

ernment, as the controlling authority over the harbors, had the right to carry out such works as were deemed necessary without considering what effect they might have upon the city's drainage system in that harbor. If any nuisance resulted the city must effect the remedy and pay the entire cost.

## COAST TO COAST

**Toronto, Ont.**—The Hydro-Radial Commission completed plans for a Toronto to Niagara Falls line.

**Vancouver, B.C.**—A prominent engineering firm is investigating the possibilities for the establishing of a modern steel producing plant.

**Port Arthur, Ont.**—The waterworks system has been transferred from the city council to the Utilities Commission as a measure of economy.

**St. Thomas, Ont.**—The annual report of the Hydro-Electric Company shows a surplus of over \$9,000 after deducting depreciation charges.

**Fredericton, N.B.**—The St. John's River International Commission report, which has been in preparation intermittently since 1909, is completed.

**Victoria, B.C.**—The Saanich waterworks are now in possession of the council. The water was turned into the Saanich mains for the first time on February 18th.

**Edmonton, Alta.**—According to statements just compiled by the provincial government, the province has had 326 miles of railway constructed during the year of 1915.

**North Vancouver, B.C.**—The co-operation of Vancouver is sought by the Board of Trade in efforts to secure the establishment of copper and zinc smelters on the north shore.

**Quebec, Que.**—The Civic Health Committee, after investigating schemes for the purification of the city's water supply, recommended the adoption of a sterilization system.

**Toronto, Ont.**—At a meeting of shareholders of the Consolidated Mining and Smelting Co. it was decided to purchase the entire stock of the West Kootenay Light and Power Co.

**Winnipeg, Man.**—The sixth annual report of the Manitoba Good Roads Association shows that 265 miles of roadway were constructed under the Good Roads Act in 1915.

**Edmonton, Alta.**—At the convention of the Alberta Association of Local Improvement District and Rural Municipalities the formation of a Good Roads Commission was urged.

**Calgary, Alta.**—It is expected that when the auditors have gone over the accounts of the municipal plant the cost of paving done last year will be \$2.50 or more per square yard.

**Edmonton, Alta.**—It is announced that the last spike in the construction of the Grande Prairie branch of the Dunvegan and Fort McMurray Railway will be driven on March 15th.

**Winnipeg, Man.**—Legislature proposes spending \$25,000 investigating road conditions in the north. Dauphin will be the headquarters of the engineer in charge of the work.

**Hamilton, Ont.**—It is announced that the Canadian Northern will build a fast steam line from Toronto to Hamilton, and will drop its electric railway scheme, provided it is given greater bonding power.

**Victoria, B.C.**—The Department of Lands, Forests Branch, recently sent some fir and cedar ties to the Great Eastern Railway Company of England, who carried out tests which demonstrated the superiority of Douglas fir.

**Mimico, Ont.**—A joint meeting of ratepayers of Mimico, New Toronto, and Etobicoke will be held at which the municipalities will endeavor to decide on what terms they will agree to the completion of the Toronto-Hamilton highway.

**Hamilton, Ont.**—Although no action was taken by the Board of Trade at their special meeting, the arguments presented would indicate that the consensus of opinion strongly favored building an up-to-date steel bridge in place of the proposed fill over the marsh, connecting up the Toronto-Hamilton highway.

**Sarnia, Ont.**—F. A. Dallyn, provincial sanitary engineer, Toronto, reported to the council on Ald. Thomas Langan's scheme for supplying the city with a pure water supply. It was pointed out that the changing shore line and the high temperature of the water where Ald. Langan had planned to have the intake, would condemn the plan from a sanitary standpoint.

**St. Thomas, Ont.**—The Elgin County Council decided to pass a by-law to take advantage of the provision of the Highways Improvement Act in order to build good roads throughout the county. The by-law is not to become operative until January 1, 1917, and in the meantime a comprehensive plan will be prepared for designating the roads and the amount of improvements required.

## THE WORLD'S SUPPLY OF POTASH.

For many years past the world's supply of potash has been in German hands owing to the fact that Germany possessed the enormous potash deposits of Stassfurt, which could produce potash more cheaply than any other locality in the world. The seriousness of this position is evident, since potash is an indispensable constituent of manures, without which modern agriculture could not be continued. In this respect the supply of potash is a matter which concerns everyone. Similarly, many British chemical industries, such as the manufacture of soft soap, alum, bichromates, glass, etc., depend for their continuance on supplies of potash.

In spite of the German potash monopoly the manufacture of potash compounds from other sources has lingered on in a small way in Scotland, Norway, France, Japan, Russia, and elsewhere, and in the last few years Italy and the United States especially, have endeavored to utilize new sources under their own control. Quite recently new deposits of salts somewhat of the Stassfurt type have been discovered in Spain and India.

The chief characteristics of manganese steel were summarized in a paper read before the International Engineering Congress, as follows: This steel usually contains 10 to 15 per cent. of manganese and approximately 1 per cent. of carbon. It is practically nonmagnetic and has a peculiar hardness, to which it owes a remarkable resistance to abrasion. It is extremely difficult to machine. It has high strength and toughness, but relatively low elastic limit. With care it can be forged and rolled. It has found its principal application in castings for crushing and grinding machinery and railroad crossings. Manganese steel has the peculiar property of being toughened and softened by quenching in water, resembling copper in this respect. All manganese steel castings are subjected to this treatment to remove brittleness.