

PERSONALS

DUNCAN W. FRASER, managing-director of the Montreal Locomotive Works, Ltd., has been elected vice-president in charge of sales of the American Locomotive Co. and the Montreal Locomotive Works, Ltd.

E. J. OWENS, formerly office engineer of the St. John and Quebec Railway, has been appointed office engineer of the highway division of New Brunswick's department of public works. Mr. Owens will also continue to act as office engineer of the railway.

L. M. JONES, city engineer of Port Arthur, Ont., has been appointed chief engineer of the Warren Bituminous Paving Co. of Ontario. Mr. Jones has been city engineer of Port Arthur for the past nine years. He was at one time engineer of the Winnipeg Electric Railway Co.

W. H. SLINN, who has been employed as assistant city engineer of Kingston, Ont., on roads and pavements, has accepted a position with E. G. M. Cape & Co., Ltd., contractors, Montreal, as assistant engineer on the construction of one of the Canadian Connecticut Cotton Co.'s mills at Sherbrooke, Que.

C. A. BOULTON has joined the staff of E. G. M. Cape & Co., Ltd., contractors, Montreal, and is now in Sherbrooke, Que., as assistant engineer on the construction of Mill No. 2 for the Canadian Connecticut Cotton Co. Mr. Boulton was formerly on the staff of Murphy & Underwood, consulting engineers, Saskatoon, Sask.

RICHARD WAUGH, chairman and treasurer of the Greater Winnipeg Water Commission, who was recently appointed a member of the Saar Valley Commission, has been elected chairman of the latter commission at a salary of 150,000 francs per annum and an expense allowance of 30,000 francs per annum. Mr. Waugh has resigned from the Winnipeg commission.

H. SPRINGER, formerly municipal engineer of St. Vital, Man., who recently returned from overseas, has been appointed engineer in charge of road building for the municipality of Dauphin, Man. Mr. Springer went to England with the 184th Battalion, but crossed to France with the Canadian Engineers and was officer in charge of a party of engineers attached to the heavy artillery.

CHAS. W. TARR has resigned as vice-president and general manager of Morris Knowles, Ltd., consulting engineers, Windsor, Ont. Mr. Tarr will rejoin the firm of Morris Knowles, Inc., of Pittsburgh, Pa., as resident engineer on the construction of a water filtration plant in Elyria, Ohio. Mr. Tarr has been general manager of the Canadian branch of the Knowles company since its incorporation, and has had charge of the design and construction of sewers and water works for the Essex Border municipalities. Morris Knowles, the president of the company, has not yet appointed Mr. Tarr's successor at Windsor.

OBITUARY

SAUL MERCIER, age 26 years, of St. Gregoire, Montmorency county, Que., a surveyor in the employ of the Quebec government, was stricken with scurvy while exploring in the wilds of the Hudson bay region. A tribe of Indians endeavored to help him and drove him 250 miles on a dog sledge to St. Felicien in the lake St. John district, whence he was taken to Quebec by train, but he was beyond medical aid and died last week.

The C. P. R. has ordered equipment valued at \$15,000,000. Much of this will be constructed in the company's own shops, but the Canadian Car and Foundry Co., Ltd., has secured a large order. The new equipment will include 2,500 box cars, 500 refrigerator cars, 500 automobile cars, 67 ore cars, 12 diners, 53 sleepers, 24 baggage cars and 13 compartment cars.

DRAINAGE FOR SHOAL LAKE AQUEDUCT

DETERMINATION of the best method of carrying out the work of underdraining the portions of the Shoal Lake aqueduct which have been affected by alkali, will be made by a sub-committee appointed a few days ago by the Greater Winnipeg Water Board. W. G. Chace, chief engineer of the board, urges that the work be begun at once, stating that the disintegration will have increased at least 40%, as compared with the $\frac{3}{4}$ -in. depth of affected material found last April.

Three lump-sum bids were received by the board, as follows: Carter-Halls-Aldinger, \$140,963.90 per mile; Fowler and Young, \$148,409.50 per mile; Northern Construction Co., \$158,004.50 per mile. The estimate of the chief engineer was \$99,277 per mile.

The sub-committee above mentioned will determine whether it is best to accept one of these tenders or to select a contractor upon a "cost-plus" basis. J. G. Sullivan, consulting engineer, who is now an alderman of the city of Winnipeg, and who was one of the engineers who reported on the disintegration last year, advises the latter course.

The Northern Construction Co. have offered to do the work at cost plus 9%, and Thomas Kelly and Son at cost plus 12½%. Fowler and Young refuse to assume any liability for keeping the aqueduct intact while underdraining.

"Only that portion of the conduit which is known to have suffered most can be treated this year," says Mr. Chace in his report to the board. "That mile and a half and slightly more was built during 1916. At the date of my report of April, 1919, it had lain under influence of the soil waters for two and one-half years. It was discovered that, over certain areas exposed for examination, the concrete had been softened to a depth of $\frac{3}{4}$ in., and that injurious influences had penetrated even deeper in places. Another year has passed and the injuries noted last spring must have progressed by at least 40% and possibly to greater degree. In places the reinforcing steel may now be exposed to rust and decay. Even brief delay in proceeding with the work of preventing further injury will prove very serious."

CANADA MAY GET THIS TROPHY

AT a meeting of the New York section of the American Water Works Association held recently, Secretary John M. Diven announced that the Hill trophy, to be held for one year by the section showing the greatest percentage of increase in membership during the previous year, would again be in the field for competition. The score as it now stands is as follows:—

Section.	Increase %	Section.	Increase %
California	13	Illinois	10
Canada	20	Iowa	28
Central States	21	Minnesota	18
Four States	14	New York	16

At the monthly luncheon of the Ottawa branch of the Engineering Institute of Canada, held last Thursday in the Chateau Laurier, Alex. Johnston, deputy minister of marine, delivered an address on Canada's mercantile marine. Mr. Johnston declared that the cost of Canadian-built boats has not been excessive. He read a letter showing that the English price last June was £33/10 per ton at the time contracts were placed in Canada at \$167.50 per ton.

At the eighteenth annual meeting of the Ontario Good Roads Association, held last week in Toronto, Lucius W. Allen, civil engineer and contractor, of Belleville, was elected president for the ensuing year. Other officers elected were: Vice-presidents, T. J. Mahoney, Hamilton, and W. H. Brown, Chelsey; secretary-treasurer, Hon. George S. Henry, Todmorden. Directors—F. A. Senecal, Plantagenet; J. A. Sanderson, Oxford Station; William Nugent, Belleville; W. H. Pugsley, Richmond Hill; Major T. L. Kennedy, Dixie; J. E. Jamieson, Singhampton; John Currie, Strathroy; J. E. Waters, Niagara-on-the-Lake; and S. L. Squire, Toronto.