

as well as in flavor, and these inferior qualities are conveyed to the beef and dairy products, as well as to the flesh of other domestic animals. Finally, the consumers of these products cannot have wholesome food. The air also becomes contaminated, especially in the vicinity of stagnant pools, and when the stock drinks from these pools, the case becomes still more aggravated. Stagnant water should specially be avoided near the sides of the house from which the prevailing winds blow.

The farmer's dwelling should be specially well drained, and if the house has a cellar, its drainage should be complete. All garbage should be kept away from the cellar and the house drains; it should be conveyed to the compost heap or to the cultivated field, where its noxious effects will be less seriously felt.

We have now completed our series of articles, and we hope they have been read with interest and profit by a large number of our readers. We might have enlarged on the subject, but our aim has been to present the leading principles, thereby awakening reflection, and to give such facts as will be of immediate practical importance to those who contemplate draining their land. We have purposely avoided saying anything about stone or wooden drains, believing that it would be better not to teach farmers how to do what they should not do. In most every locality tiles can now be had at reasonable prices; and as durability is a leading factor in all drainage, we do not recommend the use of any other material. If we have accidentally omitted any feature of the subject, which is of any practical importance, we shall be pleased to answer any inquiries through our correspondence columns.

[CONCLUDED.]

Women's Out-door Work.

One of our essayists on the above subject takes a very gloomy view of the situation. As she requests us to withhold her name, we publish her essay in our correspondence column. Our essayists should bear in mind that we cannot award prizes to those who request their names or addresses to be withheld.

Judging from her composition and penmanship, the writer is a lady of rare ability and education, and yet she writes with such intensity of feeling that one would suppose her to be one of the sufferers. We publish her article because some of our masculine essayists have prescribed the out-door duties of their wives and daughters, or their sisters, as the case may be, as if human females were beasts of burden, and it is hoped that the writer will awaken in their minds and consciences better thoughts and feelings. Her picture is surely not a true one of Canadian farm life; it is to be hoped that it is extremely overdrawn, and only true to life in exceedingly rare instances.

One writer referred to the American custom, viz., that the men would not get a bite to eat if the women had to soil their fingers by any out-door employment whatever. This is surely the other extreme. The woman, be she wife, sister, or daughter, who can entertain her friends utterly oblivious of the privations of the out-door workers, is not worthy of them. Some of our essayists suggested that the in-door workers should familiarize themselves with out-door work in order that the latter might come useful on the farm during the dearth of laborers; but

they forgot to mention that, in the same mode of reasoning, the out-door workers should familiarize themselves with household work. We commend the cogent thoughts presented by our prize essayist and we hope they will strengthen the moral tone of domestic life.

The life of a nation, moral, social, and religious, bears a close relation to the consideration shown to our mothers, wives, daughters, and sisters, and weak is the pulse of the nation where they are regarded as slaves instead of companions. This generation of Canadians plays an important part in moulding the character of rural life in all the ages to come.

What Birds are Beneficial and Wherein?

At a recent meeting of the Oxford (Ohio) Farmers' Club, the above was the topic for discussion, the substance of which is given in the Cincinnati *Weekly Gazette* as follows:

"The first place on the programme had been allotted to Dr. Walker, but in his absence the president called on Mr. Wetmore, who stated that birds, if we except the sparrow, are becoming scarcer every year. He thinks this is indirectly a cause, too, for the increase of insect pests.

"The robin is still to be found here in goodly numbers, and his value is not appreciated. He is an early riser, and after his song of praise, he proceeds promptly to prepare a hearty breakfast for himself and family from worms and bugs in the garden and fields.

"The barn swallows used to be numerous here, but the boys and the tightly weather-boarded barns are fast thinning them out.

