

Veterinary Department.

Worm in a Horse's Eye.

Among the many ills which horse flesh is heir to, is that of worm in the eye. This disease is believed to be peculiar to India. It has never been known in Britain, and, as far as we can learn, has not been noticed in Canada. The earliest veterinary accounts of this curious phenomenon were published in the *Veterinarian* about the year 1838. For these accounts the profession is indebted to Mr Skeavington, late veterinary surgeon to the Bengal Horse Artillery, and to Mr. Gibb, surgeon to the Honorable East India Company's stud at Porzah. Mr. Percival, in noticing this disease, mentions that the latter gentleman, during a residence of sixteen years in Hindostan, had about an average of twenty cases to treat annually.

For a description of the worm within the eye, and also to account for its presence therein, we are indebted to Percival's excellent work on diseases of the horse. In describing, he says:—"The worm in the eye is plainly visible. The intruder is clearly seen in some instances, even at a short distance off, swimming about in the aqueous humour within the interior chamber of the eye, apparently in the full enjoyment of its natural element; except at any time that it may happen to take a swim through the pupil to visit the darker regions of the posterior chamber, and then, for the time of its stay, it becomes of course invisible." Mr. Gibb has "more than once seen two worms in the same eye, at one time, and has also seen a second worm make its appearance in an eye from which one had been extracted some months before." Mr. Skeavington liberated a worm from the near eye of an officer's charger in September, 1831, and in September, 1832, the same horse was brought to him with a worm in the off eye. Sir Everard Home informs us that this species of worm is found in the circulating blood of the horse, and that he is disposed to believe that they get into the aqueous humour through the arteries of the ciliary processes, which, in the horse, are of comparatively large calibre. This opinion is supported by the notorious fact of worms being often discovered within the cæliac artery of the ass. Mr. Gibb is of the same opinion as Sir Everard:—"I have always been disposed," says he, "to think that the worm in the eye must find its way through the circulating system, and not from without." Mr. Skeavington's opinion is, "that the worm is taken up at the time of drinking in so minute a form that it is capable of being absorbed into the circulating system."

We have already mentioned that the presence of this filaria in the horse's eye is unknown in Europe, and as far as we can learn, no notice has been taken of it in this country. We have no doubt, however, that this singular phenomenon now again occurs in Canada, and it is with the view of eliciting information on the subject, that we bring the following case under the notice of our readers.

The subject of this communication was a chestnut gelding, six years old, and of the heavy draught breed, the property of Mr. Armstrong,—a farmer residing in York township. In the month of May, 1864, the horse was brought to this city, and we were requested to look at him. On enquiry, we found that Mr. A., some five or six days previous, had observed something amiss with the near eye. The next day the eye appeared worse, and on a closer examination a moveable body was detected within the eye. When brought under our notice, the worm was seen very distinctly, and the cornea was becoming opaque. The opacity, however, was not to such an extent, but that every movement of the filaria could be plainly seen. It appeared to move in every direction, and with remarkable quickness, and a more lively little creature one could scarcely behold. This was the first and only case of the kind we had seen, but being conversant with the phenomenon through reading

and hearing it alluded to in lectures, we had not the least difficulty in our diagnosis. In giving an opinion on the case, we recommended the removal of the worm from the eye by an operation, and had the horse immediately brought to the infirmary. Before operating, we acquainted our friend Mr. Williamson, veterinary surgeon, Royal Artillery, then quartered in this city, who kindly offered his assistance. We had the horse thrown in the usual way, and properly secured, and with a small lancet at once made an incision through the antero inferior part of the cornea, and out came the aqueous humour, and with it the little worm. After the operation, the eye was covered with a wet cloth, and the horse was taken home. We saw him three days afterwards. The cornea was opaque, but the eye did not seem very painful. The horse was put to his usual work on the farm, and when we last saw him, about two months ago, the eye was perfectly clear and well, with the exception of a small speck where the incision was made.

The worm in length measured one and a half inches, and was thicker in the middle, tapering towards either extremity. In this case the worm appears to have been very rapidly developed. The spring of 1864 was remarkable for heavy rains, and in India this phenomenon appears to be most prevalent in wet seasons.

Scratches in Horses.

It is my purpose in this writing to give a few practical hints to avoid a troublesome disease, known as *Scratches or Grease*. It is generally caused by bad stable management. It seldom attacks the fore legs, and horses with white legs are more subject to it than any others. Strict cleanliness is the only prevention. To-day's dirt should not be left for the morrow's cleaning. A man that is truly fond of his horse will attend to his being properly cleaned at the proper time—he will say it is not good for him to sleep in his sweat. I well know the benefit of an hour's work at night.

