# CONTINENT OF AMERICA.

### DOMINION OF CANADA.

#### CANALS OF CANADA.

## REPORT BY COMMERCIAL AGENT LEISHMAN, OF MORRISBURG.

#### CANAL DEVELOPMENT.

Previous to confederation the canals in Canada were owned by the provincial governments.

In 1867 the union of the provinces was effected and they became the property of the Dominion Government, subject to the control of the department of inland revenue, but their construction, maintenance, and repairs are provided for by the department of railroads and canals. The St. Lawrence and Welland Canal systems, in conjunction with the Sault Ste. Marie Canal and the Great Lakes, give an unbroken water communication from Duluth via Montreal to Liverpool, a distance of 4,618 miles, of which 71 miles are artificial navigation.

In 1841 the system of canals between Montreal and Lake Ontario was contemplated with a view of securing a depth of 9 feet at all stages of the St. Lawrence waters.

The St. Lawrence River, however, is from various causes subject to fluctuations, the extent of which it seems was not determined with precisio. at the time when the canals were originally constructed.

The observations and experience of subsequent years have proven that while the intermediate river affords a sufficient depth for vessels drawing 9 feet, in the canals themselves at certain periods of low water that depth can not be maintained, the bottom not having been sunk to an adequate low depth.

The Dominion canals constructed between Montreal and Lake Erie, are the Lachine, Beauharnois, Cornwall, Farran's Point, Rapide Plat, Galops, and Welland. The aggregate length of these canals is 70<sup>1</sup>/<sub>2</sub> miles, the total height overcome by locks is 533<sup>1</sup>/<sub>2</sub> feet and the number of locks is fifty-three. The greatest navigable depth is 14 feet and that at present to be found only in the Welland Canal, which was opened for the first time for 14 feet navigation during the season of 1888.

In the year 1871 it was decided by the Dominion Government to enlarge the canals on the St. Lawrence route, and it was subsequently determined that such a depth should be secured as would accommodate vessels of 14 feet draft. In conformity with this scheme of enlargement all permanent structures such as locks, bridges, etc., which are being built are required to be of such proportions as will accommodate vessels of 14 feet draft. The new locks are 270 feet long between the gates, 45 feet wide, and with a clear depth of 14 feet of water on the