

into the fully formed fly in May, and in that month both fall and spring wheat. There are several generations of the Hessian fly each year, and it is most liable to injury from this insect. It does not exist where only spring wheat is grown. High fertility of soil and late sowing are safe-guards against it to some extent. Pasturing the wheat stubble,—burning it off,—steeping the seed grain and rolling it in plaster or lime, sowing wood ashes, two bushels to the acre in both fall and spring,—are remedies more or less efficacious. Human endeavours are aided by the attacks of other insects. The Hessian fly is followed up and destroyed by two small, black, ant-like parasites. These are so numerous and active, whenever and wherever it appears, that it is very quickly exterminated, and hence has now ceased to be an object of serious apprehension to the agriculturist.

**A NEW DESTROYER.**—A yellow worm, one-half to five-eighths of an inch in length, and very destructive to grain, has made its appearance at Ritchfield, on the line of the La Crosse Road. A wheat field covering some ten acres, was completely destroyed by these insects in the course of three days.—*Mil. News.*

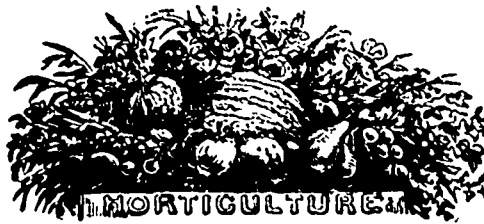
**A GOOD WORD FOR SQUIRRELS.**—I wonder if farmers are aware that the little striped squirrel makes food of the crysalis from the caterpillar's cocoon? I have seen him at it several times within the last two years, and also learned that he was a meat-eater, for food or medicine. Walking over an elevated portion of the road one day last summer, I heard a rustling in the grass and shrubbery in the ravine beside me, forth came the squirrel with a little brown snake eight or ten inches long, and perched himself upon a flat stone in a wall near by, and I watched until the snake was consumed.

## Veterinary Department.

### Our Treatment of Milk Fever.

Cows exposed to cold and dampness or fed on dry, heating or astringent food, often have fever of some kind. To prevent this, keep the cow from exposure to cold and dampness near calving time, and for some time afterwards, give warm messes of wheat bran after calving, made thin three times a day, and some water to drink from which the chill has been taken, if drawn from a well or cold spring. Four years since we had a cow which came in the first of May; she seemed smart, and the third day was given a cold mess of bran and water at noon. The next morning she was in great distress, would rise up, tremble and fall down, and had not eaten the hay placed in her manger over night. The stable floor was littered with straw a foot thick to prevent her from injuring herself when falling. A piece of saltpetre the size of a large pea was dissolved in a pint of water, put in a long-necked bottle and poured down her, then she was vigorously rubbed all over with wisps of straw, and covered with a thick woollen bed-quilt, to draw the internal warmth to the surface—her limbs often well rubbed. Some warm gruel (made of bran and flour, mixed), was poured down her, as she could eat nothing her-self, but calf permitted to run with her, and having a good appetite, took every opportunity to get what milk it could. The rubbing and external warmth were kept up; the second dose of dissolved saltpetre was given twenty-four hours after the first, repeated doses of wheat bran and flour gruel given, and some young, tender grass picked and placed in her mouth. The second day she did not trample so much, and could stand longer; the third day was much better, and the fourth being pleasant she was let out to feed on tender grass near, and return to the stable when tired. She soon became as well as ever.—*Brantford News.*

**SCRATCHES AND GREASE.** These ailments are scarcely known in well ventilated stables, where cleanliness and care are exercised in managing horses' feet. J. B. Chaceman sends his method of treatment, which is as follows: "Cleanse the heels with soap suds, and, when dry, apply hot tallow with a swab. One application is sufficient. Fish brine, or a coating of common white lead paint, are equally efficacious." We approve of your application of warm water and soap, and rubbing the parts dry, after which the white oxide of zinc ointment, or a little glycerine, will be found excellent applications for these diseases. They can be obtained of any good apothecary, are easily applied, and free from danger; which is not the case with the remedies you mention.—*American Agriculturist.*



