m, adhere to the air as shewn in They are furith an operculum ich at the time of about twenty r they are deposs to allow of the off the eggs thus but Mr. Bracey t, for when they time the slightistant the latent erculum or lid is to the moist sur-"Thus a horse friendly office of

gs deposited by h by their stingus on the tongue

tive, rather long et with bristles. or yellowish red eleven segments, ith a double row istles, large and the point which ds. The larvæ om the lining of they maintain wo dark brown ad is furnished. whole surface of ribute to fix it ne grubs by the e seen they are way by the food he first process

ly found adhernall deep round gh it, but not

as not to injure ny flaccid_mem-

n attached, and rifice, and falls e change into a After remainits mature form In a few hours

fly and by anos eggs upon the tressing to the 37

animal from the excessive titillation it occasions, for he immediately after rubs his mouth against the ground, his forefeet, or sometimes against a tree with great emotion, till finding this mode of defence insufficient, he quits the spot in a rage, and endeavours to avoid it by galloping away to a distant part of the field, and if the fly still continues to follow and teaze him, his last resource is in the water, where the insect is never observed to pursue him. These flies appear sometimes to hide themselves in the grass, and as the horse stoops to graze they dart upon the mouth or lips, and are always observed to poise themthemselves during a few seconds in the air, while the egg is prepared on the extended point of the abdomen."

Remedies.

Mr. E. Verrill, from whose valuable paper on the external and internal parasites of man and domestic animals, we quote, writes thus :--

The amount of injury caused by the bots of horses has long been a matter of dispute, many writers claiming that they are very injurious, and even at times fatal, while others deny this and consider them as harmless, or even beneficial. This can be definitely settled only by experiment, but most reasonable men would be content to forego any possible benefit and be satisfied with a healthy horse, destitute of bots. No doubt many diseases due to other causes are commonly attributed to these insects, but that they are frequently the cause of serious trouble, is generally believed and admitted. In this instance prevention is comparatively easy, while all writers admit that there is no reliable cure, no matter how much they may differ in other respects. The means of prevention consist chiefly in frequently removing and destroying the eggs, and also in removing and destroying the full grown larvæ when observed attached to the rectum. The eggs being large can easily be seen, and can be removed either by thorough washing and brushing, or by cutting the hairs off with scissors. A wash of carbolic acid soap has been recommended to destroy them. In some countries the grooms frequently wash out the mouths of the horses with a suitable brush in order to remove the young larvæ. Many drugs have been recommended to remove bots from the stomach, but none that do not endanger the life of the horse can be relied on ; and in cases where they bring away the larvæ it is possible that those that are already in the intestines are the only ones affected. Spirits or oil of turpentine is a remedy in common use, but should be used with caution, if at all. A better plan under ordinary circumstances is to keep the horses in good health in other respects, so that they can the better sustain the attacks of the larvæ, until they naturally pass away, which will usually take place without serious injury. In exceptional and severe cases only, resort should be had to special medicines of a dangerous or doubtful character, and then they should be given if possible in accordance with the advice of a competent physician.

No. 2.—THE OX BOT-FLY (Estrus bovis LATR.).



This is a large and handsomely-coloured fly.

M. Joly describes it as having a very hairy body, a large head, the face and forehead covered with light yellow hair, the eyes brown and the antennæ black. The throat is yellow, barred with black, the abdomen of a greyish white at the base, covered with black hair on the third segment, and the remainder of an orange yellow; the wings are smoky brown.

The fly appears during the summer months, and the female lays her eggs on the backs of cattle. There seems to be a considerable difference of opinion as to the manner in which the egg is deposited. Mr. Bracey Clark holding very decidedly