the proper quantity. Formerly he sowed it by hand, but now used an excellent fertilizer and sower manufactured by J. O. Wisner & Son, of Brantford; it has a force feeder, and cannot be choked even by wetting the superphosphate. We asked him if he was an agent for these things he so strongly advocated, but he replied that he had never sold a machine, and that his time was too well occupied in farming.

Around Paris and Brantford very little had been seen of the fly, and the same might be said of the neighborhood of Delaware. On light land in the township of Westminster some slight damage had been done, but in the township of London the losses by the fly are greater than in any other places that we have examined; the damage in the latter township will be about two per cent. On the whole, the excitement we believe to be greater than our investigations warrant.

REMEDIES FOR THE HESSIAN FLY.

In the FARMER'S ADVOCATE, vol. 12, pages 172 and 178, we gave a description of the Hessian fly, with an illustration and the remedies then found to be most effectual. The Hessian fly is described by Harris in "Injurious Insects" as follows:

"The head, antennæ and thorax are black; the hind part is tawny, more or less widely marked with black on each wing, and clothed with fine grayish hairs. The egg-tube of the female is rose-colored, the wings are blackish, except at the base, where they are tawny and very narrow; they are fringed with short hairs and are rounded at the tip. The legs are pale red or brownish, and the feet are black. The body measures about one-tenth of an inch in length, and the wings expand one-fourth of an inch or more. After death the hind body contracts and becomes almost black."

The remedies most recommended are (1) destruction of the insect in the stubble, and (2) sowing the next crop of fall wheat as late as can be done in autumn—late in September. The way to accomplish their destruction in the stubble is two-fold: first, burning the stubble, which in cutting the wheat with the reaper, is cut so high that the insect is left in it to mature into the fly, and burning the stubble necessarily destroys the entire brood. A serious objection to this method is that in destroying the flies we destroy with them their parasites. They are our most efficient allies, destroying, as has been computed, nine-tenths of every generation of the fly. Another method recommended is as follows: If we see that the fly has laid her eggs on the wheat leaf, turn in a flock of sheep of sufficient numbers to eat the crop close to the ground in a few days. The efficacy of this method is doubted by some. In its favor an American farmer relates his experience as follows:

"I think that when wheat comes up spindling, there is nothing better than to pasture it down with sheep; and if you find the fly in wheat and will turn in enough sheep to pasture it down close within a few days, your wheat will not be injured. Last fall I had a piece of early-sown wheat, 11 acres, that was nicely up and looked thrifty. I went to examine it and found the fly very numerous. I turned 80 sheep on it and they cut it close to the ground, when I turned them out. The wheat came on and now looks splendid, and no fly to bother it."

The second method is sowing the wheat late in the fall, and thereby preventing the parent flies from having any wheat plants on which to lay eggs at the laying time, thus destroying their prospects of another season. A Canadian farmer, having tested this plan himself with success, recommends its adoption by others. He says:

"If fall wheat is not sown until after a frost, the danger is tided over. The fly must deposit her eggs before this occurs, and if farmers will stop sowing wheat in the very early days of September and wait until say the 10th or 15th—the plant will make as vigorous growth before winter as if sown earlier, and escape the danger spoken of."

Wheat sown by him on the 31st August, as a test, only yielded five bushels to the acre, while that sown on the 17th Sept. returned from twenty-five to thirty bushels.

This insect generally passes through two generations annually. The eggs of the first brood are deposited in September in a crease of the leaves of the young wheat plant. The young insects are hatched out in a few days and they crawl down to the first joint, where they pass the winter. They do not gnaw the stalk nor enter into it, but adhere to it lengthwise, head downwards, and live on the sap. When two or more larvæ are thus imbedded in a stalk, it becomes weakened, falls down and withers or dies. About the 1st of March, the pupæ having completed the winter stage of existence, come forth full fledged flies, and they immediately deposit eggs for the second brood, which occupies the remainder of spring and summer, being nurtured in the lower joints of the straw. Crops of winter wheat are liable to two attacks of the Hessian fly, one generation producing another, which occupies the lower joints of the stalk. Spring wheat can rear but one brood, and is therefore comparatively safe from its attacks. The fly cannot sustain itself in districts where winter wheat is not cultivated. We would add that a fertile, well-cultivated soil is itself a means of the crop escaping comparatively safe from damage by the Hessian fly. Weak, poor plants will at once succumb to the attacks that might be withstood by plants that are in healthy, thrifty condition.

OUR QUARANTINE AT QUEBEC.

Having heard from a reliable source that an infected animal had been allowed to enter Canada within the past four months, and still lived on a farm in Canada, we deemed it to be our duty to examine more fully into our quarantine regulations. We have given a report on the quarantine at Point Edward, and shortly we hope to give another on that dangerous hospital. We now purpose to enlighten you about the one at Point Levis, in Quebec. You may think it a long journey for us to take, but when duty calls, we go.

