- (2) Samples taken from common carriers represent waters stored for various lengths of time under varying conditions.
- (3) In view of the impossibility of accurately ascertaining the source and history of each supply examined reliance must be placed upon results of laboratory examination to a greater extent than is necessary or justified in estimating the quality of a supply from a known source with a known history.

CANADIAN TELEPHONE STATISTICS.

THE Deputy Minister of the Department of Railways and Canals, A. W. Campbell, Esq., C.E., has recently issued his report on the telephone interests of Canada for the year ended June 30, 1914. The report shows a steady growth, and also a distinctly noticeable movement, when compared with reports of previous years, toward the consolidation and centralization of telephone interests in populous communities, particularly in the province of Ontario.

A total of 1,136 telephone organizations made returns for 1914, as compared with 1,075 organizations in the previous year.

The number of miles of telephone wire in use in 1914 was 1,343,090.07—an increase of 250,503.30 as compared with 1913. This wire mileage for 1914 was divided as follows: Urban, 962,947.49; rural, 380,142.58. There was 1 mile of telephone wire in use for every 6.0 of the population, as against 6.8 in the preceding year. (The population of Canada on March 31, 1914, was estimated by the Census Office to be 8,075,000.)

The number of telephones in use was 521,144, representing a gain of 57,473 over 1913. There was one telephone in use for every 15.5 of the population, which places Canada in a foremost position among the nations with respect to telephone service. Only one other country, the United States, is known to have as large a number of telephones in use on the basis of population.

The wire mileage for 1913 and 1914 was divided into classes as follows:—

crasses as romows.	CONTRACTOR OF STREET		
	1913.		
Classes of wire.	Urban.	Rural.	Total.
	Miles.	Miles.	Miles.
Galvanized	40,296.02	282,906.76	323,202.78
Copper	12,837.02	50,140.41	62,977.43
Cable: overhead	274,136.03	3,811.25	277,947.28
underground	425,138.45	92.00	425,230.45
submarine	3,180.00	48.83	3,228.83
Total	755,587.52	336,999.25	1,092,586.77
	1914.	A. C. Barrer	
Classes of wire.	Urban.	Rural.	Total.
	Miles.	Miles.	Miles.
Galvanized	43,550.61	322,225.17	365,775.78
Copper	14,330.41	48,629.23	62,959.64
Cable: overhead	340,388.08	8,148.29	348,536.37
underground	563,431.84	251.00	563,682.84
submarine	1,246.55	888.89	2,135.44
Total	962,947.49	380,142.58	1,343,090.07

In addition to the internal elevators now in operation at Saskatoon (3,500,000 bu.) and Moose Jaw (3,500,000 bu.) the Calgary elevator (2,500,000 bu.) will be ready for next crop, according to a recent announcement by Sir George Foster.

COAST TO COAST

Moose Jaw, Sask.—The construction of storm sewers, costing \$26,440, has just been completed by the city.

Berlin, Ont.—The new incinerating plant, described recently in *The Canadian Engineer*, has been placed in operation and is giving good satisfaction.

Edmonton, Alta.—The Canadian Northern Railway has nearly a thousand men engaged on ballasting the main line west of this city. A number of small steel bridges will also be erected shortly.

Sarnia, Ont.—It is stated that at present the new waterworks system at Point Edward is supplying only about one-fourth of the demand. Steps are now being taken to effect a better flow of water into the infiltration basins.

Vancouver, B.C.—Two sections of the recently completed Connaught bridge over False Creek were damaged by fire on April 29th, effecting enormous inconvenience to traffic. The damage to the structure was estimated at \$50,000.

St. Thomas, Ont.—It is reported that a meeting of municipal representatives in Essex County is to be held with a view to organizing under the name of The Essex County Hydro-Radial Association. There is in view a project to purchase the Pere Marquette Railway between Windsor and London and to electrify it.

Brantford, Ont.—Work on the Lake Erie & Northern Railway south of Brantford, on the line to Port Dover, is being rushed. Track-laying started on May 6th at Simcoe and Mount Pleasant, while a steam shovel has been started on the grading at Simcoe. It is expected that the ballasting of these sections of the line will be started within thirty days.

Toronto, Ont.—On the Don section of the Bloor Street Viaduct some 225 men are at present employed by Messrs. Quinlan and Robertson, the contractors. One abutment has been finished. Work is well advanced on another and several others are under way. It is expected that the substructure will be completed this summer, so that steel construction may advance during cold weather.

Victoria, B.C.—It is intended to have a formal opening of the Sooke Lake Water Supply System during the convention of the Union of Canadian Municipalities, to have been held in Victoria during July. The convention has been cancelled, however, and the ceremonies relating to the waterworks system will necessarily require alteration. It it expected that the work will be completed next month.

Brockville, Ont.—The town has been advised by Dr. J. W. S. McCullough, chief officer of the Provincial Board of Health, that the proposed intake pipe will not meet with the approval of the Board unless a filtration plant is simultaneously proceeded with, and measures also taken to divert sewage from above the pumping station. Tenders have been called for the construction of the mechanical filtration plant and close on May 17th.

Brantford, Ont.—The electrification of the Lake Erie and Northern Railway between Brantford and Lake Erie has been the subject of controversy between the city and the C.P.R. A proposal was made by which the city should hand over the Grand Valley Railway between Paris and Galt, in return for the electrification. It is reported that the city refused, however, and further negotiations are being carried on concerning the purchase of that section of the city's municipal road by the C.P.R.