

Veterinary Department.

Shoulder Slip in Horses.

A VERY common occurrence among farm horses in the spring of the year is what is known as shoulder slip, or as it is called in some parts of Canada, *Siccane*. Shoulder slip consists in sprain or laceration of the fibres of the antea and postea spinatus muscles, which are situated on the external part of the shoulder. The muscular fibre becomes atrophied or wasted, in some cases to such an extent that the scapula or blade bone can be easily felt, leaving a large hollow extending from the upper to the lower part of the shoulder. It is oftenest met with in young horses, and is caused by going in an awkward manner when first put to work, or from badly fitting collars, and ploughing on rough and heavy grounds. It is also caused by circling horses when being broken. The first symptom is a slight stiffness of the shoulder, which is best seen in bringing the horse out of the stable. The muscles sprained are also somewhat swollen, and are hot and tender. The swelling soon disappears, and atrophy of the muscular fibre ensues. The heat and pain ceases; the wasting of the muscles becomes quite evident, giving rise to the depression commonly called *Siccane*. When the external muscles only are injured, the horse has a peculiar action, owing to the contraction of the muscles on the inner part of the shoulder not being counterbalanced by the contraction of those muscles situated externally. The shoulder joint appears to spring outwards at every step; and this symptom often leads to the erroneous supposition that the joint is dislocated.

In the treatment of shoulder slip, the horse should be kept perfectly quiet and confined to his stall, which, in this case, is preferable to either a loose box or being turned out to pasture. The shoulder must be fomented with hot water twice or thrice a day, and this treatment continued for several days. When the fibres are wasted, and the process of reproduction has begun, it is encouraged by the application of mild stimulants, repeated every third or fourth day, together with gentle walking exercise and good keep. If given time and properly treated, the worst of cases will completely recover. It takes a considerable time before the muscular fibre becomes reproduced, and we must trust more to nature than to medicinal remedies.

Entomology.

The Canada Thistle Caterpillar.

It generally falls to our lot to have to discuss, in this column of THE CANADA FARMER, the demerits and wrong-doings of some hated insect foe,—to chronicle all its mischievous works, or to suggest some means of ensuring its speedy extermination, as an evil-doer too bad to be suffered to live. But lest our readers should gradually be led to believe that every insect is destructive, and therefore must be trodden under foot and crushed to death without a moment's hesitation as a meritorious act, we would turn our attention in our present issue, to one that ranks on the opposite side,—one that is actually the farmer's friend!

Every one knows how great a pest to the country the Canada thistle is, but it is not every one who knows, in like manner, that there is a caterpillar which devours immense quantities of this noxious plant. Let us see, then, what this friendly caterpillar is like, that we may know better than to kill him, when he next comes in our way. From May until September (for there is more than one brood in the year), there may be found feeding on the leaves of the Canada thistle, and other similar plants, speci-

mens of this caterpillar, either solitary, or two or three near each other. Each one spins for itself a slight web, on the upper surface of the leaf, which it draws over in such a way as to form a shelter for itself. Under this covering it devours the skin and pulp of the leaf, without touching the under skin; and when all within reach is consumed, it removes to another part, and constructs a new habitation, of larger dimensions, of course, to correspond with its own increased size. When full-grown, the caterpillar is about an inch and a half long. It is dark-brown or blackish, with narrow yellow strips along the back and sides; its head is black, and feet reddish; on each segment except the first, there are several whitish, black-tipped spines, varying in number from two up to seven, the greatest number being in the middle. The chrysalis is about three-quarters of an inch in length; it varies in colour from light grey or ashen to brown, and has three rows of golden or silvery tubercles on the sides and back. It is usually suspended from the bars of fences or other objects near the plant on which it has fed. In this state, it continues for about a fortnight in summer,—in the autumn for nearly a month,—and then comes out in the form of a beautiful butterfly, the Painted Lady, (*Cynthia cardui*, Linn.)*



The fore-wings above are tawny, with the middle almost rosy red, and spotted with black, while the tip is widely black, spotted with white; the hind wings are principally tawny or reddish, with three rows of black spots near the edge. On the under side, the fore wings are marked as above, but the red is much brighter, and the black paler; the hind wings are dappled with brown, white, and grey, and have near the outer edge a row of five beautiful eye-like spots, the two middle ones being the smallest.

