

it becomes readily soluble. In the same way the nitrogen contained in muck, when composted with wood ashes and manure, is rendered more immediately available for plant food.

Strawberries.

583. SIR,—Do you think the ever-bearing varieties of strawberries grown in California could be grown here?

What do you know about the Williams strawberry, would you recommend it? I would like to find someone, who has no axe to grind, who has tried it. I want to set two acres more, and I want the best.

I. JOHNSTON, *Warkworth.*

The California ever-bearing strawberries would probably be of little or no use for market purposes, in Canada.

The Williams is a fine commercial berry. We grow it at Maplehurst, and find it a good cropper, of good size, firm for shipping, and hardy. It is a cross between Crescent and Sharpless.

Land Plaster, Rock Phosphate and Superphosphate of Lime.

584. SIR,—What is the difference, if any, between land plaster, rock phosphate and superphosphate of lime? Would the latter take the place of bone meal in mixing fertilizer? Reply through your paper and oblige

St. Thomas, Ont.

A. W. GRAHAM.

Reply by Prof. J. H. Payton, Guelph.

Land plaster is sulphate of lime, a compound consisting of sulphuric acid and lime. It is obtained from grinding gypsum rock.

Rock phosphate is ground up phosphate of lime (apatite). Sometimes it is acted upon with sulphuric acid; the result is mineral superphosphate. Rock phosphate will consist of phosphoric acid and lime; but, as a superphosphate, will contain in addition, sulphuric acid.

Superphosphate of lime likely refers to bone superphosphate, which results from acting upon bones with sulphuric acid, and is more active than the mineral superphosphate referred to. Bone superphosphate is usually preferred to bone meal, on account of its being more ready for plant use, and thus more available in the plant economy. Nature, by means of the carbonic acid in the soil, renders in time the phosphoric acid of the bones active; but man, artificially, reaches more quickly the same results, by using a stronger acid upon the bone, viz., sulphuric acid. Bone superphosphate may thus be used instead of bone meal.