will be close and constant, and will be enforced to the letter

by the entire engineering staff.

Nearly all of the canal will be lined with concrete, and the layout of the concreting plant and metal formwork, which will cost over \$250,000, has been specially arranged with just two points in view: First, speed of concreting; and second, adaptability to the latest ideas in the scientific proportioning of materials.

## RURAL WATER SUPPLIES

N a paper presented to the American Water Works Association and republished in this issue, Dr. E. G. Birge, state epidemiologist of Iowa, makes the claim that the rural water supply is an integral part of the municipal supply, and that the citizens of any community as well as those officials to whom they look for better health conditions, should be as vitally interested in the remote well as they are in their neighbor's sanitary conveniences. Dr. Birge's line of thought is not new, nor does he claim any originality for it, but the the angle from which he discusses the subject may be new to some readers, and will prove interesting even to those to whom it is an old story. There can no longer be any doubt that any campaign looking toward better sanitary conditions must take into account the remote country districts, if we can still call them remote. Under present living conditions, all communities are so closely bound together that a campaign for better health conditions in one corner of a province loses a large share of its effect unless that campaign can be taken up throughout the entire province at the same

## STANDARDIZATION OF RESEARCH TESTS

RESEARCH tests are difficult to standardize, because research can be made successful only by the use of a great deal of initiative. It is, therefore, possible to standardize research tests only to the extent of standardizing the methods of securing the test data, and even these methods are likely to vary according to the objects of the tests.

One can readily appreciate, therefore, the difficulties experienced by Prof. Slater and his committee on tests of reinformation of the committee of the committ reinforced concrete floors in attempting to standardize such tests. Prof. Slater's report to the American Concrete Institute, which is published in this issue, was prepared by only three members of his committee, and Prof. Slater frankly admits that even these three members do not fully agree with the proposals set forth in his report.

The subject of tests of concrete floors is very compression hensive, and, as Prof. Slater points out, it would be very different or all difficult to develop standards likely to be of value in all cases; nevertheless, the general advice contained in Prof. Slater's report is well worth close study by any engineer who

may be called upon to conduct tests of this nature.

## PERSONALS

ALEXANDER PEDEN has been appointed engineer in charge of the structural drafting office of the Dominion Bridge Co., Ltd., Lachine, Que.

Howard J. McLean, of Calgary, Alta, has been appointed junior hydro-electric engineer, Reclamation Service,

Department of the Interior, at Calgary. F. N. SMAIL, formerly assistant engineer in the provincial highways department, Regina, Sask., has joined the city engineer's staff in Moose Jaw, Sask.

G. J. STEPHENSON, of Paynton, Sask., has been appointed resident architect in the province of Saskatchewan for

the Department of Public Works of Canada. D. C. COLEMAN, vice-president and general manager of Western lines, Canadian Pacific Railway Co., has been appointed President of the Kettle Valley Railway, British Columbia.

- J. A. DUCHASTEL, city manager of Outremont, Que., has been presented by the Greek government with the Silver Cross of the Savior for services renderd during the war to Greeks in Canada.
- J. A. Tom, who has been city engineer of Guelph, Ont., for the past 18 months, has resigned in order to accept a position as resident engineer on the staff of the Ontario Highways Department.

THOS. ADAMS, town planning adviser to the Housing Committee of the Dominion Cabinet, has sailed for England, where he will represent the City Improvement League at the International Conference on Housing.

R. R. BEEBEE, formerly assistant city engineer of Fredericton, N.B., has been re-appointed to that position. Mr. Beebee will assist City Engineer McDowell in the paving work that is being planned for this summer.

WILLIAM J. GRANT has been appointed assistant superintendent of the Department of Highways, province of Saskatchewan. As district superintendent, Mr. Grant has been in charge of the department's work in the vicinity of Saska-

- W. S. LEA, consulting engineer, Montreal, and J. A. DUCHASTEL, city manager of Outremont, Que., have been appointed consulting engineers to the Quebec Public Utilities Commission "at a remuneration to be approved by the commission."
- L. A. St. Marie and Ernest Drinkwater have been appointed resident water works engineers for the South Shore municipalities (St. Lambert, Montreal South, Longueuil, etc.), by the Quebec Public Utilities Commission, at a remuneration "to be fixed by an intermunicipal committee."
- W. A. SIBBETT, of Bracebridge, Ont., has returned to Canada from Barranquilla, Colombia, where he was engaged for six months on a survey of the harbor for the national government. Mr. Sibbett has now undertaken some survey work along the northern shore of Lake Superior for the Algoma Steel Corporation, of Sault Ste. Marie, Ont.
- G. C. McKay, engineer on the staff of the Public Works Department of Canada, who has been in charge of the department's office in Merritt, B.C., has been promoted to the position of district engineer for the Cariboo-Lillooet district, with headquarters in Quesnel. G. B. Whitehead, district engineer of Kamloops, will temporarily have charge of the office at Merritt, pending the appointment of a successor to Mr. McKay.
- W. J. STEWART, consulting engineer of the Department of External Affairs of Canada, has been appointed by the Dominion government as its representative on the International Committee of Inquiry which is meeting in Paris to draft general conventions on freedom of transit, international ports and international railways in order to facilitate the work of the League of Nations in regard to transportation problems. The British Empire has two representatives on this committee, of which Mr. Stewart is one. Mr. Stewart is now in Paris, studying the vast amount of data which must be considered in the work of the committee.

## **OBITUARY**

HON. R. B. GLENN, one of the three members of the United States section of the International Joint Commission, was found dead in bed in the Royal Alexandra Hotel, Winnipeg, last Sunday night. All members of the commission were in Winnipeg to attend a hearing in the St. Lawrence navigation and power investigation. Mr. Glenn was formerly governor of North Carolina. He was born August 11th, 1854, in North Carolina, and graduated from the University of Virginia, where he and Woodrow Wilson were class-mates. Mr. Glenn was a lawyer, and at various times occupied the positions of state solicitor, United States district attorney and state senator. He was elected governor of North Carolina in 1904, and received his appointment on the International Joint Commission in 1913.