

versary of the introduction of steam navigation in America was celebrated; 1907 holds the record for the largest boat ever built in Canada, the "Midland Prince," which was launched at the yard of the Collingwood Shipbuilding Company. It was constructed for the Midland Navigation Company, and chartered for the grain business between Port Arthur, Fort William, Duluth and Chicago. The Trent Valley Canal, which has been before the people of Canada for many years, added another notable achievement in July, when the hydraulic lift-lock at Kirkfield, overcoming a level of about fifty feet, was opened. We have seen the Georgian Bay Canal question again under consideration, and at the closing of the year find it somewhat of a more feasible undertaking.

The St. Andrew's locks on the Winnipeg River, fifteen miles below the city of Winnipeg, presents many exceedingly interesting and unique features. The work of construction was commenced during July. It was not long ago that the transportation from the Atikokan Iron Works of Port Arthur of the first cargo of Canadian pig iron east for the purpose of manufacture was recorded; also the first set of tubes for the subaqueous portion of the Detroit River Tunnel, which were sunk into position on October 1st. Great improvements have been made in our harbors and shipping facilities. New terminals, extensive changes and improvements in every line from coast to coast have added their quota to Canada's development for the year 1907. The Independent telephone movement, the Marconi telegraph development, municipal works of great proportions, and endless industrial achievements in every line have marked the year's undertakings.

#### TORONTO'S WATERFRONT PROBLEM.

It is plain to anyone who will seriously consider Toronto's waterfront question that the time has arrived when the occupancy of the waterfront by railways must be firmly and decidedly dealt with, in order that the rights of others than the railways may not be permanently destroyed. Many complications will undoubtedly arise in any case in the efforts to properly conserve all the interests involved. In the United States the foremost solution of traffic congestion and inconveniences suffered by Toronto is the viaduct. Relief obtained from overhead bridges could not be other than temporary. The growth of population and of railway traffic would soon make this situation so intolerable that relief from it would be demanded at any cost. The financial aspect of the problem should not be the primary consideration. Some day or other the railroad tracks along Toronto's waterfront will have to be elevated. When the environs of Toronto are considered part of the city's commercial heart, then the railroad companies and the city will be glad, if their foresight stands them in good stead now, that a substantial and useful viaduct runs along their waterfront. If the knack of looking into the future is not cultivated, the dirge of the viaduct that is not will be as continual and mournful as the chirp of the persistent sparrow. There is a strange hesitancy in dealing with improvements which involve the demolition of things that "have always done." Considerable opposition has been shown from some sources to the building of this viaduct, although the railroads say that the opposition is not theirs. This being so, the viaduct seems to be emerging from its theoretical blue-print shape into something that looks more substantial. From somewhere or other have emanated all sorts of fanciful and insuperable objections to elevated tracks. Such elevation is but a matter of mutual agreement and money. If hard-headed railroad directors, a persistent Board of Trade, and a determined city council cannot agree on the merits of an undertaking which is a necessity and a desirable improvement, one can have little regard for this trinity of authorities. A viaduct for Toronto's railroad traffic is an obvious necessity.

#### RAILWAY FATALITIES.

The epidemic of serious railway accidents, which seems to have struck Canada during the past few months, continues to swell the appalling list of fatalities. America holds two unenviable records. One, the annual amount of its fire loss; the other, the sacrifice of human life on the altar of its railroads. The following is the record since 1896:—

Year.	Pas- sengers.	Em- ployees.	Others.	Total.
1896 .....	11	46	104	161
1897 .....	7	76	130	213
1898 .....	5	98	167	270
1899 .....	20	119	145	284
1900 .....	7	123	195	325
1901 .....	16	118	183	317
1902 .....	19	146	165	330
1903 .....	53	186	181	420
1904 .....	25	192	178	395
1905 .....	35	206	227	468
1906 .....	16	139	206	361

In 1896, one hundred and sixty-one persons lost their lives on the Canadian railroads. Ten years later the number had increased to three hundred and sixty-one. In the United States alone, for the year ending June 30th, five thousand persons were killed in railway accidents and 76,286 injured, which represents an enormous and appalling increase over the figures for the preceding year. These figures include only accidents to passengers, and to employees while actually on duty, and do not include electric lines, on which casualties are increasing at a rapid rate. The large number of accidents on the American roads, compared with the few in Great Britain, is frequently a subject of comment. Two reasons exist for the happy dearth of fatalities there. Great care is exercised in every way, and a railroad accident in Great Britain is a serious thing for the railroad. It is not forgotten with the verdict of the jury. The Imperial Board of Trade thoroughly investigates the causes of each accident. If the railroad company is neglectful, the company suffers. If reforms are suggested, the company would find it unwise to refuse to carry out desirable improvements.

Mr. M. J. Butler, Deputy Minister and Chief Engineer of the Department of Railways and Canals, says that the return of accidents on Canadian railways is the dark side of the business of transportation. "The danger accompanying the movement of trains is always very great, and when to this is added negligence and carelessness on the part of both employees and those who suffer, we have the factors which roll up annually a regrettable record of sacrifice. While these accidents are apparently inseparable from railway traffic, they nevertheless are nearly always avoidable. Unless someone blunders, or something breaks, such disasters as usually occur could not happen. The strengthening of equipment, the elimination of risky methods of handling trains, the introduction of safeguards in many forms, and the enforcement of rigid inspection, are all steps in the right direction. These agencies are now being applied with more or less care on practically all our railway lines; and still the waste of life goes on." The circular in respect to defective equipment which the Railway Commission is sending to all Canadian railroads will draw attention to recent reports of inspectors to the effect that over thirty per cent. of the engines and cars in use, the total running into thousands, have defective safety appliances, and that many of the cars have defective air brakes. The circular will express the hope that within a reasonable time these defects in equipment will be rectified, and that it will not be necessary for the board to take further action.

It is not long since the investigation of the train wreck at Caledon, in which the driver and conductor were acquitted. The fact was clearly shown that the accused had received no definite instructions touching