

For the inception of the work, and that a beginning may be made, it is suggested that the work should be commenced on the St. Lawrence River near Cornwall, where the U. S. Lake survey ended, and be continued down that River to the Gulf. The work would first consist of a primary triangulation, with sides of from 10 to 30 miles in length, as circumstances permitted, and would then be extended by carrying on a greater or less amount of interior topographical work, levelling, etc.

#### COST.

The cost would of course vary with the extent of survey, but it is thought that a sum of, say, \$15,000 would be sufficient to start the primary triangulation, which is the basis of survey. This amount would cover the cost of two observers, one on each side of a main chain of triangulation, and two station setting parties, and would pay all expenditure of the above for transport and travelling expenses.

Of course a much larger sum than that mentioned could be advantageously employed, but the annual expenditure of this small amount would provide a large quantity of valuable information, and would lay the foundation for more extensive prosecution of the work, when the circumstances warranted it.

The advantages accruing to the country by a geodetic survey would not be confined to the definite material advantages gained in topographical knowledge, and the coast and sounding surveys based upon the triangulation.

An additional and not inconsiderable advantage would be the stimulus given to scientific research. It has been the experience of other countries that men employed on geodetic surveys, having their attention drawn to the numerous branches of science involved, have, by their scientific and mechanical inventions, added greatly to the sum of knowledge in these branches, and indirectly to the material wealth and progress of the countries.

The Association of Dominion Land Surveyors has long felt that the time had arrived when a trigonometrical survey of the country should be begun, and the question has frequently been discussed at their annual meetings. In 1886 they took action in the matter by preparing a memorial on the subject, and submitted the same to the Hon. the Minister of the Interior; and recognizing the