

their nestlings upon an average 36 times in an hour. For the protection of orchards and woods titmice are of invaluable service. They consume in particular the eggs of the dangerous pine spiders. One single female of such spiders frequently lay from 600 to 800 eggs twice in the summer season; while a titmouse, with her young ones, consume daily several thousands of them. Wrens, nuthatches, and woodpeckers often dexterously fetch from crevices of treebark numbers of insects for their nestlings.

2d. As a proof of the valuable services rendered by swallows it is estimated that one of these birds will devour 900 insects in a day, and when it is considered that some insects produce as many as nine generations in a summer, the state of the air, but for these birds, may be readily conceived. One kind of insect alone might produce 560,970,489,000,000 of its race in a single year!

3rd. A gentleman in the County of Kent, England, writes thus:—I have excellent means of knowing that in various parts of the county, whole crops of fruit, vegetables, and grain have been swept off entirely by various kinds of minute insects, which the birds alone are competent to detect and destroy, and which not one man in a hundred knows anything about. Men see their hopes blasted, but they believe some ill wind has blown "a blight," for under that vague term they designate all such evils. In no localities have insects done so much injury to the fruit where birds are indiscriminately and systematically exterminated. The gardens in some localities are planted with plum trees. In 58 they promised an extra abundant crop, but before the fruit was matured the havoc of the winter moth, upon which the birds, especially the titmouse, feed, consumed almost the whole crop.

I lay not the foregoing statements relating to interesting subject of protecting and encouraging the introduction of small birds into the wing and improving Province of Canada be the subject for the consideration of the Board of Agriculture? Perhaps a more favourable opportunity for procuring three or four species of birds will not again occur as at the forthcoming National Exhibition to commence in London next spring, where a great variety of birds will be collected, and all the bird fanciers and dealers in England may be consulted. The Commissioners deputed to proceed to England for the Exhibition, might be authorized to purchase and bring out some birds, to be let loose in the city of Toronto, where they would be confined for a while in the large gardens and pleasure grounds within the limits of the city, and increase would hereafter migrate through the country, and become exceedingly useful in the destruction of insects. The expense would be small, and the benefits arising from the introduction of the birds would be beyond any

present computation. Only one kind or variety should be placed in each coop, or cage, during the voyage. I am, Sir,

Your faithful servant,
J. B. MARKS.

[It affords us much pleasure to insert the above very interesting communication from an old and zealous friend of Canadian Agriculture, who, though at present widely removed from us, continues to cherish an unabated interest in the welfare of this new country, in which for many years he permanently resided. We commend the subject of Mr. Marks' letter to such of our farmers and gardeners especially, as take a practical interest in those branches of Natural History to which it more immediately relates. Considerable success has already attended the introduction of several species of British birds into the Australian colonies; and if similar attempts were made in these parts of the American continent, due attention must be paid to the length and severity of our winters. The reckless destruction of birds is no doubt as impolitic as it is inhuman.—Eds.]

Comminuted Food.

[From the Irish Farmer's Gazette]

Sir,—I am induced by your confessing in your issue of the 18th ult. "to feel great interest in the experiment" of using "comminuted food" to trouble you with my experience of the system. In 1860 I had, in every sense of the word, a very small turnip crop; but having a chaff-cutter and one of Bental's most excellent root pulpers, I determined to try the plan of giving the turnips pulped and the hay chaffed and mixed together to my stall-feds, numbering 20 beasts. Both machines were worked by manual labour, and the food prepared every day. So well pleased was I with the result that I made up my mind to erect a "one-horse gear," by which I would be enabled this year to work the two machines together, and on a much more extensive and more economical scale. The horse gear cost £10, exclusive of the expense of setting it up, which was trifling. 40 beasts are fed three times daily on the "comminuted food," besides 50 sheep that are fattening, and 8 farm-horses have their hay chaffed. The cattle get all their hay through the turnips, except a little at night. It takes a horse about 2½ hours daily to do the entire work. The great advantages of the system are, firstly, from the ease with which the cattle consume the prepared food, additional time is gained between each feed for rest, besides the saving of muscular exertion necessary to enable a beast to get through a feed of whole raw turnips, which is