

velopment, why should Canada indulge in expensive makeshifts? Why not solve at once, and for all time, the entire problem of water transportation by constructing a deep waterway from the ocean to the head of the Great Lakes,—the centre of America's greatest present and potential energies?

Such a development would necessarily also provide for a uniform regulation of the lake levels, which is so urgently needed.

OPINION OF GENERAL BIXBY, CHIEF OF THE U. S. ARMY ENGINEERS.

The question of deep inland water navigation has been raised in the form of inquiries within the past year, both in Canada and the United States; the matter, however, has received greater consideration in the United States than in the Dominion. In an interview at Washington, D. C., in March last, General W. H. Bixby, Chief of the U. S. Army Engineers, in whose department the matter falls, declared that the opening of the Great Lakes to the sea for ocean craft is merely a matter of money; there is no obstacle in the way that cannot be overcome. He also called attention to the fact that the investment involved in the construction of large vessels is so great that they cannot afford to pass slowly through long, narrow and confined channels, with their attendant dangers, and stated that the suggested improvements in the St. Lawrence would consist of six or eight dams creating small lakes through which would pass the largest vessels at practically full speed. By the suggested improvements, the number of locks would, however, be reduced from twenty-one to eight or six, thereby effecting a great saving in time of transit. The corresponding proposed improvement in the Welland Canal would reduce the number of locks there from twenty-five to three or four, **making this route incomparably the quickest and the safest to the sea, and providing amply for future commercial development.** Mr. John Kennedy, C. E., an acknowledged authority on the subject states "The problem in its present stage as I take it is not an engineering one but of trade and transportation route. Nobody doubts that the waterway is feasible as an engineering problem."

EXERCITIONS OF THE HON. CHARLES E. TOWNSEND, MEMBER OF U. S. SENATE FOR MICHIGAN.

On June 27th, last, the Hon. Mr. Townsend, member for Michigan, and Chairman of the Senate Committee on Coast and Insular survey, moved the following resolution in the Senate of the United States:

"That for the purpose of improving the St. Lawrence River from the Great Lakes, the President of the United States is authorized and directed to enter into an agreement with the Dominion of Canada which shall provide, upon such terms as may be agreed upon, for a waterway of sufficient depth and width to accommodate deep water or sea-going vessels, for the common use of both countries."

Both Mr. Townsend and General Bixby urged an investigation and General Bixby has suggested that the United States should contribute towards the cost of the proposed developments in Canada, expecting in re-