

## CANADIAN NATIONAL EXHIBITION.

There has not been a season in which so much competition has been shown among mechanical manufacturing firms as this present one. A walk through the Machinery Hall showed many European firms that were competing against local firms and those from the United States, that heretofore have had the displaying space to themselves.

The Consolidated Optical Company, Limited, of Toronto, again secured their advantageous station near the main entrance of the Manufacturers' Building, and displayed a line of surveyors' instruments and meteorological devices that are made in Canada. In connection with the latter they showed a wind-gauge and automatic recorder, made-to-order for Government officials.

Messrs. William Hamilton Company, Limited, of Peterboro', Ont., had a prominent position in the Machinery Hall, and took full advantage of the same to demonstrate the qualities of the Samson Water Wheel. One large turbine was erected in their booth, and ample facilities were given to examine the mechanism.

The Canadian Boving Company, of Toronto, had an interesting exhibit in the north-east portion of the Machinery Hall. This was made up of a twelve horse-power "Bolinder" semi-Diesel crude oil engine driving a dynamo and water pump, the easy working of the latter being shown by a stream of water flowing into a large galvanized iron tank. A large sign overhanging their exhibit stated that this firm make a specialty of power apparatus, and numerous devices demonstrated below amply bore out the statement.

Messrs. John Millen & Son, Limited, occupied the south-west corner of the Machinery Hall, and had on display an interesting exhibit of chains, and a cabinet which was fitted up for the special purpose of demonstrating the mechanism of the "Coventry Noiseless Chain," for which they are the agents. They also had a number of link chain and several blocks and tackles, together with other labor-saving devices dependent upon chains for their operation.

The Canada Metal Company had their usual artistic and useful exhibit of various alloys and ingot metals, and were showing samples of lead wool and demonstrating its qualities as a calker for pipes. This wool resembles in appearances the steel wool often used by cabinet makers to remove varnishes and polish from woodwork. It is in very thin threads and well tangled together; resulting in a mass that is soft and spongy to the hand.

Messrs. Baines and Peckover, of Toronto, secured the southeast corner of the Machinery Hall and showed products coming under the title that they have selected for their exhibit, viz., "The Iron Store." Bar iron and steel, both plain and ornamental were shown in various lengths, and one wall was devoted to the display of "Atlas" metals, alloys and babbit. The front of their booth is taken up with two or three rolls of "Lincona" belting, for which they are the agents. This belting is a composition with a canvas finish on one or both sides, resulting in a surface that has a powerful grip on the pulleys.

The General Machinery Company, local offices Traders Bank Building, Toronto, were demonstrating the merits of the Luitwieler pump in their exhibit, and for this purpose have erected a tripple stroke pump and a means of showing the force and evenness of the stream. A hydro-pneumatic

water supply system is shown in the rear. This is intended to give a high-class water service to country residences and other buildings difficult of access to the mains of a municipal pumping plant. The pump was driven by an electric motor, and the latter controlled by the water level in the tank. A device was also shown whereby a gasoline engine may be started at a signal, which is automatically given, when the water in the tank falls below a pre-ascertained level. The electric device is entirely automatic but the gasoline option is a good substitute in localities where a reliable electric pressure cannot be obtained.

Messrs. Wettlaufer Brothers erected a large tent to the southwest of the Machinery Hall and gave semi-open air demonstrations of the merits of their heart-shaped concrete mixers as well as their various concrete block and brick machines, and other concrete specialties.

The building formerly occupied by educational exhibits and hand work was given up entirely to the Canadian Gas Association. In this building several interesting exhibits might be seen, among which was that of H. Mueller Mfg. Co., Canadian factory, Sarnia, Ont. (about November 1st). This firm specializes in the manufacture of gas main equipment, gas cocks, service boxes, waste cocks, etc. Their exhibit was much enjoyed by municipal officials, while the other attractions in the building, being to a large extent of a domestic nature, were visited by householders.

The Canada Cement Co., Limited, had a booth under the grandstand at which complete information could be obtained in regard to concrete roads and all other forms of concrete construction. This exhibit was one of the most unique in the grounds. It consisted of a set of illuminated transparencies of everything from a concrete fence post to a concrete viaduct. Another feature of this exhibit was the illuminated posts around the booth, being the first used on the grounds.

A feature of the fair this year was the new Government Building, erected during the past season to the west of the grounds. All the provincial governments were allotted space to demonstrate the representative merits of the districts coming under their jurisdiction. Excepting the province of Ontario, all the exhibits were of a mercantile nature and the spaces were used to exhibit wheat, minerals and natural advantages. The province of Ontario have a separate building, which is devoted exclusively to exhibits of this nature, so that their space in the Dominion Government building was used as a health exhibit and every effort was put forth to educate the visitors regarding the means of combating disease and the importance of this department of the provincial governing body.

A fair-sized pressure filter, manufactured by Messrs. Bell Bros., of Manchester, England (local representatives Bell Filtration Company, of Canada, Limited, 305 Kent Building, Toronto) was installed and a Luitwriter triplex pump connected in such a way as to illustrate a water purification system suitable for a town of one thousand persons with an estimated consumption of one hundred gallons per day each.

A bacteriologist was in attendance at the display of disease producing cultures which formed a splendid show. Many antitoxins were also shown, which graphically showed the progress made by science in combating diseases known to be due to the presence of micro-organisms in the body.