

ing acquaintance with business methods, business law and who also understands men.

The demand for this type of engineer has been so insistent of late years that heads of schools of engineering recognize it, and many of them have already adopted courses which provide not only for specialization along mechanical or civil engineering lines, but also studies in such subjects as will more adequately enable engineers to fill positions where executive ability and business sense are called for.

PERSONAL.

ARTHUR W. ODLUM, city electrician of Port Alberni, B.C., has resigned his position.

EDWARD J. O'NEIL, reeve of Sandwich South, has been appointed superintendent of road construction for Essex County.

W. L. BIRD, local manager for the Kaministiquia Power Company, Fort William, Ont., has been elected a director of the company.

J. H. DUBUC, civic engineer of bridges and subways, Montreal, has been elected a member of the American Society of Municipal Improvements.

C. A. MULLIN, of New York, who was at one time commissioner of public works in Milwaukee, has been engaged by the city of Montreal as pavement inspector.

WILLIAM S. COOK, engineer, Canadian Porcelain Co., of Hamilton, Ont., has been elected an associate member of the American Institute of Electrical Engineers.

ELLIS THOMPSON and H. B. ELLSWORTH have been engaged by the Ontario Bureau of Mines to map the Rognon and adjoining properties near Dryden, Ontario.

SMITH CURTIS, former British Columbia minister of mines, has been in Montreal, Que., endeavoring to arrange for the opening of a zinc smelter in British Columbia.

Lieut.-Colonel C. J. Burritt, engineer of Barrifield Camp, near Kingston, Ont., has been transferred to Ottawa and will be succeeded by Captain PALMER, R.C.E., Halifax.

A. VAN ZWALUWENBURG, formerly associated with Walter Harvey Weed in the preparation of the Copper Handbook, has taken a position as chemist for the Nipissing Mines, Limited, Cobalt, Ont.

LEONARD FOULDS, senior partner of the firm of Foulds & Bowes, architects and engineers, Toronto, and son of Sir Samuel Foulds, one of the leading surgeons in England, has "signed up" with the 220th York Rangers as a sergeant.

GEORGE W. FULLER, consulting engineer of New York City, has been awarded the Edward Longstrath medal of merit by the Franklin Institute, Philadelphia, for a paper on "Biochemical and Engineering Aspects of Sanitary Water Supply."

EDWARD FITZGERALD, late of the Canadian Pacific Railway Company's Purchasing Department, and since February last purchasing agent for the Imperial Munitions Board, has been appointed assistant to the chairman of the board, Mr. J. W. Flavelle.

Capt. JAS. G. ROSS, who went to France with the 13th Canadian Battalion Royal Highlanders of Canada, and was wounded at Festubert, has returned to Canada and resumed his practice as consulting mining engineer with the Milton Hersey Co., Limited, Montreal.

Lieut. WILLIAM DUNBAR, Black Watch, who is unofficially reported wounded, was a civil engineer and surveyor in British Columbia. When the war broke out he went to England and joined the Sportsmen's Battalion, afterwards transferring to his present regiment.

M. E. BRIAN, city engineer of Windsor, Ont., has been appointed chairman of the Board of Engineers which will prepare plans for a joint water and sewage system for Windsor, Walkerville, Ford City, Sandwich, Ojibway and Sandwich West. LEONARD RICE, assistant engineer of Ojibway, was elected secretary.

T. J. VAUGHAN-RHYS, for several years associated with various mining enterprises in Portland Canal division and other parts of the northern coast district of British Columbia, recently took charge of development work at a mine in Cedar Canyon district, on the State of Washington side of the international boundary line.

Lieut. PETER D. D. LYALL, of the Peter Lyall & Sons Construction Co., Limited, Montreal, has received an appointment with the 190th battalion. Lieut. Lyall was born in Montreal in 1877, and since the death of his father, the late Peter Lyall, has had charge of the firm, which has done extensive contracting work all over Canada.

A. M. MORRISON, of the Canadian Engineers of the British Army, has been awarded the Distinguished Conduct Medal for conspicuous gallantry. He also has received a commission as lieutenant in the Canadian Engineers. At the outbreak of war Mr. Morrison was an engineer engaged in the construction of the Pacific Great Eastern Railway in British Columbia.

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Lieut. L. B. REYNOLDS, of Nelson, B.C., one of a number of Kootenay mining engineers who a few weeks after the outbreak of war volunteered for active service and were soon engaged in engineering work on the Continent, was one of several wounded men who returned to Canada last month. Several years ago Lieutenant Reynolds was manager of the Eureka copper mine, at the head of Eagle Creek, a few miles west of Nelson, B.C.

A. F. MACALLUM, B.A.Sc., C.E., commissioner of works, Ottawa, Ont., has announced the organization of his department as follows: Assistant engineer, FRANK C. ASKWITH; pavement engineer, L. McLEAN HUNTER; sewers, incinerator and garbage, WILLIAM F. BRICE; sidewalks and surveys, NORMAN B. McROSTIE, P.L.S.; mechanical engineer of waterworks, L. L. GISBORNE; bridge engineer, ROBERT HENHAM; street cleaning, watering and oiling and oversight of the district foremen, GEORGE LITTLE.

JOHN EDWARD HANLON, B.A.Sc., has been given a commission in the Canadian Engineers in the tunneling corps, and will go to Valcartier for two weeks' preliminary to going overseas. Lieut. Hanlon was born in Guelph, Ont., got his early schooling there and graduated with honors in his science course at Toronto University. He was in Chile when the war broke out, and returned and enlisted as a private with the 170th Battalion. He has had experience about Cobalt, and was for four years at the Hollinger mines. Being anxious to get to the front he went over to the engineers, and his training won him a commission.