

The Education of Farmers' Sons.

EDITOR CANADA FARMER. — In the March number I noticed some remarks of yours on the important subject of education of farmers' sons. Our system of Public School Education is miserably deficient. The present programme of studies, although perhaps well suited for High Schools, contains too many subjects for the Public Schools which should be strictly confined to laying the groundwork of a sound English Education—for instance the three R's, with, in the higher class, Canadian Geography and History. Botany and Entomology can only be taught efficiently during intermission, and give practical lessons on the spot.

As for Mathematics, Algebra, Dynamics, Hydrostatics, with the different 'ologies and 'osophies, these things should be relegated to the High Schools, Grammar Schools, and Collegiate Institutions. Farmers' sons do not generally require them, and their heads are so crammed with odds and ends of these things, that they either become conceited prigs, or get disgusted with their studies, and become stupid oafs. Such education will do very little towards improving the minds of our country lads, and, if they are intended for farmers, they ought to commence their lessons in ploughing, etc., etc., as soon as they are able to guide a plough. If they are trained up in a really intelligent manner, they could improve themselves during our long winter evenings. This could easily be set to rights by the Council of Public Instruction, whose business it is to prepare the Programme.

Another branch of Education, in which I fear our country lads will prove apt pupils, is a knowledge of horse-racing, with its accompanying evils of pool selling, intemperance and profanity—which, I am sorry to say, appears to be fast extending into the rural districts, and making those worse who were by no means too good before. The Municipal Corporations could prevent this if they pleased, but they do not seem to care much about it. Our sons have hitherto been too prone to leave the farm and seek employment in the cities and towns, as it is, without inculcating them with a love of horse-racing and pool-selling.

Another serious evil which I observe is increasing, is the tendency of well-to-do farmers to sell or lease their farms, and rush into mercantile business for which, from their previous habits of life and modes of thought, they are by no means suited, and when they fail, and failure with them is only a question of time, they will probably feel disinclined to return to farming, and will travel about as agents for sewing machines and other inventions, and will look back with regret to the time when they were in a situation of independence, and enjoyed the satisfaction of being able to pay all their debts at the end of every year.

CHAS. JULIAN.

Presqu'ile, Ont.

IT IS POSSIBLE THAT A WAY OUT of the dilemma of having the crops destroyed by insects, or of rendering the land infertile by the application of unassimilable poison, has been discovered by Mr S. J. Lyman, a chemist of Montreal. He has invented a compound of phosphorus and soap, which is applied in solution to the plants, and which, it is claimed, not only kills all insects, including the redoubtable Colorado beetle, but gives great vigor to the plants, and enables them better to resist the attacks of pests of all kinds. The feeling against the indiscriminate use of Paris-Green is one that is steadily growing in strength, notwithstanding the efforts of interested parties to pool pool any suggestion of danger, and the CANADA FARMER has done its best to get the use of the poison abandoned. We are confident that, sooner or later, an effective and unobjectionable remedy against the Potato beetle will be found. The efficacy of the phosphorus soap mentioned above may be tested at very small cost, and we would be obliged to any of our readers who try it if they will report the result.

AN ENGLISH FIRM, Messrs. Garrett, have invented a portable engine for threshing which burns straw for fuel. At a recent trial, from beginning to end, nothing whatever was used under the boiler but straw, and the draught at starting being dull, there was some delay in getting up steam. Shortly after 5 A.M., however, 75 lbs. pressure was shown, and work was started on a large stack of wheat, and continued without further impediment or delay, except the usual intervals for refreshment, until 4.15 P.M. The stack was finished at that time, and had

yielded 430 bushels of 60 lbs. each, from a weight of straw estimated at about 17 tons (of 2,000 lbs.) The total quantity of straw burnt and wasted was 1,996 lbs. In other words, 100 lbs. straw used as fuel, threshed out a net weight of 1,700 lbs. of straw, extracting from it 1,275 lbs. (21½ bushels nearly) of wheat—making a total weight of nearly 3,000 lbs. carried through the threshing for each 100 lbs. of straw consumed. There will soon be a field for these straw burning engines in our rapidly developing Northwest.

Perillus Circumcinctus.

Mr Isaac Watts, of Toronto, brought us, for naming, an insect which he found on his potato vines. The insect is the *Perillus circumcinctus*, and as it is a friend, and not an enemy, to the farmer, we have had it engraved, so that it may be known and spared. It is a carnivorous insect, and preys upon the larvæ of other insects, among them the larvæ of the Colorado potato-beetle. Unfortunately, like the rest of us, the *Perillus* has its bad points. It



preys on the larvæ, not only of injurious insects, but also of those which are not noxious. But, on the whole, it may be reckoned a good friend. The line to the right of the cut shows the exact size of the insect.

In color, the *Perillus* is a deep, chocolate-brown, with broad margins and bands of creamy white. It attacks its prey with its beak, upon which it transfixes its victim. Thus being done, it plants itself firmly on its feet, with the beak raised and the victim spitted upon it, holding it aloft while it extracts the contents of its body.

