posterior straight muscles of the head and may be 3 inches long. It is affected in poll evil.
   A Second Bursa has been described as being formed between the ligamentum nuchae and the superior spinous process of the second cervical vertebra. This bursa is bounded at the sides by the complexus muscle.
   Subcutaneous Bursa of the Withers has occasionally been noted as extending on the side of the withers from the fifth to the seventh dorsal vertebrae. It is involved in fistulous withers.

I have not observed the two latter bursae in any of my dissections.

A NEW SKIN-PARASITE (LOUSE) OF SHEEP.

BY J. A. GILRUTH, M.R.C.V.S.,* CHIEF VETERINARIAN AND BACTERIOLOGIST TO THE GOVERNMENT OF NEW ZEALAND.

A few years ago a number of specimens of a small parasite found on the skin of the face of sheep, were forwarded for my examination and opinion by a well-known sheep breeder in the South Island. Although these specimens were not well preserved, yet microscopical examination showed them to be the variety of lice known as Hematoptinus.

Various members of this species are found, and have been described as affecting the different domestic animals, and even animals which are in a wild state, but so far no Hematoptinus has been described as affecting the sheep.

The common sheep louse (Trichodectes capraecephalus) presents many

* Reprinted from his Report for 1906.
well-marked differences in form and size to the parasites of the *Hamatopinus* class, as will be readily observed by an examination of the accompanying illustration. The *Hamatopinus* is much larger, and the long head with its conical extremity exhibits a marked difference to the broad rounded head of the *Trichodectes*. Many other variations between the two parasites can easily be observed under the microscope. The species *Hamatopinus* is capable of effecting more injury to the sheep than the *Trichodectes*. The former possesses a mouth so formed as to enable it to penetrate the skin of the sheep and live upon its blood. The common louse appears to go no deeper than the outer skin, and consequently causes less irritation and less injury.

New sheep-louse (*Hamatopinus sparscephalus*), greatly magnified.

Mr. Kerrigan, who was requested to procure further specimens, reported that none could then be found, the animals having been dipped after the specimens were forwarded.

Subsequently Mr. Wilkie, late Government Veterinarian, made a careful examination of the flock in question and found a number of parasites, of which he made the accompanying drawing and described some of the important anatomical appearances. Unfortunately he could not secure any male specimens. His more careful observations proved my decision regarding the classification of the parasite to be correct.

The parasite is practically only found in spring to any extent, and is exclusively confined to the skin of the face, but is occasionally observed on the skin of the legs.

Mr. Wilkie, who took some specimens of these parasites with him to Europe, writes me that he has submitted them to Professor Neumann, the greatest living authority on parasites of the lower animals, who has written Mr. Wilkie to the following effect:—

"It appears to me that they belong to *Hamatopinus* ox, especially a kind to which you have already referred.

Attached to the head is a peculiar organ which gives them a conical appearance.

Professor Neumann says that the specimens I originally sent you may be preserved in alcohol.

Attention is drawn to the fact that flockowners may secure...

The animal was a polo ground horse, with patches of dry skin and a pulse was taken. The horse seemed to have been rubbing down, and was noted to be eating lucerne, an indication of a nervous nature. The general condition of the animal was fairly good, with no apparent trypanosomiasis.

September 26th, 19...

September 28th, 19...

September 30th, 19...

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Case of Piroplasmosis in a Pony.

"It appears to be without doubt a new species. It is closely allied to *Hematopinus vituli*, L. (*H. tenuirostris*, Burm.), which lives on the ox, especially the calf, but it is certainly distinct in several characters."

Attached is a reproduction of a drawing made by Mr. Wilkie, which gives a good idea of the parasite enlarged.

Professor Neumann has asked, through Mr. Wilkie, for a number of specimens in order that a complete description of its anatomy, &c., may be prepared.

Attention is drawn to the occurrence of this parasite in sheep, so that flock owners may communicate their experience, and also that we may secure the specimens asked for.

CASE OF PIROPLASMOSIS IN A PONY.

BY LIEUTENANT H. S. ALLEN, A.V.C., QUETTA, BALUCHISTAN.

The animal, an 8-year-old Arab gelding, was suddenly taken ill on the polo ground on September 8, 1906. He began blowing and shivering, with patches of perspiration over the flanks, back and armpits. The pulse was slow, hard, and wiry, but the mucous membranes of the mouth and eyes normal in colour. A stimulant was given, a good rubbing down was ordered, with warm clothing, bran mash, green lucerne, and plenty of common salt. The next morning a saline laxative was given, and the pony appeared to be going on well. On September 12 there was a great change; he was very depressed, the mucous membranes were a deep orange colour, the urine very dark and feaces coated with mucus, the pulse quick and strong, respirations and temperature normal. An hepatic stimulant was given, and water *ad lib.*

September 13, temperature, 7 a.m., 101.2° F.; 6 p.m., 99° F.
September 14, temperature, 7 a.m., 101.6° F.; 6 p.m., 101° F. The colour of the mucous membranes was darker, bowels very constipated, pain shown when passing feaces, the urine the colour of porter, frothing when falling on the ground. The pony refused food, rapidly falling away in condition.

September 16. There was disinclination to move, and signs of pain on pressure behind the last right rib; appetite very poor. Temperature, 7 a.m., 101.6° F.; 6 p.m., 102° F. Warm fermentations over region of liver.

September 17. Symptoms of peritonitis, great depression; temperature, 7 a.m., 103.2° F.; 6 p.m., 102.2° F.

Blood smears showed *Piroplasma equi*, with very few leucocytes present. The pony died at 2 a.m., September 18.

On *post-mortem* examination traces were found of old-standing pleurisy, peritonitis, and hepatitis. The liver was adherent to the diaphragm, and weighed 15 lbs., spleen 7 1/2 lbs., heart 9 1/2 lbs. Both the spleen and liver were cirrhotic in consistency, the heart showed signs of fatty degeneration. Both lungs were congested. The intestines, bladder, and kidneys appeared to be healthy.

The pony was said to have suffered from frequent attacks of "liver" during his life.