

this came under our notice. He could not say "No" when pain, or poverty, or distress appealed to him. It is possible his want of success as a business man may in a measure be attributed to this. Twice within our recollection the wagons in his yard were loaded and about to start for market, when a poor, broken-hearted man, whose

wife was dying of consumption, came and pleaded for some strawberries, which were then at a high price. The man went off with the strawberries, telling the writer of these lines that he felt ashamed to ask such a favour from Mr. Blackmore, as he had so often received similar kindnesses.

## QUESTION DRAWER.

### Best Fertilizers for Orchard.

1147. SIR,—Have been using barnyard manure for years on my orchard, but supply cannot readily be got now, so will have to get something to take its place. Saw sometime ago, in the *Globe* I think, an advertisement of Bradley's Fertilizers, and took a memo at the time. The kinds specified were Niagara phosphate, guano, dissolved bone with potash, and fruit and vine fertilizer. Could you give me a practical opinion as to whether these articles are *reliable*, and also if so, which kind would answer best for pears and apples on clay soil. As you well know it is of the utmost importance to us fruit growers that orchards should be fed well, and I do not wish to spend money on an article that will not give the best results. If these goods are not the best, kindly let me know where and what to get.

Owen Sound. W. B. STEPHENS.

As far as I am aware, the Bradley Fertilizers are reliable; that is, the results of their analysis, as made by the Government chemist, agree very well with the percentages of phosphoric acid, potash, and nitrogen guaranteed by the manufacturer.

The composition of the brands mentioned by your correspondent is as follows:

	Nitrogen, Calculated as Ammonia.	Phos. Acid.	Pot- ash.
1. Niagara phosphate . . . . .	1.00	8.00	1.08
2. Seafowl guano . . . . .	2.50	10.00	1.50
3. Dissolved bone with pot- ash . . . . .	1.00	10.00	2.15
4. Fruit and vine fertilizer. 2.5		10.00	5.40

For orchard application, I should expect the best results from either Nos. 3 or 4; the price per ton would naturally be a factor in deciding which brand would be the more profitable to employ.

Since this orchard is not receiving barnyard manure, and the soil is a clay, it occurs to me that the turning under of a crop

of clover might be beneficial. If sown early in July, an excellent stand will be obtained, if the season is at all favorable, by the end of the season—say, October—when it may be ploughed under, or, if thought best, left as a cover crop during the winter and turned under early in the spring. This plan is a very economical and effective one for enriching the soil in nitrogen and humus. It is doubtful, if such a method were pursued, whether it would be necessary to purchase nitrogen in the form of a commercial fertilizer.

FRANK T. SHUTT.

Chemist, C. E. F., Ottawa.

P. S.—Those proposing purchasing commercial fertilizers should peruse the Bulletin issued by the Inland Revenue Department, Ottawa, which states the composition of all fertilizers sold in Canada.

### Raspberry Cane Borer.

1148. SIR,—For a couple of summers a pest has been destroying great numbers of my black raspberry canes, completely killing out some hills. When the young cane is about six inches or a foot in height, some insect deposits an egg in the tender part of the cane. The egg becomes a little white maggot, which eats its way downward about an inch and a half, then eats around the cane, inside the shell, and finally nestles itself there. Thereupon the part of the cane above the maggot wilts and droops over. If the cane be broken off just at the bottom of the wilted part, the maggot will be found.

Please name and describe the parent insect in your next number of the *Canadian Horticulturist*, and tell us the best way to prevent its ravages.

Hespler.

H. J. BROWNLEE.