

A Windfall.

(To the Editor of the CANADA FARMER.)

SIR:—During the prevalence of a heavy gale of wind recently, a large old tree, the hollow trunk of which had been the nesting place for many years of swallows and other birds, was blown down, and on examination the base of the trunk was found to be almost full of an accumulation of droppings and the remains of eggs, young birds, &c., of which I send you a specimen.

Would you be good enough to state, through the CANADA FARMER, whether the compost is of any value as a garden manure; and if so, in what manner you would recommend it to be applied?—I am, &c.

AN OLD SUBSCRIBER.

[The substance is valuable alike for garden or field crops. Its effects, at the rate of two or three hundred pounds to the acre, on the cereals would doubtless be astonishing, and sown with any garden seeds, the result would be almost equal to what follows an application of guano. For ordinary garden purposes we would recommend equal parts of it and bone dust.—ED. C. F.]

Destroying the Potato Bug.

(To the Editor of the CANADA FARMER.)

SIR:—Having heard and read of a good many methods of exterminating the potato-bug, will you kindly allow me space in your valuable columns to state the plan pursued with great success by myself last summer. The remedy is within the reach of all, and can be applied by children equally as well as by grown up persons.

I took the bottom of an old fashioned chamber candlestick, narrow at the top and wide at the bottom, like a flanged dish, and filled it to a depth of half an inch or so with coal-oil. Setting this on fire, I then went through the potatoes when they were about six inches high and scorched all the tops, turning them gently with the hand in order to get at the under side of the leaf, where the eggs are invariably found, and these I committed, leaf and all, to the flames. The full grown insect was usually discovered on the upper sides of the leaves, and a light tap with the fingers made them share the fate of their progeny. This course I pursued day by day and sometimes twice a day, and the result was a splendid crop.—I am, &c., STANHOPE.

[The plan adopted by our correspondent is undoubtedly a "scorching" one, too much so we fear for the potato tops, and especially liable to prove so when the operation is conducted by children. Besides, the process is altogether too slow a one, forcibly reminding us of the reply made by the vendor of a bed-bug exterminator on being asked how to apply the article. "Take them by the nape of the neck and dust it in their eyes." When time and labor are no object, ban picking and various other methods may be employed quite effectively, but on the whole we think the Paris green remedy the best yet.—ED. C. F.]

Old Sores.

(To the Editor of the CANADA FARMER.)

SIR:—Last fall I had a valuable colt whose head became inflamed, commencing on each side of the bridge of the nose. I enclosed eight grains of arsenic in each of two small paper parcels; made an incision on each side of the animal's head about five inches below the eye, inserted the arsenic packages, and sewed the incisions carefully up. In a short time two large scabs formed which I decided to remove, but upon doing so discovered that all the adjacent parts were loosened from the bone and the bone itself very much affected.

Can you recommend any course of treatment that will produce adhesion of the parts to the bone, or is there any probability that in course of time a new growth of flesh will take place?—I am, &c.,

Madison Co., Montana.

A SUBSCRIBER.

[You have permanently injured your horse by the useless and, we may say, cruel treatment adopted. We can only recommend as a palliative to dress the parts daily with an application of carbolic acid and linseed oil, in the proportion of one part of the former to sixteen of the latter.]

THE CANADA FARMER

IS PUBLISHED

ON THE 1st AND 15th OF EACH MONTH,

AT

One Dollar and Fifty Cents Per Annum,
FREE OF POSTAGE.

It is sent to Great Britain and Ireland by mail, for six shillings sterling, per annum.

No subscription received for a less term than one year, commencing from the month of January.

THE CANADA FARMER is stereotyped, so that copies of back numbers can always be had.

A limited number of advertisements are inserted at twenty cents per line for each insertion. There are twelve lines in one inch of space. Advertisements under ten lines are charged as ten line advertisements.

All letters and money orders are addressed to

THE GLOBE PRINTING CO.,

TORONTO.

Agents wanted in every town and village in the Dominion to canvass for subscribers. Liberal commission allowed. Send for circular stating terms.

The Canada Farmer.

TORONTO, CANADA, JUNE 15, 1874.

Scientific Agricultural Education.

A second edition of Mr. Milne Home's pamphlet on "Agricultural Schools and Experimental Farms" has been issued, containing in an appendix practical proposals which the author intends submitting to the directors of the Highland and Agricultural Society of Scotland. Mr. Milne Home has for many years been a prominent member of this great National Society. He is also an extensive landed proprietor in the South of Scotland, and has long held a foremost place as one of the most eminent scientific and practical agriculturists in that highly cultivated country. The Professor Wilson alluded to is the noted Professor of Agriculture in the University of Edinburgh, and Mr. Jamieson is the Lecturer on Agriculture in the University of Aberdeen. A great portion of the following extracts are particularly valuable to us in Ontario at the present time, when our Provincial Agricultural College is in operation, especially if the country at large is to reap the full benefit such an institution is expected to afford. We print the principal portions of the appendix as follows:—

"There are three distinct lines of procedure which have been suggested to be followed by the Highland and Agricultural Society, with a view to advance the interests of agriculture. 1st, To encourage schools and classes for teaching the principles of agriculture, so far as these principles are known. 2nd, To institute experiments and investigations for the purpose of discovering principles and processes not at present known. 3rd, To afford, or assist in affording, protection to the farmer against imposition or mistakes in the manufacture of fertilizers. With regard to the first of these objects, there are two points to be noticed:—What need is there for giving the encouragement referred to? If more should be given, how may it be given?"