"The English sparrow is a nuisance, and makes ceaseless war on the swallow. He thinks it might properly be called the Irish sparrow, because of its quarrelsome nature. His grandchildren had been watching a contest between barn swallows and sparrows. The latter had made battle on the swallows, and when a swallow would leave the nest for food the pestiferous foreigner would throw out her young or eggs and nest lining and begin to build a nest for herself. The swallow retaliated, and when Mrs. Sparrow went out for food the swallow threw out the sparrow's nest, and thus the war went on. The thievish sparrow won the day. And this is but one of the many instances of robbery that can be brought against this imported pest. It is a quarrelsome, ncisy, dirty nuisance about our homes and barns. It can not be frozen out nor starved out.

"He put in a plea for the quail, and showed his devotion to the beautiful bird by declaring that he would no longer eat quail. Unless we cease destroying them for food and for game, they will likely become extinct, and rather than this calamity should befall us, we ought to combine for their protection. Their beauty and their cheerful notes are not to be made good to us when we permit their extinction. The law should forbid killing quails entirely for a few years, until they have time to recuperate and restock our farms.

"The crow is more a friend than enemy to the farmer. He destroys in early spring more grubs than any other bird. Even the woodpecker is worthy of our care, both for his beauty and usefulness in destroying insects which injure the trees. As he drove to the club he noticed the crows walking along the rows of corn, which is just coming up large

enough for the cut-worm. The crow is ready for him, and destroys the worm by the thousands. Birds generally can be classed among the farmer's best friends.

"Mr. Bonham said he was very glad to hear his senior speak a good word for the much-abused crow. It must be admitted that the crow is not always engaged in good works. He is a cunning fellow, and knows a good thing when he sees it, and is very apt to see it. It is a fact he likes eggs, and for a change will add tender young chicken to his bill of fare. But let us give him credit for the service done us before we bring in a bill of charges. He comes as soon as frost is out of the ground, and a grub or cut-worm can thaw out. He follows faithfully the plow in early spring, and revels on the white grubs and larvae turned up by the plow. He keeps this up until after corn is up and the cut-worm threatens to destroy the tender shoots. Our friend the crow knows just where to find the cut-worm, and if you watch him carefully you will see him stop at the hill of corn where the cut-worm has cut off a tender shoot, and very deftly the crow picks him out from his hiding place and ends his career of destruction.

"Sometimes the cut-worm is so deeply hidden that to unearth him the crow accidentally pulls out the corn. It was the cut-worm he was after and not the corn. He likes cut-worms better than corn. If you doubt this, just place both before a pet crow and see how quickly he chooses. After an active spring campaign and heavy feeding on grubs and cut-worms, is it generous to begrudge him an egg or a young chicken by way of change?

"The blackbird, too, is another of the early birds which catches the worm. He follows us in the furrow; no larva escapes his keen eye. His capacity for worms is amazing. He never tires. Give him ten minutes to sing in an old tree top and he can return to his worms and eat as many more.

"In his destruction of cut-worms he has a royal helper in the beautiful robin. Dr. Brewer says he has seen a mother robin feed her young five hundred moths of the cut-worm in a day, and says his indebtedness to his robins is worth all the cherries he could raise. The robin is one of our best friends. If it were not his fondness for cut-worm moths, and the crow and blackbird's fondness for grubs and cut-worms, we cannot assert that we could save our tender garden plants or corn from this countless wriggling horde. Their capacity for destruction is marvellous and wanton. Let us not begrudge the cherry crop, when we are nourishing so efficient allies in this fearful war against our insect foes.

"There are robbers and cut-throats among birds, but they are few. The blue jay and the sparrow are the worst of these we have. If only ladies would take to ornamenting hats with the showy blue jay's plumes and the sombre shades of the sparrow, we would have fashions helping us to make good corn crops.

"He spoke good words for the redbird, the yellow-hammer, the meadow lark, the chimney swallow. The latter, he said, was most useful, as it fed at night on the myriads of night moths, which are the source of evil to our fruit. These birds are so humble and plain looking that they have been spared from the silly and ruel fashion of ornamenting homely women's