

nosus muscle over the tuber ischii. It is sometimes inflamed and distended with fluid.

Prepatellar Bursa is about $\frac{1}{2}$ 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 $1\frac{1}{2}$ inches long and $\frac{3}{4}$ 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 BURSÆ OF THE HEAD, NECK AND TRUNK.

Bursa of the Funicular Portion of the Ligamentum Nuchæ is occasionally found in the old animal, between the funicular portion of the ligamentum nuchæ 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 nuchæ 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 vertebra. It is involved in fistulous withers.

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

Small Bursa over the top of the spines of the first, second and third dorsal vertebra under the ligamentum nuchæ are rarely developed. The tops of the spines are, in these cases, quite smooth. The bursæ are oval in shape, and may be 2 inches in diameter.

Clinical Articles.

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.

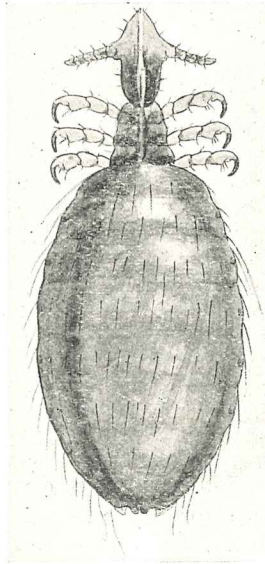
A FEW years ago a number of specimens of a small parasite found on the skin of the face of sheep, were forwarded for my examination and opinion by a well-known sheep breeder in the South Island. Although these specimens were not well preserved, yet microscopical examination showed them to be the variety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

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 *Hæmatopinus* has been described as affecting the sheep.

The common sheep louse (*Trichodectes sphærocephalus*) presents many

* Reprinted from his Report for 1906.

well-marked differences in form and size to the parasites of the *Hæmatopinus* class, as will be readily observed by an examination of the accompanying illustration. The *Hæmatopinus* 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 *Hæmatopinus* 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 (*Hæmatopinus sphaerocephalus*), 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 app
to *Hæmatop*
ox, especial
Attached
which gives
Professo
specimens
may be pre
Attention
that flockov
may be secure

THE animal
polo ground
with patch
pulse was
mouth and
rubbing do
lucerne, an
laxative wa
September
mucous me
and fæces c
and tempe
water *ad lib*

Septemb
September
colour of th
pain shown
when fallin
away in cor

Septemb
pain on pre
perature, 7
over region

Septemb
perature, 7

Blood s
The pony d

On *post*
pleurisy, p
diaphragm,
the spleen

signs of fatt
tines, bladd

The po
“ liver ” du

size to the parasites of the observed by an examination of *Hamatopinus* is much larger, and it exhibits a marked difference in *pedicels*. Many other variations observed under the microscope. It effecting more injury to the animal possesses a mouth so formed of the sheep and live upon its body go no deeper than the outer integument and less injury.

"It appears to be without doubt a new species. It is closely allied to *Hamatopinus 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 flockowners 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 *faeces* 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 *faeces*, 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 fomentations 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 *Pyrosoma 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 15¼ lbs., spleen 7½ lbs., heart 9¼ 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.

cephalus), greatly magnified.

to procure further specimens, the animals having been dipped

Government Veterinarian, made a dissection and found a number of parasites, accompanying drawing and described their appearances. Unfortunately he

His more careful observations confirmed the classification of the parasite to be

and in spring to any extent, and the face, but is occasionally

one of these parasites with him to send them to Professor Neumann, and the effect of the lower animals, who

g effect:—