

or rodmen on the excuse that they know very little about practical work and then "allowing" them to do detailing or instrument work in order that they may "learn." It is such actions as this on the part of the employing engineers that are forcing the juniors into the unions. It has been my experience that graduates are usually able to handle such work from the start without the preliminary "education" which their employers would have them believe is necessary.

The engineering schools are as much to blame for the present condition of affairs as any other agency, on account of their neglect to give these students any clear idea as to the real value of their services and as to the methods to be employed in placing them on the market to the best advantage. This knowledge is just as necessary to the young engineers as their mathematics, and they would not make such ridiculous offers as the one quoted above if they had received the proper instruction in the "engineering ethics" which Prof. Gillespie so ably defends.

If the entire graduating class of 1920 were sent out with the fixed idea that their services were worth a certain minimum, and instructed not to accept less, the employers would soon have to come to the limit set, and the union would have no ground in which to sow its seeds of discontent.

JOHN H. RYCKMAN,  
Designing Engineer,  
Department of Public Works,  
City of Chicago.

Chicago, Ill., March 23rd, 1920.

#### "UNIVERSAL" METERING RECOMMENDED

CITY Engineer Doane of Halifax, N.S., has asked his works committee to obtain tenders for the supply of 4,000 water meters. Mr. Doane recommends that every unmetered service in the city be metered. He says it is the only way in which an expenditure of one to two million dollars for a new water supply can be prevented. The city now obtains its water through two mains from Long Lake. The capacity of these mains is 11,000,000 gals. daily, which is all that can be obtained from that source in a dry year. The only way in which the supply can be increased is by going to an entirely new source. Therefore Mr. Doane recommends "universal" metering.

#### SASKATCHEWAN LAND SURVEYORS

AT the annual meeting of the Saskatchewan Land Surveyors' Association, which was held recently in Regina, papers were read by two members on engineering work at the front. Col. Garner read a paper on light railways, and Lieut. D. A. Smith on mapping. A resolution was passed instructing the council of the association to communicate with the Manitoba and Alberta associations of surveyors, with a view to close co-operation and united action in the development of the natural resources of the prairie provinces. The officers elected for the ensuing year are: President, D. Alpine Smith, Regina; vice-president, J. Lonsdale Doupe, Winnipeg; secretary-treasurer, H. S. Phillips, Regina. Councillors—J. E. Underwood, Saskatoon; and S. Young, Regina. Auditors—Begg & Murray, Regina.

The Oakoal Co., Toronto, has requested the Board of Control of that city to place a price upon the city's garbage under a 10-year contract. In reply, the board fixed the price at \$1 a ton, and stipulated that the company should pay a minimum of \$50 daily even if their requirements at any time should be less than 50 tons daily. The board is also asking for \$2,000 deposit as security, and stipulates that the agreement must be considered purely as a contract for the sale of a commodity and not as a franchise.

#### GETS MARKED CHEQUES; NOW MISSING

ACCORDING to daily newspaper reports, a warrant has been issued for the arrest of A. Sande, consulting engineer and architect, of Hamilton, Ont. Mr. Sande is said to be missing, and Provincial Detective Williams has taken possession of his office.

Mr. Sande, who is said to be a native of Switzerland, was formerly on the staff of engineers who prepared the Hamilton harbor plans, but some months ago he opened an office as consulting engineer and called for tenders for the construction of a million-dollar plant for the Cascapedia Pulp & Paper Co., of Baie de Chaleur, Que. Tenders were submitted on a cost-plus basis and were accompanied, it is said, by marked cheques for \$2,500. According to the newspaper report, Mr. Sande deposited some of these marked cheques and this action led to an investigation by the Hamilton Branch of the Association of Canadian Building and Construction Industries, and a warrant followed.

Mr. Sande's friends firmly believe that he will return and give a satisfactory explanation of his absence and of the deposit of the cheques. When he left Hamilton, Mr. Sande told friends that he was going to Quebec to open a branch office.

#### DESIGNS NEW SEPTIC TANK

DESIGNS have been completed by F. J. Whittaker, municipal engineer of South Vancouver, B.C., for a new septic tank, and have been forwarded for approval to Dr. H. E. Young, secretary of the British Columbia Board of Health. There are now about 4,000 septic tanks in South Vancouver, and considerable trouble has been caused by the absorption of sewage by the surrounding soil. A conference of local engineers was called about six months ago by the city commissioner, and these engineers made suggestions which have been adopted and worked out in detail by Mr. Whittaker, resulting in the designing of a new tank. If Dr. Young approves the design, householders will be encouraged to have their old tanks altered to meet the new design.

Secretary W. J. Baxter, of the Essex Border Utilities Commission, has resigned in order to accept a position as advertising manager of the Ford Motor Co. of Canada, Ltd.

Applications for the position of engineer of the Ottawa Suburban Roads Commission have been received by that commission. An announcement will be made in the near future regarding the appointment. The commission are now receiving applications for the position of superintendent.

Louis Garbi, who was well-known a few years ago among paving men in Montreal, recently returned to Quebec after a prospecting tour in the Abitibi region, and announced that he had discovered a rich vein of molybdenite. Mr. Garbi and his associate, Robert Clarke, of Buffalo, have secured permits to exploit a territory of 3,000 acres in La Corne Township, and claim that the ore they found is richer than any other similar ore previously discovered.

The Private Bills Committee of the British Columbia Legislature has recommended that the bill incorporating the "Association of Professional Engineers of British Columbia" be passed by the legislature, but that the bill should not become effective until April 1st, 1921. The object of this proviso is to enable interested persons to present any reasons which may be discovered as to why the bill should be amended in any particular before it becomes operative. The bill has already been amended considerably by the private bills committee. Coal and oil production, surveying, economic geology, factory construction, tunnelling and road construction have been removed from the scope of the Act. Residence within the province is not essential for membership and employees of public service corporations and governments are exempt from being licensed or registered or having to submit proofs of qualification.