The act providing for the compulsory installation of wireless telegraph equipment on certain vessels leaving Canadian ports came into effect, Jan. 1. The section giving details as to what vessels must be so equipped was given in full in Canadian Railway and Marine World for Oct., 1913. The majority of Canadian vessels which come under the act have already been equipped with the necessary wireless telegraph installation, but there are a few for which, at the time of writing, application for the necessary licenses have not been made. Of these, three operated last season on the Pacific coast, seven or eight on the Great Lakes, and one on the Atlantic coast. If, therefore, it is intended that these vessels are to be operated during the forthcoming season, as last, the installations must be made before the season opens.

Following is a list of Canadian registered vessels which have been equipped for wireless telegraphy by the Marconi

Wireless Telegraph Co .:-

Newfoundland and Atlantic Coast:—
Reid Newfoundland Co., Bruce, Invermore,
Kyle, Lintrose; Harvey and Co., Bellaventure and Bonaventure; Job Bros., Beothic
and Nascopie; C.P.R., St. George; Canada Atlantic and Plant Line, A. W. Perry, Evangeline and Halifax; Boston and Yarmouth Steamship Co., Boston, Prince Arthur and Prince George; Dominion Coal Co., City of Sydney, Douglas H. Thomas and Morwenna; J. A. Farquhar, Seal; Holliday Bros., Aranmore; Quebec Salvage and Wrecking Co., more; Quebec Salvage and Wrecking Co., Lord Strathcona; Dominion Government, Aberdeen, Acadia, Canada, Dollard, Druid, Earl Grey, Lady Grey, Lady Laurier, Lurcher (light ship), Minto, Montcalm, Montmagny, Niobe and Stanley.

Great Lakes—C.P.R., Alberta, Assiniboia, Athabasca, Keewatin, Manitoba; Northern Navigation, Co., Hamonic, Huronic, Northern

Navigation Co., Hamonic, Huronic, Noronic, Saronic; Canadian Towing and Wrecking Co., Empire and Province (barges), and St. Ignace; Dominion Government,

Simcoe.

Pacific Coast: - Dominion Government, Estevan, Galilano, Malaspina, Margaret, Newington, Quadra and Rainbow; Union Steamship Co., Camosun; British Columbia Salvage Co., Salvor; R. Dollar, Robert Dollar; Grand Trunk Pacific Coast Steamship Co., Prince Albery, Prince George, Prince John and Prince Rupert; C.P.R., Mont-eagle, Princess Adelaide, Princess Alice, Princess Beatrice, Princess Charlotte, Princess Ena, Princess Mary, Princess May, Princess Royal, Princess Sophia, Princess Maquinna, Princess Victoria and Tees.

Of the foregoing vessels, the Dominion Government steamships Simcoe and Margaret are having the equipment installed, and the Northern Navigation Co.'s s.s. Noronic has just been completed. In addition to the vessels mentioned above, which are all engaged in purely Canadian or local service, there are a number of ocean vessels running to and from Canada, which are also equipped with the Marconi system, including the C.P.R. steamships on the Atlantic and Pacific oceans, the Canadian Northern Steamships' vessels, and numer-

ous others.

Marine Casualties in 1913.-A cablegram from London, Eng., states that marine insurance losses during 1913 were unusually heavy, aggregating \$35,000,000. During the 11 completed mothhs of the year 5,332 accidents of all descriptions to vessels were reported, 1,820 being collisions, 1,532 strandings, 895 weather damage, and 423 fires and explosions. The number of vessels reported totally lost was 216, of which 62 were

Wireless Telegraphy on Canadian Vessels St. Lawrence & Chicago Steam Navigation Co.'s Annual Report.

Following are extracts from the report for the year 1913 as presented at the annual meeting in Toronto, Jan. 13:-

The season of 1913 has been a satisfactory one financially to vessel interests on the Great Lakes. We regret, however, that in common with many other companies, we suffered from the unprecedented storm of Nov. 9 in the loss of the s.s. James Carruthers with many valuable lives, and we take this opportunity to extend our sincere sympathy to the bereaved families and relatives of our officers and men. We are pleased to state that the policy regarding insurance which you authorized some years ago has proved exceedingly satisfac-We have collected \$272,794.09 from the underwriters on the s.s. James Carruthers and after providing for the full balance of her cost out of our insurance fund, we still have the substantial sum of \$61,096.94 at the credit of that account.