Referring to Professor Wilson and Mr. Jamieson's views on the subject, Mr. Milne Home proceeds:—

"These gentlemen evidently point to the need of seminaries or institutions where agricultural students, before coming to the university class, should be instructed in the sciences, which are the foundation of agriculture in its present advanced state. When the professor has to explain the chemical substances which enter into the compositions of different plants and of different soils, he has to use language and refer to matters utterly unintelligible to students not previously instructed in a certain amount of chemistry

and botany; and therefore it is that young men who have not obtained that preliminary instruction anticipate that it will be of comparatively little use for them to attend the university class.

This fact also explains why the agricultural students at the university are less numerous than formerly. In former days, little or no reference in the teaching of agriculture had to be made to chemistry, botany, geology, or other such sciences. The lectures were confined almost entirely to an explanation of the simple practices then pursued by the farmer; and no attempt was made to give such scientific explanations as are now necessary. Whilst the absence of all preliminary instruction in the sciences to which Professor Wilson refers sufficiently accounts for the small number of students now attending his agricultural class, it also explains why so few students obtain the Highland and Agricultural Society's diplomas. There are no schools in Scotland where the instruction can be obtained which can enable them to face the examination prescribed by the society's Educational Council.

The instruction required might be given in two classes of schools—elementary and middle-class schools. (1.) In the elementary schools, attended by boys up to the age of fourteen, very little of such instruction can be given. But it may be given to some extent, and with much advantage. Chemistry certainly cannot be given, unless apparatus for a few simple experiments is supplied. But a little botany and geology might easily be taught, with the help of diagrams, and also specimens of plants, flowers, rocks, and minerals, which the scholars might themselves gather and bring to the school. Such extra subjects might be taught once or twice a week—even in elementary schools, without in any way interfering with the ordinary branches.

(2.) But it is in the middle-class schools, adapted for boys above fourteen years of age, that instruction in the sciences bearing on agriculture could be most effectually given. In all our large towns, and even in some rural districts, there are grammar schools and academies which afford the means of such instruction. In some of these schools there are even now classes for chemistry, botany, mechanics, and mensuration. It would be easy for the teachers in these institutions to introduce into their teaching of these subjects such portions as bore more particularly on agriculture, and suited to lads from 14 to 18 years of age. There can be no doubt that in many middle-class schools throughout Scotland classes would be at once opened for these objects, were an appeal made to the managers by the Highland and Agricultural Society.

(3.) If it be said that the appointment of teachers, qualified to give instruction in chemistry, botany, geology, mechanics, and other sciences bearing on agriculture, would be impossible unless funds were forthcoming to pay teachers, and also to defray the cost of a laboratory, an answer is at once supplied by the Kensington Department of Science and Art. That department, as its directory for 1873 explains, gives most liberal encouragement to science classes. Grants are made for erecting new buildings, and adapting existing buildings, at the rate of 2s. 6d. per square foot of internal area, up to £500 on each application. Grants are made for fittings of laboratories and lecture-rooms, and for the purchase of apparatus, diagrams, &c., to the extent of 50 per cent. of the cost. Grants are made of £1 yearly towards the expense of each student working in a laboratory. Schools for science instruction are materially aided. In these circumstances, the fear of any want of funds to indemnify managers of middle-class schools for affording instruction in the necessary subjects, to qualify for a profitable attendance on the lectures in the university, need not exist. It might, however, be right for the Highland and Agricultural Society, in carrying out the objects of its educational charter, to give some pecuniary help in certain cases.

The Royal Agricultural Society of England is at this moment making arrangements to have the sciences bearing on agriculture taught in a number of middle-class schools in English counties, and with that view is proposing to give handsome bursaries. It is felt that the mere granting of diplomas by the society is not sufficient encouragement when there are no schools where the necessary instruction can be obtained.

The second object aimed at, is some plan of carrying on experiments and investigations with the view of discovering new principles and processes in agriculture. The Highland and Agricultural Society has long aimed at this object, but in a way which it is now generally admitted has proved a failure. The only plan which has a likelihood of success is that begun in Prussia, and since introduced into Austria, France, Italy, and America. The only obstacle in the way is the expense. Each station is said to cost from £500 to £700 yearly. Surely the agricultural