#### Marine Votes for 1916-17.

Marine votes for the fiscal year ending Mar. 31, 1917, recently dealt with by the House of Commons, include the following: CHARGEABLE TO CAPITAL ACCOUNT.

	ITAL ACC	O DITT.
Welland Ship Canal		Revotes.
Helland Ship Canal	\$4,500,000	\$ 500,000
Canal		
Lachine	30,000	
Ridean	40,000	40.000
Trent	1 000 000	20,000
Lachine Rideau Trent	1,000,000	200,000
Harbors and Rivers— Halifax dry dock St. John harbor Quebec harbor Lauzon dry dock St. Charles River Toronto harbor French River waterway Fort Arthur and Fort William Vancouver harbor Victoria harbor Esquimalt dry dock		
Harbon	\$1,070,000	\$ 240,000
Transport and Rivers—	WAR THE	
dalifax dry dock	\$ 250,000	\$ 250,000
St. John harbor	1.000,000	
Quebec harbor	495,000	495,000
Lauzon dry dock	1.500.000	TENE DAL
St. Charles River	700,000	
Toronto havben	600,000	600 000
French D:	400,000	400,000
Port A-ther waterway	400,000	400,000
Will Arthur and Fort		
Van	1,000,000	
Vincouver harbor	350,000	
pictoria harbor	1,000,000	
Esquimalt dry dock	200,000	200,000
	\$7 495 000	\$1,945,000
	07,700,000	φ1,010,000
Canals—CL	OME ACC	DUNT.
Chambly Cornwall Cornwall Quebec Rideau St. Peter's Soulanges Trent Welland Williamsburg	\$ 5,000	\$ 5,000
Ornwall	9,500	9,500
Ruebec	14.000	
Mideau	30,000	
St. Peter's	163,000	101 000
Soulanges	1 500	900
rent	40,000	200
Welland	20,000	
Williamshuma	0,000	
anisburg	2,500	
	0 005 500	0 110 100
Harbors and Rivers— Nova Scotia Prince Edward Island New Brunswick Maritime Provinces generally	\$ 295,500	\$ 110,400
Nova Sasti	0 500 150	
Prince Ed	\$ 736,150	\$ 425,150
New D. Edward Island	66,400	41,800
Mariti	425,000	280,000
grant Provinces		
Onel Cherally	5,000	5,000
Opt-	853,150	468,900
Mario	1,051,800	880,500
Salitoba	93.100	65,000
Saskatchewan and		
Alberta	29 500	9 500
British Columbia	579 000	49 700
Tukon Columbia	510,000	40,100
General	5,000	
Dredging	40,000	
-sung	1,730,000	20,000
and the second second second		
1-		
New Brunswick Maritime Provinces  generally Quebee Ontario Manitoba Saskatchewan and Alberta British Columbia Yukon General Dredging  Mail Substit	\$5,613,100	\$2,244,550
Mail Subsidies—	\$5,613,100	\$2,244,550
Mail Subsidies— Atlantic Ocean	\$5,613,100	\$2,244,550
Mail Subsidies— Atlantic Ocean Pacific Ocean	\$5,613,100	\$2,244,550 .\$1,844,167 . 487,142
Mail Subsidies— Atlantic Ocean Pacific Ocean Local services	\$5,613,100	\$2,244,550 .\$1,844,167 . 487,142 . 310,625
Atlantic Ocean Pacific Ocean Local services		.\$1,844,167 . 487,142 . 310,625
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Atlantic Ocean Pacific Ocean Local services  Mail service, authorized by st Canada, China and Japan. Canada and France.	atute—	\$1,844,167 . 487,142 . 310,625 \$2,641,934 .\$ 121,667
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Atlantic Ocean Pacific Ocean Local services	atute—	\$1,844,167 . 487,142 . 310,625 \$2,641,934 .\$ 121,667

# Progress on Welland Ship Canal Construction.

in Charge, Weller, M.Can.Soc.C.E., Engineer ed to harge, Welland Ship Canal, is reported to have 10. ed to have said at St. Catharines, May 10, that notwithstanding the war, most satisfactory progress had been made on the four sections under contract, and that three of the sections at least, will be finished Within the time limit of four years from the placing of the contract in 1913. The work on sections 1 and 2 is about 50% completed.

Sec. 1 extends from Lake Ontario for about three miles, and includes pier and trest! trestle work at the entrance to the canal, the construction of lock 1, and canal work to bridge 2. The contract was awarded Aug. 1, 1913, and the date for completion contract at Apr. 1, 1917. The amount of the contract as based on schedule rates is

\$3,487,727, and the contractors are the Dominion Dredging Co.

Sec. 2 covers the work from bridge 2 to bridge 5, about 4½ miles, including locks 2 and 3. This contract was awarded to Baldry, Yerburgh & Hutchinson, Dec. 31, 1913, for completion by Apr. 1, 1917, and the amount based on schedule rates is \$5,377,185.75.

