

will get nothing until the end of three years, but he cannot expect to be fully able to do so before, and will therefore have to work out some. There is great excitement about land at Burrard's Inlet, where it is supposed the terminus of the Pacific Railway will be. What land I have seen around Burrard's Inlet is very rocky and covered with big timber. I do not suppose it will become very valuable for agricultural purposes, even if the terminus is made there. The railway will bring the upper country into the market, and there farming, stock-raising, &c., can be carried on on a much larger scale than here. If the Government would not allow anyone to acquire a title to lands except upon a genuine *bona fide* settlement of the same, they would do a great service to the country.

VERITAS.

Maple Ridge, Frazer River, B. C., April 1, 1877.

Union Exhibition.

SIR,—The South Riding of Oxford and the South Norwich Agricultural Societies have united for the purpose of holding a Union Exhibition at Otterville, on the 5th and 6th October next.

R. I. W., Sec., Tilsonburg.

[Many more localities would benefit by uniting.—Ed.]

Agricultural Department Permanent International Exhibition.

We are indebted to Mr. C. Henry Roney, Chief of the Agricultural Department of the Permanent International Exhibition, for a copy of the official Bulletin of the Exhibition. About one-sixth of the ground floor of the Main Building, Fairmount Park, will be devoted to agriculture, under the three following heads: Agricultural and Animal Products, Land and Marine animal culture and apparatus for some living and preserved specimens, Agricultural Implements and processes. The location of the department in the northwestern portion of the building, fronting on the park, and on Belmont avenue, is the best possible, and its proximity to the Machinery Department in the southwestern portion of the building permits of the ready transmission of power to the agricultural machines to be exhibited in motion. Many of the finest displays in the Agricultural Building have already been transferred to the Main Building, and will be arranged in this section, and several States and Territories are providing collective exhibits of their wealth in agriculture and forestry. Some very interesting foreign displays will be made, and the entire exhibition promises to be one of the highest character.

The experience, as secretary of the Centennial Bureau of Agriculture, has made Mr. Roney perfectly at home in his new office. That his duties were performed in an efficient manner has been very handsomely acknowledged by the Director General, and we may safely accept his past services as the earnest of the future.

SIR,—I have the pleasure to-day of forwarding you an advance copy of pamphlet No. 1 of the International Exhibition Co., Main Building, Centennial Grounds, intended for our foreign exhibitors.

You will find on perusal that the north-west portion of the building, embracing about one-sixth of the entire area has been devoted to Agriculture, the displays in which will be very interesting and beautiful, comprising most of the finest exhibits lately displayed in the Agricultural Hall of the U. S. Centennial Exhibition.

A number of States and Territories are making very handsome collective agricultural exhibits, which promise to be very attractive.

Power will be transmitted, by wire rope, from the south side of the building, to drive such agricultural machinery as may require it, free of charge.

We are desirous of increasing our foreign displays, and shall esteem it a favor if assisted through the columns of your largely circulated and valuable journal, and trust that the courtesies and advice so kindly given to the Agricultural Department of the Centennial Exhibition may be tendered to its successor, the same department of the International Exhibition Co. Yours respectfully,

C. HENRY RONEY,

Superintendent Agricultural Department, and late Secretary of Advisory Committee, Bureau of Agriculture, U. S. C. C.

P. S.—A space has been set apart in the agricultural section for the display of agricultural journals, which may be sent us, with desks for

the use of correspondents, which, we trust, will be well patronized, and where every facility will be afforded. In cases where the Exhibition is noticed, an additional copy of the article will be desirable for permanent preservation in my scrap book. R.

Ontario Bureau of Agriculture and Arts.

SIR,—Captain W. R. Brown, R. N., of England, in a letter to the Hon. the Commissioner of Agriculture, states that in Malta, where he resided for several years, the practice to prevent insect injury to the fig is by suspending at an early period of the spring a few dried figs on some of the branches of the trees, without which it is believed that the produce fails.

It is suggested, analogically, that some slices of the raw potato put on sticks or otherwise in several parts of the ground where potatoes are cultivated, and some similar slices strowed on the surface, might attract and retain the beetle, in preference to its attacking the vital parts of the plant itself.

As the pest in all probability may reappear this season in some sections of the Province, it is much to be desired that the suggestion should be fairly put to the test of experiment by some of your numerous readers. GEO. BUCKLAND,

Toronto, April 18, 1877.

[We thank Mr. B. for the useful hint. It may be a very good plan to feed some kinds of insects, but the only food that we think of use for the potato beetle is paris green, or poison in some form. The rapid increase of this pest is such, that though feeding them might perhaps protect the potato plant when it first comes through the ground, the second family of bugs might destroy the crop.—Ed.]

Plaster of Paris or Gypsum.

