all possible brains and energy in carrying out the work in the most ingenious manner from the very first shovelful of excavation.

Engineers, and also contractors, differ in their opinions whether the lump-sum, or unit-price, contract is or is not preferable to the percentage contract. Many articles have been written upon both sides of the subject. But if the percentage contract is to be widely adopted (and it has grown a great deal in popularity during the last few years), we venture to predict that the Beatty plan will be tried by many firms, and that the contractors will find it a very satisfactory form of contract.

## CANADA'S FUEL PROBLEM — SOME NATIONAL AND INTERNATIONAL ASPECTS

(Continued from page 151)

enable sane and businesslike development of Canada's lignite, peat and other fuel resources for the benefit of the nation, to be carried out by competent technical officials entrusted with this great and honorable responsibility. As we have already noted the work has been commenced.

Officials of the government of Canada, such as those in the Geological Survey, Department of Mines, the Commission of Conservation, and other organizations, have knowledge of existing conditions and of practical means by which much of the stress may be relieved. To carry out these measures of relief and to place Canada in a reasonably independent position with respect to fuel will take time; but there is no doubt that if matters are dealt with in a broad statesmanlike manner, and the necessary encouragement of financial and other assistance is given to those who are competent, Canada will, at a minimum of effort and expense, be relieved of a menace with respect to her coal supply which threatens not only her economic life, but the well-being of a large proportion of her citizens.

## EXHIBITORS AT WATER WORKS CONVENTION

In the June 19th issue of The Canadian Engineer there was published a list of the firms that exhibited at the American Water Works convention, June 9th to 12th, Buffalo, N.Y. It is very much regretted that several names were omitted accidentally from this list. In order to make the record of the meeting complete, it should be stated that in addition to the firms mentioned on page 550 of the June 19th issue, the following firms also had space: National Water Main Cleaning Co., New York City; Joseph Dixon Crucible Co., Jersey City, N.J.; United States Cast Iron Pipe and Foundry Co., Burlington, N.J.; Irving Iron Works Co., Long Island City, N.Y.; Badger Meter Manufacturing Co., Milwaukee, Wis.; McNutt Meter Box Co, Brazil, Ind.; Glauber Brass Manufacturing Co., Cleveland, O.; Richardson Phenix Co., Milwaukee, Wis.; and the Gaunt Co., Knoxville, Tenn.

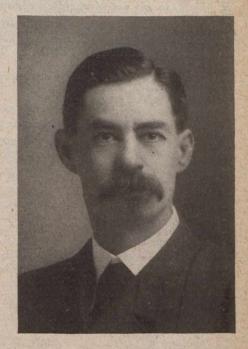
The damage caused by a recent cloudburst along the line of the Canadian National Railways, between Port Arthur and Winnipeg, was of greater extent than indicated by early reports. Four to ten inches of rain fell during forty-eight consecutive hours. Several miles of roadbed, eight bridges and thirteen culverts were washed away. During the time necessary for repairs to be completed, C.N.R. trains ran on the C.P.R. tracks.

City Architect Pearse, of Toronto, says that the first draft of the revised building by-law is in the hands of the city solicitor. As soon as the latter official is through with it, the first draft of the by-law will be printed. Mr. Pearse says that in the revision of the by-law, three points have been kept in mind, in the following order of importance: First, safety of the public; second, fire protection; third, economy of design. Mr Pearse advocates the establishment in Canada of one or more laboratories for testing Canadian materials.

## PERSONALS

LT.-Col. (Dr.) John A. Amyot, C.M.G., of Toronto, has been appointed Deputy Minister of the Department of Health that was recently created by the Dominion Government. Dr. Amyot will go to Ottawa next week and will com-

mence his new duties at once. Prior to going overseas in May, 1915, Dr. Amyot was professor of hygiene at the University of Toronto and director of the laboratory of the Ontario Board of Health. He went overseas with the No. 4 Canadian General Hospital of the University of Toronto. Upon his arrival in England, owing to his extensive experience in sanitation and health public work he was sent to France to take command of the sanitary section



of the First Canadian Division. A few months later he was placed in charge of the sanitary organization of the Canadian corps. In September, 1916, his services were requested by the commanding officer of the Second British Army, of which he was appointed assistant director of medical services, in charge of sanitation. Dr. Amyot then had charge of all sanitary work extending from the North Sea to Ypres and Armentieres. He was mentioned in despatches in December, 1917, and was awarded the C.M.G. the following New Year's Day. During the last period of his overseas service, he was consultant on sanitation work to the commanders of the Canadian forces in England. He returned to Canada early last month and is at present enjoying a well-earned vacation. Dr. Amyot was born about 1869 in St. Agathe, P.Q., and was educated at St. Michael's College and at the University of Toronto, from which latter institution he graduated in 1891 with the degree of Bachelor of Medicine.

CAPTAIN DAWSON, recently assistant engineer, Halifax Ocean Terminals, is now practising in Montreal as a consulting engineer.

EX-SENATOR C. D. CLARK, of Evanston, Wyoming, U.S. A., has been appointed a member of the International Joint Commission, succeeding the late James Tawney, of Minnesota. The appointment was made this week by President Woodrow Wilson.

MAJOR T. E. RYDER, D.S.O., M.C., has been appointed general manager of the Rudel-Belnap Machinery Co., Ltd., Montreal. Major Ryder recently returned home in command of the 7th Canadian Siege Battery after having been overseas for four years.

LIEUT. J. E. PRINGLE, formerly of the Queen Victoria's Own Sappers and Miners, Indian Army (Royal Engineers), has been appointed to a position on the engineering staff of the Hydro-Electric Power Commission of Ontario. Lieut. Pringle will be engaged in location work in connection with the "hydro-radials" between Niagara Falls and Toronto.

In an interview with the "Toronto World," Dr. C. J. Hastings, medical officer of health for the city of Toronto, states that if the water of Lake Ontario were not treated, it would not be safe for the people of Toronto to drink it.