This handsome butterfly is found in every part of the world, and is common in North and South America, Europe, Australia, parts of Africa, and the East Indies. In some seasons it is extremely numerous, while in others but one or two are to be seen. Last year it was very abundant throughout the greater part of Canada. A friend informed us that when travelling through a portion of the county of York last summer, he met with immense swarms of these butterflies, all proceeding westward, and forming a column of three or four miles in length; he estimated their number at some millions! A correspondent also told us that in the rear of the county of Hastings, he found the farmers rejoicing in the fact that nearly all their Canada thistles were eaten up by the larvae of this insect. In 1858 also, we remember it to have been exceedingly numerous.

Mr. Westwood, in his work on British Butterflies, states that "this is one of those species remarkable for the irregularity of its appearance; in some years occurring plentifully, even in the neighbourhood of London, after which it will disappear for several years. Indeed, instances are on record in which, owing to the vast numbers, migration has become necessary; and in the *Annales des Sciences Naturelles*, for 1828, an account is given of an extraordinary swarm which was observed in the preceding May, in one of the Cantons of Switzerland, the number of which was so prodigious, that they occupied several hours in passing over the place where they were observed."

*In this figure the upper side of the wings is represented on the left, the under side on the right, a little detached from the body.

Destruction of Insects in Orchards, &c.

M. Mellot Brule, a distinguished French horticulturist, has demonstrated by experiment, the efficacy of the powdered proto-sulphuret of iron (which has been before used for the preservation of timber) in destroying noxious and annoying insects.

The powder may be strewed over the ground, around the roots of the tree, or fixed on the surface of a collar surrounding the stem. No insect will pass it; or, if they attempt it, they are immediately killed. The proto-sulphuret of iron (black pyrites), is manufactured for the purpose of developing sulphuretted hydrogen, which is undoubtedly the effective agent in destroying the vermin.—*Cosmos*.

NOTE BY ED. C. F.—Perhaps some of our scientific friends would kindly try the experiment next summer, and let us know the result. We fear, however, that there are but few insects injurious to fruit-trees that would not avoid this preparation by simply flying over it.

The Apiary.

Management of the Apiary for March.

BY J. H. THOMAS.

Much will depend upon weather. If snow continues on the ground and the weather remains cold, but little can be done. If bees are housed and there is no doubt about their having sufficient honey, do not disturb them; but if the weather is warm, and the snow gone, or nearly so, there are several things which should be attended to. On a clear warm day, set out stocks that have been housed; and if in moveable comb hives examine each stock by lifting out each frame. See if they have plenty of honey; if some stocks are found with only a small amount, while others have plenty, and to spare, exchange combs of comb, first brushing off the bees into the hive with a wing. By so doing, weak stocks may be strengthened, while the strong stocks are not injured. If box hives are used, they should be turned up in the sun-light, and a search made for sealed honey. If there is any, it will be found near the top and in the outside combs. If none can be seen, they should be fed. Remove the hive into a warm room or cellar, and invert it. If honey in the comb can be had, lay pieces of such directly on the combs in the hive, and cover so that the bees cannot escape, but do not close up all ventilation. If liquid honey or sugar is to be fed, follow directions given in the "Canadian Bee-keepers' Guide." All comb that is mouldy to any great extent should be removed from either box or moveable comb hives, if but slightly affected let it remain. If my hives are used, drop the bottom board and clean out all dead bees and filth; contract the entrance to half an inch to prevent robbing. If any stocks are found to be queenless, which may be easily known where moveable comb hives are used, they should be given to other stocks having a queen. Select a good stand for each stock. In my opinion, the distance stocks are set apart is of but little importance, so that they have a good stand, and get the morning and evening sun, which is very necessary. If there is no water near the apiary, put some in a dish with some straws or any thing to prevent their drowning, and set near the hives. It is well also to set a dish of oatmeal, buckwheat or rye flour when they can get it, for if short of bread they will use it in preparing food for the brood. Keep an eye to all weak stocks, and see that they are not robbed. See that all old hives are well cleaned and ready for use. Those who have not yet ordered moveable comb-hives, but are intending to do so, should not delay. If three or four persons in a neighbourhood ordering hives of J. H. Thomas & Bros. would form into a club, and send in their orders together, having their hives sent to one address, it would be to their advantage, as three hives may be sent to one address for the same freight charge as one hive.