

do contain entozoic larva or ova. When these guinea-pigs come to be killed, examined, and compared, some definite results may be looked for, meanwhile, a chemist who has examined specimens of grass, carrots, turnips, onions, and lettuce from a sewage farm, says: 'I find nothing to report against any of them. They all seem to me in excellent order, and free from parasitic insects, or from fungi of any kind. Not the least important part of the report is that in which the committee give particulars of a sewage-irrigated farm near Romford. The crops there have proved surprisingly profitable. Onions fetched £36 an acre in the ground; spinach, £22 an acre; cabbage and cauliflowers, from £24 to £27 an acre; lettuce, £30 an acre. A new kind of American oats yielded at the rate of 14 quarters to the acre. Three crops of rye-grass were taken in one season from 5½ acres of meadow, and produce in all nearly 13 loads. Three sown with 'bunching greens,' a species of colewort, produced plants enough to plant 7 acres, and 430,000 plants and 3,240 full-grown roots for sale, the money value of which was £39 15s. From this it would appear that the most profitable use for the sewage of a town is to cause it to flow across a farm.

BOARD OF ARTS AND MANUFACTURES.

FOR THE PROVINCE OF QUEBEC.

We have been requested to insert the following circular:—

MONTREAL, JULY 1871.

Sir,—I am directed by the Board of Arts and Manufactures to inform you that an Industrial Exhibition will be held jointly with the Agricultural Exhibition, in the City of Quebec, on the 12th, 13th, 14th, and 15th of September next.

The Manufacturers of the Dominion and of other Countries are invited to send the produce of their industry for Exhibition.

Prizes to the amount of about \$5,000 are offered for the best productions.

The prize list is divided into thirteen classes as follows.

- CLASS. 1.—Cabinet and other wood work, Surgical appliances, Musical Instruments, &c.
- " 2.—Carriages, Sleighs and parts thereof, &c.
- " 3.—Machinery Castings, Manufactures of Metal Tools and Fittings, &c.
- " 4.—Building Materials, Pottery, Tiles, Slates and Slate Manufacture, Buttons, Glass-ware, &c.
- " 5.—Architectural, Mechanical and other drawings, Portraits and other Paintings, Decorative Paintings, Japanning, Sculpture, Statuary, Engraving, Lithography, Pencils, Materials used in Fine Arts &c.
- " 6.—Paper, Printing, Book Binding, Manufactures of paper, &c.
- " 7.—Leather, Manufactures of leather, Rubber goods, &c.
- " 8.—Oils, Varnish, Chemical Manufactures and preparations, &c.
- " 9.—Geology and Natural History.
- " 10.—Soap, Groceries, Provisions, Tobacco, Crackers, &c.

- " 11.—Woolen, Flax and Cotton goods, Fishing Tackle, Furs, Wearing apparel, &c.
- " 12.—Ladies' Department.
- " 13.—Domestic Manufacturers.

Competent Judges will be appointed for the different classes and the prizes awarded with the greatest impartiality.

Arrangements have been made with the different Railroad and Navigation Companies to reduce their rates of freight on articles intended for Exhibition, and all other measures have been taken to promote the interest of the Exhibition, it remains for the manufacturers to make it a success by giving it their support.

I therefore hope that you will send to this Exhibition a collection of the best articles manufactured by you, as it is important that strangers visiting the Exhibition should be favourably impressed by the quality of our different Manufactures, and to show that we compare favourably with other countries.

If you wish to have a prize list, please let me know, and I will mail it to you without delay.

I have the honor to be,

Sir,

Your most humble servant,
E. LEF. de BELLEFEUILLE,

Secretary.

15, St. Lambert Street.

PUTTING UP FENCES BY MACHINERY.

A correspondent of the *Toronto Globe* writes: "While passing a few spare days with a friend in the West, I was much amused at a novel way of putting up fence-posts. The land was rather low than otherwise, and, although soft enough in the fall, would have been very hard in dry summer weather.

"The implement employed to facilitate this business was none other than a 'pile-driver,' made as ordinarily used, with about twelve feet drop for the ram, but constructed of much lighter materials. The scantling was only 2×6 and 3×3 inches, with the exception of the si's, which were stronger, and made of hard wood, to facilitate moving about—an operation which was performed by the same oxen that raised the ram. The ram itself was composed of the butt of an oak log, six feet long, banded with iron at its lower end, to prevent splitting, and about sixteen inches in diameter. Grooves were plowed in it on each side, so as to admit of its moving readily in the guides. It was hoisted up by a yoke of cattle, attached to a rope, passing under one wheel at bottom and over another at top, and the plan answered well for pulling the ram rapidly up to its elevation, from which it descended with a tremendous 'thud' on the cedar post, which was pointed and held upright, and immediately under the ram. About three blows drove the post nearly four feet into the earth, and almost all went quite straight. A few—one here and there—were crooked; but these, I was told, would be pulled straight with the cattle, or dug out at the foot, so as to allow of their being pressed over, until they all came in direct line. I was informed that this course was a great saving of labor, and when quickly handled, the time that each post required to be driven was only a few