Suppose a man with a four-horse team—and it is heavy horses that are more subject to greasy heels, with a curry comb in one hand and a brush in the other, for he can use two hands in cleaning horses, though a good many drivers appear ignorant of the fact—spends one hour industriously on his horse's sides and legs, he will be surprised in the morning to see how much sleeker a horse looks, than if he has been in the habit of feeding, hanging up his gears, and calling his work done. He will from this time devote one hour for cleaning—that is but just enough to save greasy heels—when opportunity permits, do the work well regardless of time. I am not a stranger to the job—just get on your knees, with a corn cob and a handful of straw, rub off every speck of dirt, and continue rubbing after the dirt is gone. The stable is the place to make your horse look well. When you have him out he has got to work, and he can perform that work better if he has been properly cared for over night. The first appearance of grease is a dry scurfy state of the skin of the heel—in white legs it will show a blue shade under the hair. Custom has very properly retained the hair on the horse's heels. It guards the heels from the rough surface of our ploughed fields, creating a greater necessity to hand rub the dirt therefrom. It should never be washed, as the washing keeps the heels moist, and to prevent grease, the heels should be kept dry and clean.—*Maryland Farmer*.

ON SHOEING HORSES THAT OVER-REACH.—In the *Mark Lane Express*, a blacksmith, who has had much experience in the art of shoeing, contends that in order to prevent horses from over-reaching they should be shod as follows:—"Make the toe-caulks very low, forward, standing a little under, and the shoes set as far back as convenient, with heel-caulks, so as to let the foot roll over as quick as possible. On the hind foot I have the heel-caulk low, and the toe-caulk high, and projecting forward, keeping back the hind foot while coming up over a high toe caulk, thus giving time for the forward foot to get out of the way. If thus shod, the horse will travel clean, without a click, and his speed will be increased on a trot fifteen or twenty seconds in a mile." The *Express* has the following comments on the above method:—"The reverse of this rule is generally practised. The blacksmiths, in view of preventing over-reaching, usually set the forward shoes as far forward as possible, and set the hind shoes as far back from the toe as they conveniently can. It remains for intelligent blacksmiths to decide which is the best method."

Entomology.

A Dangerous Parasite.

We learn from *Galignani's Messenger* that a prize has recently been awarded, by the French Academy of Sciences, to Dr. Zenker, of Dresden, for his important researches on the *Trichina Spiralis*. The same journal adds the following particulars respecting the history and ravages of this insect:—

"This microscopic worm, which lives coiled up in a sort of cystus or pocket, was observed about 1835 by Prof Owen in the flesh of certain animals. In 1850, Dr. Herbst, of Göttingen, found by experiment that the trichina was transmissible from one animal to another by ingestion, and Drs. Virchow and Leuckart confirmed the fact. On the 12th January 1860, a young girl was admitted into the hospital of Dresden on the supposition that she was labouring under typhus fever, but there were some symptoms wanting to confirm this opinion. The girl died on the 27th, and Dr. Zenker, on dissecting her body, found to his astonishment many thousands of trichina in a free state in the muscular tissue. Their not being encysted was a sure sign that they were of recent importation. In the intestines he found a vast quantity of adult trichinae, male and female, and perceived the bodies of the latter filled with living embryos similar to those existing in the muscles. Thus Dr. Zenker, for the first time, proved that in the same person there may exist adult trichina in the intestines and their larvae in the muscles; so that the latter could only have got there by piercing the intestine, either by direct migration or by the blood and chyle. Upon inquiry he found that the girl had eaten pork from a pig killed on the 21st December 1859, and that both the farmer and his wife, with whom she lived, had been attacked with similar symptoms, but had recovered. From all these facts Dr. Zenker arrived at the conclusion that there exists in man a disorder resulting from the immigration of trichina from the intestines to the muscles, and that this disorder becomes mortal when the immigration is too considerable in consequence of the ingestion of a large quantity of meat tainted with the parasite. No sooner did this discovery become known than it was confirmed by further observations throughout Europe. In Germany, especially in those places where raw pork is used, hundreds of cases were discovered, even assuming the form of an epidemic, where trichinated pork had been sold."

ARMY OF CATERPILLARS.—The *Lindsay Post* says:—"A most unusual incident was witnessed on Wednesday last on a grass plot belonging to Mr. James Hughey, lot 11, 6th con., Fenelon. An extraordinary colony of caterpillars, numbering millions upon millions, were seen moving along in a western direction, consuming thistles, grass, and every kind of vegetation they met with on their onward march. So completely did they demolish thistles, that nothing remained of those attacked save the roots and thorns."

INSECTS AND BIRDS IN FRANCE.—Besides the insect plague noticed last week, it appears from the public journals, that in France cockchafer and caterpillars are making sad havoc. They have stripped trees of their leaves in the Bois de Bologne and St. Maur; and the hills from Champigny to Sacy, which supply the Parisians annually with so many thousands of pounds worth of excellent apples, pears, cherries, and plums, will, it is said, produce but little this year, thanks to the caterpillars. This is attributed to the fact that the peasants suffer their children to destroy the nests of the small birds, which are the only instruments that can effectually protect trees from caterpillars. It is calculated that there were formerly 10,000 birds' nests in every square league of cultivated land in France. Each nest is supposed to contain on an average four young ones which the old birds fed with 60 caterpillars a day. The old birds were supposed to eat 60, making 1.0 caterpillars a day altogether. This multiplied by 10,000 nests will give 1,200,000 caterpillars destroyed every day in a square league of a well-planted country. The peasants, one would suppose, would have sufficient common sense to protect the birds which render them such valuable service, but they appear utterly ignorant on the subject. The only bird respected by the peasants, and especially the Norman peasant, is the wren, and that from a superstitious motive.—*Gardener's Chronicle*.