

pre-eminent. The canal traverses the lowest depression of land in the range of mountains which extends from the Arctic Ocean to Cape Horn. This depression is occupied by the large inland sea of fresh water, Lake Nicaragua, and by its outlet, the San Juan River. The western border of the lake is within twelve miles of the Pacific coast, from which it is separated by a low divide of 42 feet. The lake is 110 feet above sea level. It drains towards the Atlantic Ocean through the river. This great natural feature is to be utilized in the proposed canal, both the lake and the river being navigable throughout most of the route proposed for the canal. Following is an extract from the pamphlet:

"The details of work to be done are, roughly, a break-water at Greytown, on the Caribbean Sea, dredging thence to the westward, 10 miles, through alluvial ground; then a lock of 31 feet lift. At 2 miles beyond there will be a second lock or double lock of the combined lift of 75 feet, and a dam across the small stream, Deseado, above which will be a basin affording $4\frac{1}{2}$ miles of free navigation; then a rock cut about $2\frac{3}{4}$ miles in length, followed by 12 miles of free navigation in the valleys of two small rivers, the San Francisco and the Machado. Here the water will be raised by dams and embankments, and the basins will connect directly with the San Juan River above a large dam across that river, which will raise the surface level in the river and lake and secure additional free navigation of $64\frac{1}{2}$ miles in the river and $56\frac{1}{2}$ miles across the lake. On the western side of the lake the canal enters a cut of slight depth in the earth and rock, 9 miles long, issuing thence into the Tola basin, with $5\frac{1}{2}$ miles of free navigation obtained by damming the small stream, the Rio Grande. At this dam a series of locks lowers the level 85 feet, and the canal proceeds in excavation down the valley of the Rio Grande, a distance of 2 miles, to the last lock, a tidal lock of 20 to 30 feet lift, below which the canal enters the upper portion of the harbor of Brito, $1\frac{1}{2}$ miles from the Pacific Ocean.

"From ocean to ocean the canal will be 170 miles long. There will be 16 miles of excavation on the east side, $11\frac{1}{4}$ miles on the west, $\frac{3}{4}$ mile for 6 locks, making a total excavation of 28 miles. There will be a total navigation in the several basins now existing and to be constructed, of 21 miles. Free navigation will be had in the San Juan River of $64\frac{1}{2}$ miles, and in Lake Nicaragua of $56\frac{1}{2}$ miles, a total of 121 miles. With the exception of the rock cuts in the eastern and western divides, the canal in excavation will be at all points wide enough for two ships to travel in opposite directions. Through the basins and in the lake and river vessels can pass each other and navigate with entire freedom.

"The traffic of the canal will be limited only by the time required to pass a lock. On the basis of 45 minutes as the time for this operation, and that but one vessel shall pass in each lockage, the number of vessels which may pass through the canal in one day is calculated at 32, or in one year 11,680; which, based on the average tonnage of vessels going through the Suez Canal, will give an annual capacity for traffic of over twenty million tons. The locks, however, are 650 feet long and 70 feet wide in the chamber, and two vessels, each of 2,000 tons displacement, can be passed in one lockage, thus materially increasing the estimated capacity. The time from ocean to ocean by steamers is estimated at twenty-eight hours, which includes one hour and twenty minutes for possible detention in narrow cuts."

TAX EXEMPTIONS.

THE value of real estate and buildings thereon in Toronto in 1889, exempt from all taxation, amounts to \$16,041,150, which, at $14\frac{3}{8}$ mills on the dollar, the rate of taxation this year, amounts to \$230,591. The assessments on real estate this year are upon an appraised valuation of \$116,283,077.

Toronto University is exempt on assessment of \$977,300 on buildings only, and Upper Canada College on \$477,600 on buildings only, to say nothing of the other very valuable real estate they own.

Following is a summary of real estate tax exemptions in Toronto in 1889:—

Dominion Government.....	\$1,833,204
Ontario Government.....	3,124,210
Public Schools.....	715,559
Roman Catholic Separate Schools.....	59,571
Roman Catholic Church Property.....	1,158,217
Protestant Churches Property.....	3,130,108
Salvation Army Property.....	94,934
City Property.....	2,301,803
Universities and Colleges.....	2,592,441
Charitable Institutions.....	438,386

The following shows the value of property held by the leading religious denominations in Toronto, exempt from taxation, in which are included churches, schools, missions and vacant lands, but not orphanages or colleges:—

Roman Catholic Church Property.....	\$1,158,217
Roman Catholic Separate Schools.....	59,571
Anglican Church Property.....	995,078
Methodist.....	837,117
Presbyterian.....	702,254
Baptist.....	229,393
Congregational.....	151,291
All other.....	214,975

\$4,347,896

The system of tax exemption in Toronto needs revision. As far as municipal protection goes—fire, police, etc.—and as far as general benefit is concerned from street and other improvements, from water and gas service, etc., all landed estate is on equal footing. All these benefits and advantages cost money, and it would be nothing more than right and just that all the property thus benefited should bear its equal and just proportion of the expense. Value is given to the exempted property here alluded to, by reason of the fact that it is located in a large and flourishing city; and it goes without contradiction that if it were located in Alaska or Labrador it would not be valued as highly as it now is. Are these advantages of any value to the owners of the property? Neither the Dominion nor the Ontario Governments contribute a dollar towards the expense of the City of Toronto, but they are quite as able to pay for these advantages as the tax payers of Toronto are to pay for the advantages to their private property. So, too, regarding the valuable holdings of the different church and educational organizations. Their property would be of but little value if it were not in Toronto; and as the general public have no voice in the management or control of these organizations—as they exist solely for the benefit of the few privileged ones, and not for the general use of the public—they should be made to contribute their just and equal share in the support of the city government. If the Roman Catholics, the Protestants, the Salvation Army, or the Young Men's Christian Association, desire to invest their money in real estate and fine buildings, they are free to do so, but the expense of the municipal care of it should be borne by them and not by the tax payers of the city generally; and it is as manifestly unfair to ask for tax exemption for this class of property as it would be to ask for tax exemption for factories, foundries, workshops and other industrial establishments. It is absolutely wrong and unfair to exempt from taxation the stately cathedral and tax the unpretentious workshop that rests beneath its shadow. One