### Exhausted Fruit Trees.

It is no uncommon thing to find single trees or even whole orchards, once productive, that have become barren, either yielding no fruit whatever, or a few scrubby specimens, mere apologies for the products formerly given. In such cases you will perhaps hear it said that the trees have failed, or become exhausted; whereas the truth is that the soil is exhausted. Such phenomena are viewed as among the mysteries of the vegetable kingdom, but they are among the simplest and most easily explained facts, to be met with out of doors. It would be difficult to find anything more irrational than the course pursued by many in regard to fruit-growing. A young orchard is planted out, and forthwith sown to a grain crop in which the trees stand during the summer months, like storks in a rush pond, their heads just peering over the nodding grain. Year after year a similar course is pursued. The land is expected to bear as much of some sort of crop as though an orchard had never been thought of. After much hard struggling half the trees, two-thirds perhaps—are found to have survived, and they begin to bear a little fruit. At last, by a stretch of leniency, the orchard is seeded down, and after one or two mowings converted into hard-run pasture. Who ever thinks of manuring an orchard, or who would dream of giving up the land to the trees, and manuring it well, and cultivating it thoroughly? Yet, if after the worst possible usage the trees do not bear plenty of choice fruit, either the nurseryman is blamed, or the climate is cursed, or forsooth the trees are exhausted! In the June number of the *Horticulturist* the author of "Ten Acres Enough," cites the case of a farmer in the best fruit-growing region of New Jersey, who came into possession of a farm, which thirty years ago was used as a nursery. Many choice fruit trees were planted upon the estate, but the new proprietor "considered the raising of sweet corn and pickles the chief end of man," neglected his trees until they only bore meagre crops of indifferent fruit, and had made up his mind to grub out the useless things to furnish more room for "corn and cucumbers," when he was successfully tempted to sell out. The buyer determined to reclaim the degenerate trees, being encouraged to take this course by an account which appeared in the *Horticulturist* many years ago, and which we cite as proof of the extent to which soils may be exhausted by neglect, and the manner in which renovation and reclamation may be effected. Two outcast pear trees that had once borne fine fruit, had for some years only produced worthless specimens. The owner was told they had exhausted the proper elements of pear tree growth in the soil, and that these must be renewed. Determined to test the truth of this theory he set to work very vigorously; scraped off the rough outer bark and put on a coating of soft soap,—pruned and shortened in the trees about a third, paring the large cuts and covering them with a solution of shellac; dug a large trench round each tree, cutting away a portion of the roots, and filling the trench with good soil and well prepared manure. Next season the trees put on a rich dress of luxuriant foliage,—the second year there was a moderate bloom, every blossom of which came to fruit. The third season the two trees bore six bushels of superb fruit. Their vigour and fruitfulness were restored, and they literally renewed their youth. The theory of rotation of crops in general farm practice is based on the fact that constantly growing the same product

exhausts particular elements in the soil, and this fact, no doubt, often accounts for the barrenness of fruit trees, and the failure of orchards. The soil is robbed of its nutritive qualities year after year,—no new supply is furnished—and out of nothing, nothing can come. The practical lesson is obvious,—we must feed our fruit trees if we expect them to feed us.

### International Horticultural Exhibition.

*Editor of THE CANADA FARMER:*

SIR, To introduce my subject, let me quote from the *London Gardeners' Chronicle*, of April 15th.

"The International Fruit Show is fixed to commence on the 9th of December. On this occasion, besides the gold medal for the best collection of fruit and vegetables produced in the garden of a Sovereign, gold medals are also offered for the best collection of fruit and vegetables grown by any Botanic or Horticultural Society in any part of the world; for the best and most complete representative collection of fruit and vegetables from any of the colonies; and for the best and most complete representative collections from the Presidencies of India; while certificates exchangeable for medals, are to be given for separate exhibitions of fruits and vegetables, either fresh or preserved, from all parts of the world. This should produce something of interest."

It will be seen by the above announcement, that colonial competition is solicited, and collections of fruit and vegetables, either from societies or private sources, will be gladly received. We all remember the important position Canada occupied at both the great Industrial Exhibitions held in London, and surely we ought not to be behind-hand in exhibiting specimens of our home grown fruits and vegetables at the proposed International Fruit Show. But how is the thing to be done? There are comparatively few individuals who could afford to send home private collections, and perhaps the better plan would be for the Provincial Agricultural Association, or the Upper Canada Fruit Growers' Society, to organize or appoint a committee to receive and arrange specimens that may be sent from the different parts of Canada, and send them to England in charge of some experienced person, who could arrange and look after them there. A subscription to defray expenses (if the above mentioned Societies could not appropriate funds for the purpose), could be got up by the Horticultural Societies throughout the country, and I should imagine there would be no difficulty in raising an adequate amount.

Strawberries are now in season, and cherries coming on. A good collection of these, and other perishable fruits, should be preserved, as they ripen, by competent hands, so as to be ready for the committee or society, undertaking to exhibit them. Canadian fruits, whenever shown in England, have always attained a high rank. Why should we not bear the palm, and come out as fruit growers, at the head of the list of British Colonies? All we want to accomplish this desirable result, is promptness and unity of action.

There will, no doubt, be a good display on the 9th of December, as collections for the competitive exhibition of fruit and vegetables from the garden of the Sovereigns of Europe, will be sent by France, Russia, Italy, Turkey, Hanover, Belgium, Greece, and many others probably who have not yet declared their intention so to do.

If any better plan than that suggested by me, can be proposed, let us have it,—only let us lose no time in making a beginning, but proceed at once most earnestly with the work. W. T. GOLDSMITH.

St. Catharines, C. W.

NOTE BY ED. C. F. We are much obliged to our valued correspondent for calling attention to the above important matter, and earnestly hope that in the way suggested, or in some other, care may be taken to have Canada worthily represented on the occasion referred to.

TO HORTICULTURISTS.—The fruits of breaking a pair of plants are mostly composites of air.

THE CURRANT WORM.—The *St. Catharines Journal* says:—"Mr. Jas. Taylor has been experimenting with the 'currant worm.' He finds unleached ashes sprinkled on the leaves early in the morning, before the dew evaporates, a sure remedy."