On account of the increasing business offering, your directors have placed an order for a large modern side tank steamer for delivery next autumn, and very satisfactory progress has been made in her construction to date. To meet the cost of this vessel your directors issued \$140,000 of new capital stock, offering the same to the

shareholders at par. The directors, from the earnings of the season, have paid a dividend of 8%, amounting to \$68,800 and have carried the balance \$63,504.61 to the credit of profit and loss, which added to the previous balance makes \$222,150.57 at credit of that

account

| ASSETS. | |
|--|--------------|
| Four steamships—Iroquois, W. D. Mat thews, G. R. Crowe, and E. B. Osler. | |
| thews, G. R. Crowe, and E. B. Osler. | \$900,000.00 |
| New steamship, expended to date | 50,000.00 |
| Bills receivable | 20,000.00 |
| Balance in Dominion Bank | 315,935.57 |
| \$ | 1,285,935.57 |
| LIABILITIES. | |
| Capital stock, old issue | \$860,000.00 |
| Received on new issue | 40,875.00 |
| | \$900,875.00 |
| Accounts and bills payable | |
| Balance in insurance fund after deducting | |
| loss on s.s. James Carruthers less insur | |
| ance recovered from underwriters | 61,096.94 |
| Balance of profit and loss carried forward. | 222,150.57 |
| \$ | 1,285,935.57 |
| PROFIT AND LOSS ACCOUN | |
| Balance forward Jan. 2, 1913 | |
| Steamship earnings\$150,161.5; | 2 |
| Interest | |
| Published the state of the stat | - 151,661.93 |
| | \$310,307.80 |
| Cost of management | |
| Dividend 8% payable Jan. 2, 1914 | 68.800.00 |
| Balance carried forward | 222,150.57 |
| | |

At the annual meeting bylaws passed authorizing the directors to borrow money from the Dominion Bank should it become necessary; also respecting the issue of \$140,000 of new capital stock.

The directors, who were re-elected for the current year, are:—President, W. D. Matthews; Vice President and Secretary, J. H. G. Hagarty; Managing Director, A. A. Wright; other directors, Jas. Carruthers, Capt. S. Crangle, G. R. Crowe, C. S. Gzowski and Sir Edmund Osler.

Society of Naval Architects and Marine Engineers.

At the annual meeting in New York recently, W. N. McFarland, who presided, in commenting on the use of fuel oil for ship propulsion, said that oil is economical when its cost in cents per gallon is not greater than one half the cost of coal in dollars

per ton; i.e., oil at 2c. per gallon is more economical than coal at \$4 a ton.

Two papers dealt with the possibility of building unsinkable vessels, and the changes in their structure to accomplish Wm. Gatewood, whose paper treated the latter feature, expressed the opinion that subdivision by transverse bulkheads, combined with suitable freeboard, is the logical method of preserving and stability; that the proportion of the length of the vessel which may be damaged without danger of foundering should regulate the spacing and height of the bulkheads; and that for a coastwise steamer of standard type, carrying pas-sengers small in number compared with the Atlantic liners, no other subdivision would seem necessary.

H. A. Everett, Assistant Professor of

Marine Engineering, at the Massachusetts Institute of Technology, read a paper on the stability of lifeboats, which represented the results of inclining experiments and subsequent stability calculations upon four types of 28 ft. lifeboats:—1st, standard metallic; 2nd, standard wooden; 3rd, metallic; and 4th, collapsible wooden. The tests on the collapsible boat were not reassuring to those who believe in this type, as, even in an unloaded condition, water leaked into the pontoons or chambers between the decks. Of course, in any wooden boat, subject to the weather and wear of service, leakage is bound to occur; but when such leakage occurs in a space where bailing is impossible, the stability and buoyancy are seriously impaired.

Greater Safety at Sea.

The Revision Committee of the International Conference on Safety at Sea, which has been sitting in London, Eng., for some time, discussing rules and suggestions for securing greater safety for passengers and crews at sea, concluded its sittings Jan. 19. If the conclusions arrived at and the suggestions adopted by the committee are approved by the nations concerned, a time limit having been fixed at Dec. 19, 1914, it is provided that the regulations shall go into effect July 1, 1915.

Among a large amount of matters dealt with, the two chief features were the adoption of a plan for an arrangement lengthwise and crosswise of watertight compartments for vessels, which it is stated will make a vessel practically unsinkable; the exemption of passenger vessels carrying less than 50 passengers, or those plying within 100 miles of the shore, from the necessity of being equipped with wireless telegraphy, and the adoption of a miniature life-saving apparatus for children. President of the conference was Lord Mersey, who presided at the enquiry into the loss of the s. s. Titanic.

The Minister of Marine gave notice in the Dominion House of Commons, Jan. 21, that he would introduce a bill to amend the Canada Shipping Act so as to make its provisions conform to the international regulations adopted at the recent conference in London, Eng., which dealt with matters pertaining to greater safety at sea.

First Vessel Through the Panama Canal. -The passage of the first vessel through the Panama Canal, from the Pacific to the Atlantic, was accomplished, Jan. 7, when the crane vessel Lavalley left the Pacific entrance to the canal. The trip was done by stages, chiefly for the purpose of showing the practicability of navigation through the canal, and no passengers were carried. The Lavalley is 100 ft. long, 40 ft. beam, and 15 ft. draught.