The Canadian Engineer

Established 1893

A Weekly Paper for Canadian Civil Engineers and Contractors

Terms of Subscription, postpaid to any address:

One Year \$3.00

Six Months \$1.75

Three Months \$1.00

Single Copies 10c.

Published every Thursday by The Monetary Times Printing Co. of Canada, Limited

JAMES J. SALMOND President and General Manager

ALBERT E. JENNINGS Assistant General Manager

HEAD OFFICE: 62 CHURCH STREET, TORONTO, ONT. Telephone, Main 7404. Cable Address, "Engineer, Toronto." Western Canada Office: 1208 McArthur Bldg., Winnipeg. G. W. Goodall, Mgr

Principal Contents of this Issue

	PAGE
Problems in City Surveying, by W. W. Perrie	257
Permit Weir in St. Lawrence	262
City Planning for Small Municipalities, by A. P. Hoover	263
Fifty Years Hence	264
Roads During and After the War, by E. P. Hooley	265
Windsor-Toronto Highway	266
B. Coli in Swimming Tanks	267
Road Work in Manitoba, by M. A. Lyons	267
Open Spandrel Arches, by Frank Barber	269
American Society of Municipal Improvements	260
Three-Day Convention of Engineers at Halifax	270
St. John Harbor, by Alex. Gray	271
Benefits of the Panama Canal	272
Engineer's Library	273
Personals	276

PORTS AND THE WAR

N page 273 of this issue is published a review by Mr. F. W. Cowie, chief engineer of the Montreal Ha bor Comm ssion, of Prof. MacElwee's "Port and Terminal Facilities." This review is very opportune on account of the annual convention this week in Boston of the American Association of Port Authorities, of which Mr. W. G. Ross, of Montreal, is president.

When Mr. Cowie questions whether the present port emergency effort in the United States is being carried on along the right lines, either for the present or for the future, he no doubt refers to the tremendous expend tures being made on terminal warehouses. These warehouses are being located near the ports but require in all cases a movement from the warehouses to the ship, and Prof. MacElwee states that it costs as much to transport freight from one pier in Boston Harbor to another pier in the same harbor as it does to transport it from Cuba to Boston.

It is not in a boastful spirit that Mr. Cowie declares that for the expenditure up to date there is no port in the world-and he has visited most of them-where there is anything nearly equal to the central concentrated division of the port of Montreal.

Mr. Cow e refers to the past lack of study of the requirements of American ports, and to the lack of skill in design. Canadians who have followed the record of the port at Montreal know that there has been no such lack there. For nearly one hundred years past, the engineers of the port of Montreal have made records for permanence of position, and have always stood well toward the front in the ranks of the engineering profession in Canada. When Sir John Kernedy recen'ly resigned as responsible engineering head of the Mon'real Harbor, he brought to a close a record of forty-one years of notable service in that work. Mr. Cowie's connection with the Montreal Harbor Commission dates back originally to 1886, although he has not been continuously connected with that work since then and has, in fact, been chief engineer of the commission only for the past twelve years. The latter period, however, has probably been the time of greatest development in the port of Montreal, in which development Mr. Cowie has taken a leading part.

SECURITY OF TENURE

N a letter written to the Municipal Engineer and Sanitary Record, of London, England, Mr. S. B. Bennett, an English engineer who spent several years in Canada, but who now resides in the United States, complains very bitterly about the lack of security of tenure of office among municipal officials in Canada. In commenting editorially upon Mr. Bennett's letter, the English paper claims that similar complaints have previously been made by other engineers.

Are conditions really quite so bad as depicted by Mr. Bennett and the English editor? There have undoubtedly been a number of cases of injustice to engineers by municipal councils in this country, but on the other hand we know many engineers who have retained municipal positions for much longer than the two years which Mr. Benett intimates to be practically the absolute limit of tenure of such office.

The status of the engineer in municipal affairs throughout the Dominion is undoubtedly unsatisfactory in some ways to the profession, but is it generally so poor as to warrant the wholesale condemnation expressed in Mr. Bennett's letter? Many of our readers are in municipal positions or have had experience in such positions, and if any of them care to express their views for the benefit of their fellow engineers, either in support of Mr. Bennett's viewpoint or in refutation of his statements, we would be pleased to publish any letters upon this subject. His letter was reprinted in our last issue.

ORDER EARLY,—THE LIBRARY'S GONE!

N an address to engineers of St. Paul and Minneapolis, Mr. Alfred D. Flinn, secretary of the Founder Engineering Societies of the United States, remarked that the most complete technical library in the world is in Berlin, Germany.

"The card catalogue of that library," said Mr. Flinn, "is so complete that any conceivable question can almost be answered from the catalogue itself." Mr. Flinn hopes that the date is not far distant when the combined libraries of the Founder Engineering Societies in New York City will eclipse even the Berlin collection.

We would suggest that Mr. Flinn be restrained from spending very much money in trying to increase his library to the size of the German one, because if the German library be really so desirable, General Pershing may find room for it among his baggage on the way home, ard he might be persuaded to turn it over to Mr. Flinn some time next year for addition to the books and index cards which Mr. Flinn already possesses. However, we theroughly approve of the timeliness of Mr. Flinn's remarks. Now is the proper moment for every one to speak up and let the boys in France know just what is wanted from Berlin. Order early,-the library has been spoken for already. It's Mr. Flinn's.