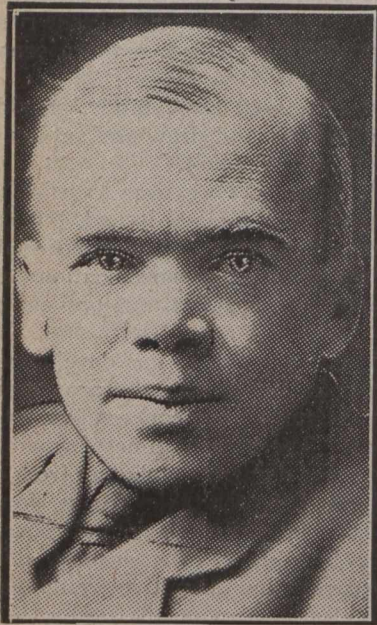


the generator cannot be connected to the bus until the excitation voltage has reached the normal value. The waterwheel gates are then partly opened and the generator comes up to approximately normal speed. It is then connected to the bus without field through an iron-core reactance. Then a weak field is applied. Next it is raised to full normal value, and then the reactance is short-circuited. The contact-making ammeter opens the gates to full gate opening and the generator then carries full load in about forty seconds after either the control button or the float switch is closed.

PERSONALS

W. R. WORTHINGTON, engineer of sewers, Department of Works, Toronto, was successfully operated upon last week at the Wellesley Hospital, Toronto, for appendicitis.

Lieut.-Col. GEORGE G. NASMITH, director of laboratories of the Department of Public Health, Toronto, received the degree of D.P.H. (Doctor of Public Health)



last week at the University of Toronto. Col. Nasmith, who returned from France where he was in charge for some time of British army sanitary work, passed the examinations for this degree with a high mark. Col. Nasmith is now entitled to the very distinctive letters of C.M.G., M.A., Ph.D., D.Sc., (an honorary degree conferred a year ago) and D.P.H. He was born in Toronto forty years ago and graduated from the University of Toronto in 1900. Since his return from France he has written a book on army

sanitation work. Among other research work which he has directed since his return, were the experiments regarding the fertilizer value of activated sludge, which were described in a recent issue of *The Canadian Engineer* in an article by Col. Nasmith and G. P. McKay.

JAMES HUNTER, of Toronto, has discontinued the operation of the Hunter Structural Steel Co., Toronto, and has joined the Submarine Boat Co. at Newark, N.J., having charge of two ways.

R. P. DRYER, assistant sales manager, Canadian Allis-Chalmers Limited, Toronto, has resigned to accept a position in the Pittsburgh office of the Allis-Chalmers Mfg. Co., of Milwaukee, Wis.

JAMES H. SPICER, recently chief draftsman and shop superintendent of the bridge department of Canadian Allis-Chalmers Limited, is now works manager for C. W. Hunt Co., Inc., West Brighton, N.Y.

C. HAYWARD, formerly of the city engineer's department, Sault Ste. Marie, Ont., has been employed by Morris Knowles, Limited, Windsor, Ont., in connection with the proposed construction of the Essex Border sewerage interceptor.

MORRIS KNOWLES, consulting engineer, of Windsor, Ont., and Pittsburgh, Pa., has incorporated his Canadian firm. Mr. Knowles will be president of Morris Knowles, Limited; Chas. W. Tarr, vice-president and general manager; J. M. Rice, secretary.

J. G. SEYFRIED, C.E., lately of the Lackawanna Bridge Co., and formerly structural engineer of the Grand Trunk Railway, Montreal, and at one time connected with the bridge department of the Canada Foundry Co., has been appointed structural engineer of the Submarine Boat Co. at Newark, N.J., and will have charge of all structural design.

F. A. DANKS, who has been in charge of the field work at both the slow and rapid sand filtration plants at Toronto Island, has resigned from the works department of the city of Toronto to join J. B. Nicholson, Limited, Hamilton, Ont., in superintending the construction of reinforced concrete reservoirs, coal storage plants, grain elevators, etc. Mr. Danks is a graduate of S.P.S., Toronto, class of 1908.

J. H. BILLINGS, B.A.Sc., University of Toronto, will read a paper on the "Strength of Cast Iron in Bending as Affected by Variations in Cross-Sections," at a meeting of the Ontario Section of the American Society of Mechanical Engineers, to be held next Monday evening at the Engineers' Club, Toronto. Mr. Billings' paper will deal particularly with the research conducted during the past year at the University of Toronto. The meeting will be attended by Mr. Rice, of New York, who is the general secretary of the society.

Capt. R. H. NICHOLS, formerly partner in the firm of Vandeleur & Nichols, electrical and mechanical engineers, Toronto, spent a few days in Toronto this week on furlough preparatory to leaving for India, where he has been appointed general manager of the Bengal Iron and Steel Co., Limited. Capt. Nichols enlisted within a month after the declaration of war and was attached to the medical corps. He has been in service for forty-four months in various positions, both at the front and in British Government departmental work. He has not been wounded or sick for a day since he left Canada. His former Toronto firm was wound up within a few months after the declaration of war, as Mr. Vandeleur also decided to enlist, and is now serving in France as a captain in the Army Service Corps.

OBITUARIES

DAVID WEBSTER, chief engineer of the Brantford waterworks system since its inception over 40 years ago, died at his home in Brantford on May 17th, as a result of gangrene. He retired from the civic service a couple of years ago, and was succeeded by his son.

JAMES BOYD, C.E., resident engineer at Hamilton, Ont., for the Grand Trunk Railway, died Monday evening, May 20th, at St. Joseph's Hospital, Hamilton. Mr. Boyd had been ill with pneumonia for eight days. He was born in 1877 in Airdrie, Scotland, and was a graduate of Glasgow University. He was engaged in railroad engineering in Great Britain before coming to Canada seven years ago to join the Grand Trunk. He was an assistant engineer on the G.T.R. staff at Toronto for four years, then receiving the appointment at Hamilton. Interment was in Mount Pleasant Cemetery, Toronto. Mr. Boyd is survived by a mother and two sisters, all resident in Scotland.