

ances form no light argument against the benefits accomplished by that which is, in slang phrase, termed '*Dr. Green.*' The appearance of the coat, and aspect of unthriftiness, after a run at grass, generally declare bots to be present within the body.

Uninformed persons are always desirous to possess some medicine which will destroy bots; they wonder that science lacks invention sufficient to compound such an agent. An anecdote may probably dispel such astonishment.

A patron of the Royal Veterinary College was once conducted by a pupil through the museum belonging to that establishment; the pair at last stood before the preparation of a horse's stomach eaten through by, and also covered with, bots.

'God bless my soul!' exclaimed the visitor, after the nature of the specimen had been explained. 'What a spectacle! What a myriad of tormentors! And have you no medicine to remove such nuisances? Can veterinary science discover nothing capable of destroying those parasites?'

'Why, sir,' replied the student, 'only look at that preparation. To my knowledge, it has been put up in spirits of wine, and corked air tight for two years. The creatures must be either very dead or very drunk by this time; yet, as you witness, they hold on. What sort of physic could accomplish more than is already effected by the spirits of wine and close confinement? I am at a loss to conjecture!'

For the above, the author is indebted to the admirable lectures delivered by Professor Spooner; but the conclusion drawn by the student must be more than satisfactory. Bots, once within the stomach, must remain there till the following year; when being matured, their hold of the lining membrane of the viscus will relax, and, in the form of a chrysalis, they are ejected from the system. No medicine can expedite the transformation. It has hitherto appeared easier to kill the horse than to remove the parasite.

To the investigation of Bracy Clark, Esq., V.S., the public owe all their knowledge of the fly, whence the bot is derived. The common parent, according to the above authority, is the oestrus equi; and the author gladly avails himself of the original description by the above-named talented gentleman.

'ON THE OESTRUS EQUI, OR THE STOMACH BOT.'

'When the female has been impregnated, and the eggs sufficiently matured, she seeks among the horses a subject for her purpose, and approaching him on the wing, she carries her body nearly upright in the air, and her tail, which is lengthened for this purpose, curved inwards and upwards; in this way she approaches the part where she designs to deposit the egg; and suspending herself for a few seconds before it, suddenly darts upon it, and leaves the egg adhering to the hair; she hardly appears to settle, but

merely touches the hair with the egg held out on the projecting point of the abdomen. The egg is made to adhere by means of a glutinous liquor secreted with it. She then leaves the horse at a small distance, and prepares a second egg, and poisoning herself before the part, deposits it in the same way. The liquor dries, and the egg becomes firmly glued to the hair: this is repeated by these flies till four or five hundred eggs are sometimes placed on one horse.

The skin of the horse is usually thrown into a tremulous motion on the touch of this insect, which merely arises from the very great irritability of the skin and cutaneous muscles at this season of the year, occasioned by the heat and continual teasing of the flies, till at length these muscles appear to act involuntarily on the slightest touch of any body whatever.

The inside of the knee is the part on which these flies are most fond of depositing their eggs, and next to this on the side and back part of the shoulder, and less frequently on the extreme ends of the hairs of the mane. But it is a fact worthy of attention, that the fly does not place them promiscuously about the body, but constantly on those parts which are most liable to be licked by the tongue; and the ova, therefore, are always scrupulously placed within its reach.

The eggs thus deposited I at first supposed were loosened from the hairs with the moisture of the tongue, aided by its roughness, and were conveyed to the stomach, where they were hatched: but on more minute search I do not find this to be the case, or at least only by accident; for when they have remained on the hairs four or five days, they become ripe, after which time the slightest application of warmth and moisture is sufficient to bring forth in an instant the latent larva. At this time, if the tongue of the horse touches the egg, its operculum is thrown open, and a small active worm is produced, which readily adheres to the moist surface of the tongue, and is from thence conveyed with the food to the stomach.

'At its first hatching it is, as we have observed, a small active worm, long in proportion to its thickness, but as its growth advances, it becomes proportionately thicker and broader, and beset with bristles.

'They are very frequent in horses that have been at grass, and are in general found adhering to the white insensible tissue or coat of the stomach.

'They usually hang in dense clusters to this white cuticular lining of the stomach, and maintain their hold by means of two dark brown hooks, between which a longitudinal slit or fissure is seen, which is the mouth of the larva. When removed from the stomach by the fingers by a sudden jerk, so as not to injure them, they will if fresh and healthy, attach themselves to any loose membrane, and even to the skin of the hand. For this purpose they sheath or draw back the hooks almost entirely within the skin, till the