FEARS OF THE EXHAUSTION OF THE GUANO DEPOSITS may now be considered as dispelled. The engineer of the Peruvian Government has estimated the quantity of guano in newly discovered beds to be not less than 10,000,000 of tons—enough to load a vessel of 300 tons every working day in the year for one hundred years to come. This estimate is stated by British officers to be rather under than over the probable amount. As the supply at the Chincha Islands is totally exhausted, and that from the Guanape Isles is nearly so, this news will be welcome to the farming community. The newly-discovered deposits are said by French analysts to be richer in phosphoric acid and ammonia than the best of the Chincha Island guano, but samples brought to London did not give as high average results on analysis, ranging from 11.01 to 16.65 per cent. of phosphoric acid, and from 6.55 to 15.08 per cent. of nitrogen (equivalent to 7.95 to 18.31 per cent. ammonia.) The new guano is reported as for the most part in excellent condition, dry and free from lumps.

THE FOLLOWING amusing anecdote of Coleridge and Wordsworth is told in Cottle's "Life of Coleridge":

"I led the horse to the stable, when a fresh perplexity arose. I removed the harness with difficulty; but, after many strenuous attempts, I could not remove the collar. In despair I called for assistance, when aid soon drew near. Mr. Wordsworth brought his ingenuity into exercise; but, after several unsuccessful efforts, he relinquished the achievement as a thing altogether impracticable. Mr. Coleridge now tried his hand, but showed no more grooming skill than his predecessors; for, after vainly twisting the poor horse's neck almost to strangulation and the great danger of his eyes, he gave up the useless task, pronouncing that the horse's head must have grown (gout or dropsy?) since the collar was put on; for he said it was a downright impossibility for such a huge os frontis to pass through so narrow a collar. Just at this point a servant girl came near, and, understanding the cause of our consternation, 'La, master,' said she, 'you don't go about the work in the right way. You should do like this;' when, turning the collar completely upside down, she slipped it off in a moment, to our great humiliation and wonderment, each satisfied afresh that there were heights of knowledge in the world to which we had not attained."

A CONTRIBUTOR TO THE *Gardeners' Monthly* adds his mite to the literature of new diseases. He says that a startling discovery has been made in consequence of the death of many florists and gardeners with almost identical symptoms. The curious nature of the disease attracted the notice of the doctors of England generally, and of those of London and New York, etc., especially, so as to excite their interest to a high degree, and one of them examining the head of a florist in the employ of the well-known firm of Pater & Son, found the cerebrum all gone, and the cerebellum covered with numberless reddish spots, which, upon microscopic examination, proved to be representations of as many different varieties of scarlet Pelargoniums. The fact being established beyond a doubt, the doctors, however, have not yet agreed—as they never do on any subject—on the name to be given this new disease. Some are for calling it Pelargoniomania, others Geraniomania. The reader's interest in the story will subside when he learns that the discoverer was the celebrated Dr. Looksharp.

THERE ARE NO FURTHER developments in the scandal caused, as mentioned in the CANADA FARMER last month, by the endorsement by Mr. Kelley, Secretary of the National Grange of the United States, of a swindling "Grangers' Store" run by his brother-in-law. Mr. Kelley preserves a silence as complete as it is undignified and, presuming he has any ground of justification, unwise; and this, notwithstanding that each issue of the *New York Weekly World*, which was the first journal to expose the alleged connexion of the Secretary with Farley & Co., contains letters from Patrons demanding explanation. We see it announced that Mr. Kelley is about to publish a history of the Order. It may be that his silence is due to his unwillingness to forestall public interest; and that his work will be a complete history of the Order. Unless it be so, and unless his (forthcoming?) explanation be satisfactory, we can but repeat our congratulations to Canadian Patrons that Mr. Kelley is no servant of theirs, and that the respectability of the Order here will not be affected either by equivocal explanations, or by silence which has almost ceased to be equivocal.

"THERE'S MONEY IN IT," and if there is still in our land a man who doubts that education to the farming profession will not bear fruit equally with education to the so-called "learned professions," let him read and ponder over these eloquent sentences from the record of the Transactions of the Highland and Agricultural Society of Scotland for 1874:—From the exceptional educational advantages which Scotland has so long enjoyed, agriculturists in this country have been greatly superior in point of instruction to those of most other countries, and it is also important to note that the increase in the value of landed property in Scotland has been exceptionally great. It was shown about three years ago, from reliable statistics produced by Government, when the Irish land question was before Parliament, that while the rental of land in Ireland had doubled during the previous hundred years, and that of England tripled, the rental of Scotland had septupled itself in the same time. There has been, then, in that space of time, an increase in the value of landed property in Scotland of 500 per cent., against an increase of 200 per cent. in England and 100 per cent. in Ireland. This is a remarkable fact; and there can be no doubt that the explanation of it is to be found chiefly in the vastly superior school system which Scotland has possessed, and in the intelligence and enterprise which it has been the means of developing among her agricultural classes. * * * The subject is one well worthy the attention of landlords, as it shows what magnificent returns may be reaped from a judicious expenditure in providing suitable education for those who have the management and cultivation of the soil.

IN ANSWER TO THE ENQUIRY of a Hamilton reader, we reply that the accounts mentioned about the properties of the Eucalyptus, the Australian gum tree, as a preventive of fevers from malarious influences are founded on fact. The tree has immense masses of roots which absorb vast quantities of water, and it is thus valuable in marshy districts. Unfortunately for us, it will not stand the slightest frost.