

# The Canadian Engineer

*A weekly paper for engineers and engineering-contractors*

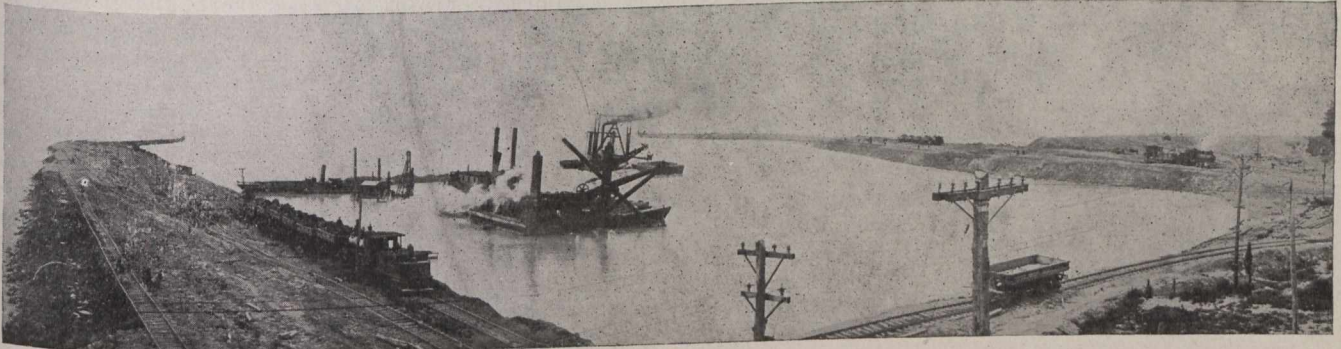


Fig. 1.—The Harbor Under Construction at Port Weller.

## WELLAND SHIP CANAL CONSTRUCTION

NOTES ON THE SEASON'S ACTIVITIES IN THE CONSTRUCTION OF CANADA'S \$50,000,000 WATERWAY BETWEEN LAKES ERIE AND ONTARIO, UNDER THE DIRECTION OF THE DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA.

THE present season has been one of remarkable activity along the line of the proposed New Welland Ship Canal. The northern portion of the route has been converted into a scene of constructional development embodying works whose proportions and involved methods of construction are on a scale with which few of our Canadian enterprises are comparable, and certainly far beyond anything of a similar nature ever attempted in this country.

For general information respecting the new route, and essential features of design, the reader is referred to an article which appeared in *The Canadian Engineer* for August 21st, 1913. Briefly, it is to replace the present

Welland Canal whose length of  $26\frac{3}{4}$  miles from Port Colborne on Lake Erie to Port Dalhousie on Lake Ontario, provides, through 25 locks, the only existing means of water transportation in this section of the Great Lakes' route. The old canal, with locks 45 feet in width, afforded some 14 ft. of water over the sills. The new canal will be 25 miles in length, from lake to lake, overcoming a difference of level of  $325\frac{1}{2}$  feet. There will be seven locks, each of  $42\frac{1}{2}$  ft. lift, 80 ft. width, and of sufficient length to accommodate a vessel 800 ft. long. The present construction is to provide a depth of 25 ft. over the sills; this to be ultimately deepened to 30 ft., according to the design.

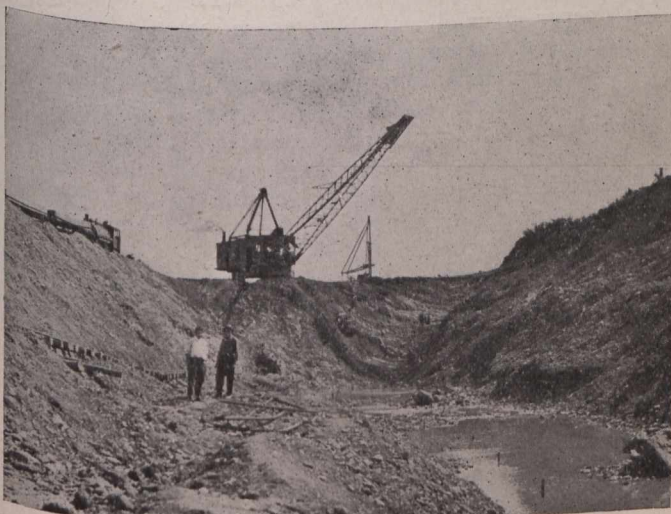


Fig. 2.—Drag Line Excavator in Lock No. 1, Port Weller.

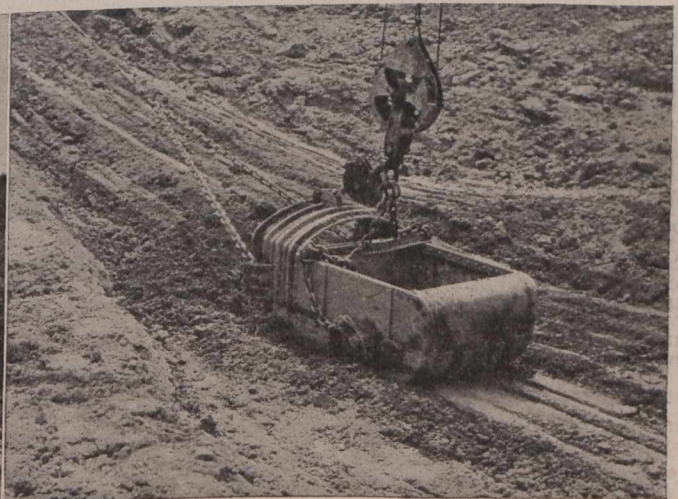


Fig. 3.—Drag Line Bucket at Work on Site of Lock No. 1.