We applied to Mr. D. McEachran, the Government Veterinary at Montreal, who has full charge of the quarantine of Quebec. He very courteously gave us the permit and a letter introducing us to Mr. Couturie, the V. S. who has local charge of the quarantine. We presented our introduction at Quebec on the morning of August 12th. Mr. C. very courteously drove us to the quarantine, and showed us every animal, answering all questions as far as he was able. The grounds are situated about two miles from Quebec, on the opposite side of the river, and one of the large Levis forts is included in the ground occupied. We drove directly into the fort without opening any gate or seeing any one near. We got out of the calache and stepped over a piece of scantling that was laid across the road from one fence to the other; on one side it was higher than the other, so that some beasts could walk under, and larger ones could easily get over. We walked to a shed, pulled out a pin and entered; this shed is nicely white-washed and littered, ready to receive another consignment. The next shed we entered in a similar manner, and any other person could do so, from all we saw, that is, merely pull out the wooden pin and enter. On entering this shed Mr. C. said: "This is the worst lot of cattle we ever had in the quarantine; they are imported by Mr. Craig, of Brampton." The lot consisted of ten Shorthorn bulls, and we have no hesitation in saying that the average seven-cross animals that are thrown out of both herd books would be a better lot of bulls, and would be of better service to our country than this lot, without the danger of introducing disease. There is danger in importing the best, but one of these bulls was badly crippled, its legs were swollen, and it kept moving its feet in a very painful-looking manner. We noticed a rough, scaly appearance on one of the front feet, between the hoof and the dewlap; it had been dressed with some kind of ointment. We enquired of the V. S. what was the matter with this beast, and the reply was, "Rheumatism." We tried to get more satisfactory information, but must wait for some one to give us more light about this rheumatic animal. This animal was not separated from the others.

In another herd we noticed an animal having a lot of red, bare, almost raw spots on its shoulder, side and neck, perhaps 20 or 30 of them, from a half inch to an inch in circumference. We never saw an animal like it. The V. S. at first said he did not know what it was, but afterwards said it must be Ring-worm. In another herd we noticed a large lump under a cow's belly, and the veterinary informed us that it was Tumor; he also informed us that her calf had one, which he pointed out to us, and sure enough, there was a lump. We asked what they were doing for these animals. Answer: "We do not think much of it." These are running with the other cattle in the same shed. In another herd we noticed a beast with a bandage on its leg; this was necessitated from a hurt received on the ship. This we think of no consequence.

There are 24 buildings in the quarantine grounds. Each shipment of cattle is kept separate from the others. The buildings are all good, light, airy, well-ventilated, well-whitewashed, and kept very clean, the manure being carted away from the ground and the yards in which they roam, for each building has a nice boarded yard of a few acres around. The buildings are all that could be desired in regard to cleanliness and comfort. We must confess that we were astonished, after having read such glowing accounts of this quarantine as being the best in existence, to find it as above described; also that only one single board fence separates it from the road and from the adjoining farms, and that the cattle are allowed to smell noses with the outside stock.

The largest lot owned by one individual was the importation of Mr. Whitfield, of Rougemont, P. Q. This importation numbered 103 animals. There were ten Sussex cows and heifers and one bull; this is a very fine class of animals, the beef of which commands a higher price than that of the Shorthorn in England. They are red animals of fine quality, somewhat resembling the Devons, but are larger animals and better milkers. If we had our choice, we should take this lot in preference to all others; perhaps this may be because we were highly pleased with this class when a school boy in England, and we are apt to return to the old love. This herd also contained 10 Shorthorn cows and 2 bulls, very fine stock; 33 Polled Aberdeen, with 2 bulls, a fine lot on the whole, and having what is considered the best cow of this class; 7 Ayrshires, of which we thought the cows the best we have ever seen; perhaps some breeders may consider them too large, but the Ayrshire bull really appears to us to have a dash of the Durham in him, he is so large and what breeders would consider too coarse for an Ayrshire; 7 very good Devons; 10 Galloways, the bull being considered the best that has ever been imported into Canada; 5 Shetland cattle, 3 cows and 2 bulls. These are the most diminutive and mean-looking cattle we ever beheld; in fact, we could scarcely believe that such were to be found—not only small, but awkward, unsightly looking objects. No real Canadian farmer would like them as a present, still there is no accounting for taste. They would excite about as much curiosity as a whale or bear in the streets. The V. S. estimated the bull would weigh 125 lbs. alive and dress 50 lbs. of beef if killed; the cow was heavy in calf