Sec. 3, from bridge 5 to about half way between bridges 9 and 10, covers the heaviest portion of the whole route, and includes the erection of twin guard gates at Thorold, the single lock 7, the construction of a short stretch of canal below lock 7, and also the three twin locks 6, 5 and 4 in flight, one flight for down bound vessels and the other for up bound vessels, overcoming a descent of 139½ ft. The contract was awarded to O'Brien & Doheny, Oct. 4, 1913, for completion by Apr. 1, 1917, and the amount based on schedule rates is \$9,540,050. This work is about 25% completed, and it is not expected that it will be finished on schedule time, but will be at least a year behind The work done has been very heavy, in some places rock having been blasted down to 80 ft. Some little labor difficulty has also been experienced, but it is stated that this has now been settled and the laborers, mostly foreign, have all returned to work.

Sec. 5, from just above bridge 12 to just above bridge 13, about 2¾ miles, is reported to be about 50% completed. This contract was awarded to the Canadian Dredging Co., for completion by Apr. 1, 1918, and the amount based on schedule rates is \$1,945,788.

The acting Minister of Railways and Canals has stated that no further contracts will be let this year.

### The Venture-Wakena Collision Investigated.

An investigation was held recently at Vancouver, B.C., by Capt. J. D. Macpher-son, Wreck Commissioner for British Columbia, assisted by Commander Unwin, R.N.R., and Capt. H. S. Hilton, as nautical assessors, into the collision between the Union Steamship Co. of British Columbia's s.s. Venture, and the Clatskanie Transportation Co.'s s.s. Wakena, from Portland, Ore., in the first narrows of Burrard Inlet, Feb. 26. The evidence produced, was, owing to the fact that witnesses for the Venture alone were present, necessarily one sided. For some unexplained reason. after having made all arrangements to be present, the witnesses for the Wakena failed to appear. The evidence adduced was, however, clear and convincing, and the court's opinion was that there can be no doubt that the Wakena's master, in the thick fog then prevailing, lost his bearings when entering the first narrows, and while endeavoring to get his vessel into midchannel, collided with the Venture. No blame can be attached to those in charge of the Venture, the master, John Park, being justified in entering the narrows, though undoubtedly the weather was very thick at the time, not only because he knew where his vessel was, but also because there are very efficient aids to navigation in that locality to meet the requirements of navigation under the conditions then prevail-ing. The Venture was handled in a proper and seamanlike manner, and the master had verified his position off Prospect Bluff, was going dead slow and sounding his whistle at proper intervals, was as close to the starboard side of the channel as he could be with safety, and

kept an efficient lookout. The court therefore absolved him from all blame. The court surmised that the non appearance of witnesses for the Wakena, implied that they knew they would not be held blame-

#### Welland Canal Lock Accident.

On May 2, the wooden steamship W. J. Averell, Capt. Patterson, formerly owned by the Rutland Transit Co., Ogdensburg, N.Y., and now owned by the Canada Shipping Co., Montreal, while upbound to Cleveland with a small cargo of package freight, struck and carried out the two headgates at lock 8 in the Welland Canal. The rush of water from lock 8 level carried the vessel and towpath gate out into the lower reach. The heelpath gate remained near the head gate of the lock, clinging to its anchorage. The level above lock 8 is a short one and the reach below is about 11/4 miles long; consequently very little water overflowed the banks and there was no damage to the latter. The vessel was not damaged. It was necessary to place two spare gates before navigation could be resumed. Locking was resumed in the afternoon, navigation having only been delayed about eight hours. The damage is estimated to be \$3,000, which is said to be fully covered by insur-The accident was caused by the steel hawser getting caught in the ves-sel's compressor and it was not even placed on the snubbing post on the lock wall to check her speed. The vessel's engines were reversed too late to avert the collision with the lock gates. We are indebted to L. D. Hara, Superintending Engineer, for these particulars.

## Improvements to C. P. R. Great Lakes Steamships.

During the past winter, in addition to the usual overhaul, the steamships Keewatin and Assiniboia, of the C.P.R. Great Lakes fleet, have received a number of improvements. The most important of these is an extension of the upper and promenade decks right to the stern. This provides, abaft the verandah cafe, a roomy, covered in and sheltered space for evening dances. Immediately above, the promenade deck has been extended, giving a clear space of 50 x 36 ft., which, without interfering with the promenade, gives accommodation for quoits, shuffle deck and other shipboard games.

The dining saloons have been entirely remodelled, and have been fitted with a number of small tables to accommodate parties of two to six people. The windows have been enlarged, and now measure 4 ft. wide by 3 ft. deep, with a leaded glass top sash, which provides ventilation without draught. The new windows will provide a good view from any seat in the saloon. The smoking room windows have also been increased in size.

In addition to the original suites de luxe, several rooms have been fitted with connecting shower baths. The main entrance hall has been enlarged, and made adaptable for a quiet smoke or game of cards in the evenings. A new barber shop and news stand have been built off the entrance hall.

The Fort William Grain Co., Ltd., has been incorporated under the Dominion Companies Act, with \$40,000 authorized capital and office at Fort William, Ont., to carry on a general grain dealing business, and to own and operate steam and other vessels, wharves, docks, elevators,