Several queries have appeared in the ADVOCATE respecting the use of plaster, but I would recommend farmers to try it on a small scale at first. I have tried it sown broadcast on barley, after it was over ground and before it was rolled, without any perceptible benefit, on a clay loam. Perhaps, as the land had not been many years cleared, there was still a sufficiency of potash in the soil to render plaster unnecessary. On another occasion I tried it mixed with unleached ashes, at the rate of a bushel of each per acre, on part of a field, immediately after a crop of hay, principally clover, had been removed. The season proved very showery, and we had some trouble in saving our hay that summer, and this was probably the reason why the plaster and ashes had no perceptible benefit. The after grass came on equally fast everywhere, but as I do not approve of taking two crops of hay from the land in one year (unless where the field could be heavily top-dressed after the removal of the second crop), I turned the cattle on it later in the season, after the clover was in blossom, so that any ripe seed might be trampled out, and whatever stubble might remain would protect the roots of the clover from the frost; and as the herbage would decay under the snow, it would form plant food for the next year's crop.

Neither lime nor plaster should be used for a crop of peas, as they would probably run too much to straw; besides, the peas would not boil soft, unless a little baking soda were added to the water in which they were boiled. Many years ago a neighbor of mine in the Province of Quebec had some worn-out meadow land which one year gave him only three loads of hay. As he could not afford to brick it up, he procured some plaster and sowed a bushel of plaster and a bushel of ashes per acre in the spring, and that season cut seven good loads of hay from the same ground. On light soils I have no doubt it would answer well. It does not follow that, because plaster did not prove beneficial on my land when I used it, that it may not be useful a few years hence when the potash in the soil shall have become exhausted.

SARAWAK.

On Mangolds.

SIR,—As the season is again at hand when farmers will have to decide what crops they will have to sow for next year's feeding, I will give a few ideas on mangolds. I do not think they will grow a heavier crop than the Swede turnip on the same land, but they will do much better on very rich land, such as yards where cattle or sheep have been confined, or where the soakage of the barn-yard has run over the land. There is no kind of root surpasses the mangold for such places; but ordinary farm land must be heavily manured to produce a crop of 600 or 800 bushels per acre. While

speaking of the kind of land most suitable, I would mention a trial I made of swamp muck, three years ago, that might be useful to some of your readers. There was about two acres of what had been willow marsh, and the soil was light and porous, yet apparently rich. I intended to sow it all with mangold, but run out of seed, and sowed about half an acre with white carrot. The mangold was a failure, not many coming up, and those that did come not rooting well. The carrot did very well, producing quite a heavy crop. This convinced me that swamp muck, if of a light, porous nature, is not the thing for mangolds.

Another objection to them is that they are easily frozen in the fall. They must be taken up early, or a hard frost such as came about the 10th of last October, would ruin them. For feeding, they are valuable at any time after they are pulled till the next spring, if they are well kept. My practice is to feed through the fall and winter to cows giving milk. They are very much superior to turnips for this purpose, as they give no bad flavor to the milk. They are also better for feeding hogs in winter; but if fed either, the hogs should be kept warm.

The fact that farmers, after growing both turnips and mangolds for many years in this part of the country, grow perhaps twenty acres of turnips for one of mangolds, proves that the turnip is thought the most profitable as a field crop.

I sow them by making drills, as for turnips; then make a rut in the top of the drill with the end of a stick. Sow by hand about 3 or 4 lbs. per acre; tramp the seed with the feet by walking heel to toe; then cover with the back of a rake, 1 to 1½ inches deep.

F. M., Innerkip.

About Growing Orchard Grass.

Having had the experience of several years past in sowing and growing orchard grass, seeding at different times of the year, with different mixtures, and finding it a valuable grass for the farmer or dairyman, I feel interested in the question of your enquirer, Mr. McLeod, about sowing it. Although what he asked you have well answered, still I would say to him that I have found other ways of seeding and managing to succeed much better.

It is not practical to sow the white clover with it, for the orchard grass is so strong and rank a grower that it would not be suitable for the lawn; it would so over-run the clover that the latter would entirely disappear after the first year, and it will even run out the red clover in about that time, though it is very suitable to seed with it, because it will fill and occupy the ground the first year, while the orchard grass is thickening up and stooling (which is its manner of growth); but after that, if it is well seeded, it will so occupy the ground as to run out everything else, and be a permanent grass, as far as my experience goes.

I have several times sowed it with grain crops in the spring, but obtained only a light seeding of it. The best way I have found is to manure and till the spring and plant it with early potatoes; work them very thoroughly and dig early, then cultivate and dress down to a good seed-bed, and sow it with orchard grass alone (that is, without grain) about the middle of August, some twenty pounds, as you said, to the acre; and I have sowed at the same time red clover seed, which grew and answered well for the next year, after which it ran out.

The most profitable way of using the crop is to mow the first growth for hay, and especially for soiling purposes, as it comes earlier than any other green crop, but for the rest of the season it does not stalk up again, and if mowed, gives two or three more crops of grass like rowen hay. I would, however, prefer to pasture it after the first mowing, as it grows up very quick and stands the drouth well, giving quite an abundance of good feed.

H. IVES, Batavia, N. Y.

[We thank our American subscriber for the above useful information.—Ed.]

RINGBONE IN HORSES.—I was surprised to see in a late number of the ADVOCATE over the signature of "J. M.," a communication finding fault with "V. S." for his mode of treating ringbone, saying that he cannot cure one out of twenty by firing or blistering. Now I beg to contradict him, and to state that I can remove 99 out of 100 by a sweating blistering where "J. M." cannot cure 1 out of 100 with his knife. I have seen the muscle removed that "J. M." speaks of, but never saw one completely cured.

F. R.

Ellice.