to drink any of the glasses of water and to call out the numbers of the glasses in which they could taste chlorine. There were different amounts of chlorine in the various glasses, he said diplomatically. He then handed to the mayor a certified list showing the numbers of the glasses that contained the chlorinated water. Nearly every man who claimed that he could taste chlorine, had picked a glass of water that had not been chlorinated.

Such incidents are amusing, but the attack upon chlorination that has been published by *Conservation* is more serious and unfortunate. *Conservation* says that chlorination is a menace to health. We say that chlorination is a boon to humanity. Within the past few years it has saved thousands of lives, many more thousands of cases of illness from typhoid and other water-borne diseases, and millions of dollars. It is not at any time a substitute for filtration, but it is at all times a valuable aid and adjunct to filtration. Chlorination has proven its case; *Conservation* **has not.**

In conclusion, it is only fair to *Conservation* to state that its "warning" regarding chlorination was well intentioned. *Conservation* has no axes to grind and has no reason to be inimical to any process excepting from a belief that the public health is concerned. The Commission of Conservation has the interests of the public truly at heart. What caused its attack upon chlorination, no doubt, was the tendency of many towns to think that they are doing enough in the interests of a pure water supply if they chlorinate the water, when as a matter of fact they need both filtration and chlorination. *Conservation's* intentions were good; municipalities should be warned of the need for filtration in addition to chlorination; but there was no need to decry the merits of chlorination in giving such warning.

PERSONALS

E. DRINKWATER, consulting engineer, has moved his office from Montreal South to 180 St. James St., Montreal.

G. C. MCDOWELL, formerly town engineer of Truro, N.S., has been appointed city engineer of Fredericton, N.B.

H. M. MILLER, superintendent of the Waterton (Ont.) Light and Heat Board, has accepted a position as "Hydro" engineer at Carleton Place, Ont., in connection with the "Hydro" extension there.

MAJOR DOUGLAS H. NELLES, of Ottawa, has returned home and will rejoin the geodetic survey. Major Nelles has been in France for two years as O.C. of the 19th Co., Canadian Forestry Corps.

IVAN E. VALLEE has been appointed chief engineer and director of railways, Department of Public Works, Province of Quebec. Mr. Vallee will act as engineer of the Quebec Public Utilities Commission.

MAJOR A. M. JACKSON, of Brantford, has been appointed engineer of Brant county, Ontario. Before enlistment, Maj. Jackson was in private practice at Brantford. He returned recently from overseas.

JOHN C. MACLENNAN, professor of physics at the University of Toronto, who for the past two years has been in England as special scientific adviser to the British Admiralty, has returned to Toronto.

LT.-COL. C. H. MITCHELL, who recently accepted appointment as dean of the Faculty of Aplied Science, University of Toronto, has been promoted in military rank and is now Brigadier-General Mitchell.

A. S. CLARSON, general secretary of the Canadian Association of Building and Construction Industries, expects to make a trip covering the entire Dominion at an early date. In all of the principal cities he will organize branches in accordance with local conditions.

MAJOR JOHN LEY RETALLACK has been appointed public utilities commissioner for British Columbia. Major Retallack served five years with the Royal North West Mounted Police, and after his discharge in 1889 settled in the Kootenay district. He has had experience in railway construction, banking, mining and corporation accounting. He was at Ypres and the Somme.

WALTER JOSEPH FRANCIS, who was recently elected one of the vice-presidents of the Engineering Institute of Canada, was born January 28th, 1872, at Toronto and was educated at Toronto Collegiate Institute and the University of Toronto, where he graduated with honors in civil engineering with the class of 1893. During the summers of his years at the university, Mr. Francis was inspector and draftsman on the construction of the Toronto Belt Line Railway. Upon graduation he became topographer on the Nipissing and James Bay Railway location. A few months later he was appointed assistant engineer on the design and construction of the Toronto Union Station. In 1896 Mr. Francis became chief draftsman of the Central Bridge and Engineering Co. at Peterborough and two years later entered the service of the Department of Railways and Canals of Canada. He spent eight years in that department during which time he designed and had charge of the construction of two hydraulic lift locks on the Trent canal, and was also division engineer in charge of ten miles of canal construction. In 1906 he was employed by the firm of Ross & Holgate, consulting engineers, Montreal, as engineer in charge of the construction of hydro-electric works in British Columbia. The following year Mr. Francis became assistant manager and chief engineer of the Dominion Engineering & Construction Co., Montreal, and in 1908 entered private practice, his firm subsequently becoming incorporated as Walter J. Francis & Co., Ltd., including F. B. Brown, whom Mr. Francis took into partnership in 1910. During the past ten years, Mr. Francis has been Canadian correspondent for the "Engineer" of London, Eng., and has appeared as expert engineering witness in a large number of legal disputes. As consulting engineer Mr. Francis has reported on a considerable number of hydro-electric power propositions in various parts of Canada. He reconstructed the Campbellford plant and designed two plants for the Dorchester Electric Co. He reported on the public utilities of Edmonton, on the Don syphon for the main intercepting sewers of the city of Toronto, on water supply for the city of Moose Jaw (which he subsequently designed and constructed at a cost of over $500,000), on water supply for the city of Winnipeg, on troubles between the city and the contractor in conection with the Montreal filtration plant, on sewer tunneling and underground electrical distribution for Edmonton, on roads and waterworks for Pointe Claire, P.Q., on the construction of the Quinze dam for the Department of Public Works, and on many other civil and electrical problems in various parts of the Dominion. In 1910, Mr. Francis represented the Canadian Society of Civil Engineers on the committee appointed by the city of Montreal to revise the building by-laws and was later appointed chairman of the sub-committee in charge of the drafting of the new by-laws. In 1913, he was chairman of the committee of the Canadian Society of Civil Engineers that prepared standard specifications for concrete and reinforced concrete. He is a member of the Institution of Civil Engineers and the Engineering Institute of Canada, and has been a councillor of the Institute almost continuously since 1910.