

# The Canadian Engineer

*A weekly paper for Canadian civil engineers and contractors*

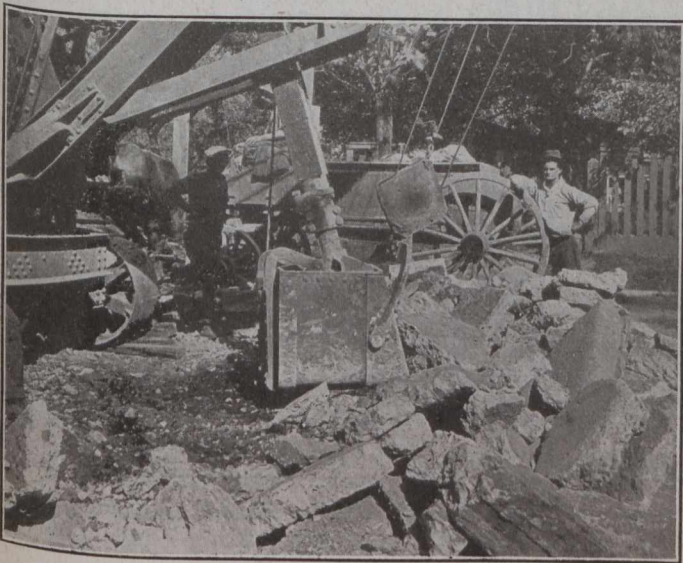
## Completion of Toronto-Hamilton Highway

Last Five Miles Now Being Laid—Concrete Base for Old Dolarway Road Torn Up With Steam Shovel—Thicker and Stiffer Pre-Moulded Joints Have Proven Advisable

By HARRY STEWART VAN SCOYOC, C.E.  
Chief Engineer, Toronto-Hamilton Highway Commission

STEAM shovels have been used in a few cities in tearing up concrete sub-base of track allowance, owing to change in grade or location, but so far as is known a steam shovel is now being used for the first time in tearing up the concrete sub-base of a roadway. About four years ago a Dolarway road was laid from the Humber River to Church Street, Mimico, a distance of a little more than two miles. The concrete was laid in one course, 1:2:4 mix, 14 to 15 feet wide. The surface was treated with tar. The traffic over this road is extremely heavy, and as it is not in suitable repair, nor wide enough, nor of the right mix, nor proper section to form a part of the Toronto-Hamilton Highway, the commission decided to tear it up, as it was desired to lay a 24-foot roadway for four and a half miles at the Toronto end of the highway.

The contract was let to Franceschini & Co., excavating and grading contractors of Toronto, for 68c. a foot. This price includes 3,000 feet free haul. Part of the broken concrete is being deposited as fill for the approaches to the new Mimico bridge, the remainder being used to repair some of the streets in Mimico.



The Steam Shovel Broke Up 600 Lineal Feet of 15-ft. x 6-in. Concrete in One Day

A Type-o Thew shovel, with bucket of  $\frac{1}{3}$  yard capacity, is being used. The shovel gang consists of six men, with ten teams to haul the material away. The concrete breaks up readily in pieces varying from one-quarter

square foot to a square yard. The shovel makes rapid progress, averaging 400 to 425 feet per day, and one day doing as much as 600 feet.

The Toronto-Hamilton Highway was finished last summer at the Hamilton end as far as the Hamilton city limits, with the exception of about 3,000 ft. which is being



Tearing Up the Old Dolarway Road

maintained as a waterbound macadam roadway until the city of Hamilton decides whether to carry the highway into the city by means of a fill, or over a bridge or along the present Grand Trunk Railway right-of-way.

The commission had not considered the last-mentioned proposition, thinking that the Grand Trunk Railway would not be likely to give up their right-of-way at any time in the near future, and intimated to the city that the scheme known as the Armstrong fill would be quite satisfactory to the commission, and would probably cost only about half the amount that the bridges would likely cost.

The report on the railway situation at Hamilton, made a few weeks ago by Messrs. Tye and Cauchon, also dealt with the Toronto-Hamilton Highway entrance by request of the city officials, and the consulting engineers advised the city that the Armstrong fill would be "quite intolerable" when taken in connection with their new railway plan for Hamilton, as "all highway traffic would emerge from a subway directly onto the railway crossing without a clear view in either direction." Should the Grand Trunk join in with the new roads seeking entrance to Hamilton