

PART VIII.—CANALS.

Before the period of extensive railway construction which commenced for Canada in the 1850's, the water routes, more especially the St. Lawrence, the Great Lakes and the Ottawa, were the chief avenues of transportation. These routes were interrupted at certain points, necessitating portages. The canals of Canada were constructed to eliminate the toil of unloading, transporting and reloading at the portages.

The earliest mention of canals in Canada is in connection with the Lachine canal, begun by early French settlers in 1700, but only after the conquest of Canada by the British were improvements of the main water routes made, and in the early part of the 19th century increased internal and foreign trade and the introduction of steam navigation resulted in more attention being given to this work. Although the canals were constructed primarily for military purposes, they soon became essential to the commercial life of the country.

Section 1.—Canal Systems.

There are in Canada six canal systems under the control of the Dominion Government in connection with navigable lakes and rivers. They consist of the canals (1) between Port Arthur or Fort William and Montreal; (2) from Montreal to the international boundary near lake Champlain; (3) from Montreal to Ottawa; (4) from Ottawa to Kingston and Perth; (5) from Trenton, lake Ontario, to lake Huron (not completed); and (6) from the Atlantic ocean to Bras d'Or lakes, Cape Breton. The total length of the waterways comprised within these systems is about 1,594 statute miles, the actual mileage of canals constructed being 117.2.

A detailed description of the individual canals was given on pp. 626-629 of the 1926 Year Book. Summary statistics of their length and lock dimensions are given in Table 38.

38.—Canals of Canada, Length and Lock Dimensions, 1929.

Names.	Location.	Length in Miles.	Locks.			
			No.	Minimum dimensions.		
				Length.	Width.	Depth.
			ft.	ft.	ft.	
St. Lawrence—						
Lachine.....	Montreal to Lachine.....	8.50	5	270	45	14 ¹
Soulanges.....	Cascades Point to Coteau Landing..	14.00	5	280	45	15 ¹
Cornwall.....	Cornwall to Dickinson's Landing....	11.25	6	270	45	14 ¹
Farran's.....	Farran's Point rapid.....	1.25	1	800	50	14 ²
Rapide Plat.....	Rapide Plat to Morrisburg.....	3.66	2	270	45	14 ¹
Galops.....	Iroquois to Cardinal.....	7.33	3	800	50	14 ¹
Welland.....	Port Dalhousie, lake Ontario, to Port Colborne, lake Erie.....	26.75	26	270	45	14 ¹
Sault Ste. Marie.....	St. Mary's rapids, 47 miles west of lake Huron.....	1.30	1	900	60	19 ¹
Richelieu river—						
St. Ours Lock.....	St. Ours, Que.....	0.12	1	200	45	7 ²
Chambly.....	Chambly to St. Johns, Que.....	12.00	9	118	22.5	7 ²
Ottawa and Rideau rivers—						
Ste. Anne Lock.....	Junction of St. Lawrence and Ottawa rivers.....	0.12	1	200	45	9
Carillon.....	Carillon rapids, Ottawa river.....	0.75	2	200	45	9
Grenville.....	Long Sault rapids, Ottawa river.....	5.75	5	200	45	9
Rideau.....	Ottawa to Kingston.....	126.25	47	134	33	5
	Rideau lake to Perth (Tay branch). .	7.00	2	134	33	6.5 ³

¹Navigable depths are occasionally less at times of extremely low water.

²Least depths in channels, 6.5 ft. ³Least depths in channels, 5 ft.