now co-operating with the association. W. A. McLean, Deputy Minister of Highways, advised caution in borrowing so as not to embarrass the government.

Wimund Huber, Ontario Department of Public Highways; Daniel Quinlan, treasurer of Simcoe County; and E. M. Young, clerk of Prince Edward County, dealt with the matter of finance from the point of view of the association. Mr. Young suggested that the same system of bookkeeping should be adopted in all counties and also that the government might establish a department for purchasing the machinery for road building.

D. M. McIntyre, K.C., chairman of the Ontario Railway and Municipal Board, delivered an interesting address on "Highways of Empire," and F. A. Senecal, clerk of the counties of Prescott and Russell, and J. F. Vance, clerk of the county of Wentworth, spoke on the subject of "Road Organization."

Before the close of the meeting, a resolution was adopted asking the government to facilitate the haulage of stone on the highways.

On Friday morning, general discussion and the election of officers took place.

The following officers were elected for the ensuing year: Hon. presidents, J. A. Saunderson and S. L. Squires; president, C. R. Wheelock; vice-presidents, J. J. Parsons, W. H. Pugsley; secretary-treasurer, George S. Henry, M.P.P.; directors, K. W. McKay, Major Kennedy, F. A. Senecal, L. E. Allen, G. Mahoney, M. I. Brown.

## PRESIDENT OF CANADIAN SOCIETY OF CIVIL ENGINEERS ADDRESSES TORONTO BRANCH

On Tuesday last, March 5th, H. H. Vaughan, president of the Canadian Society of Civil Engineers, addressed the members of the Toronto branch on "The Possible Activities of the Society Under the New By-laws."

In the course of his address, the speaker explained the reasons for the changes being made and suggested ways and means by which the branches might co-operate in an effort to make the society a still greater factor in the life of the engineer, and enable him in a fuller sense of the term to occupy the place in the community to which his training and capacity entitle him.

Fraser S. Keith, secretary of the society, also addressed the meeting, which was held in the Chemistry and Mining Building, University of Toronto. Prof. Peter S. Gillespie, chairman of the Toronto branch, presided.

## CANADIAN ASSOCIATION OF ENGINEERS

Last Thursday, February 28th, a meeting of civil engineers was held at 228 Beverley Street, Toronto, to discuss informally the advisability of organizing a Canadian Association of Engineers along the same lines as the American Association of Engineers.

There seemed to be a decidedly strong feeling among the dozen men present that some concerted effort should be made to improve the financial status of the engineer, especially the younger men in the profession.

The question arose as to whether the organization should take the form of a local chapter affiliated with the American association or operate as a Canadian association

conducted along lines similar to those of the American association. This matter was left open.

Another meeting is to be held on March 21st, when the proposed organization will be further discussed and some form of constitution decided upon.

## WINDSOR GARBAGE INCINERATOR

THE reconstruction and enlargement of the garbage incinerator at Windsor, Ont., has just been completed by the Canadian Incinerator Co., Limited, of Toronto. The plant is of similar design to those which that company had previously installed at Kitchener, Ont., and Transcona, Man., although some new features have been added which improve the efficiency and reduce the cost of operation still further.

In each cell there are 35 sq. ft. of grate bar area, and it is there that the actual incineration of the garbage is accomplished. Behind this area there is a drying hearth upon which the wet garbage is deposited in such position that the hot gases pass under, through and over it, ensuring rapid drying. A special flue carries all gases into the combustion chamber. In passing on toward the chimneys, they come in direct contact with a separate chamber where the whole carcass of an animal can be cremated within a few minutes.

From this animal chamber the gases pass on through a pre-heater, where hot air is generated. This hot air is conducted under the floor into the air chamber, from which the fireman liberates it into the ash pit at will by means of a special device, using it to create a forced draft. A special design of grate bar makes the forced draft come evenly upwards directly under the fire, thus greatly accelerating the burning.

The feed holes are all water-sealed, eliminating the possibility of any gases escaping onto the dumping floor even if the furnace be filled to its capacity.

The clinkering doors are of the guillotine type, practically the full width of the furnace, giving the fireman full access to the whole furnace for cleaning purposes. These doors are counterbalanced by weights placed inside the channel buckstays and are easily handled.

One oil burner is installed in each cell of the furnace and two in the animal chamber. These, however, are used only for a few minutes when starting the fires or when exceptionally bad garbage is encountered. In two of the plants mentioned above, the oil burners have not been used for more than a year past, as the plants are capable of destroying all ordinary garbage without the help of any fuel.

The appearance of the Windsor furnaces is very neat. Glazed bricks are used in the front and obvious effort made to obtain a presentable plant. Sufficient steel supports or buckstays have been used to obviate heavy repair costs.

A Hydro-electric system has been installed in the Portland cement works at Durham, Ont.

Leclaire and Fils, of Sorel, P.Q., have received a contract for the construction of six steel ships, costing \$1,500,000.

Members of the designing and operating staff of the engineering department of the Dominion Iron & Steel Co., Ltd., Sydney, N.S., recently formed an engineering society.

A discovery of bauxite has been reported from Kamloops, B.C., and another from near Vancouver. A discovery of <sup>2</sup> per cent. nickel pyrrhotite is reported from Jervis Inlet. Bauxite in quantity would assure an important new industry.