of 4,500 feet. The work upon the wells has not been as satisfactory. Contractor Duff has sunk a well 310 feet; but at this depth difficulty was met, and the casing bent, with the result that the whole work had to be undone. At present Mr. Duff is awaiting the arrival of a water jet with which he will endeavor to sink the well deeper. Another well, from which it was expected that a flow of 200,000 gallons per day would be secured, will be equipped with a pump very shortly, and the additional water will be added to the output of the system.

Edmonton, Alta.—Superintendent Parsons of the Edmonton waterworks department has estimated that in 1914 it will take \$614,000 for the general operation of the plant, while \$210,000 will be required for interest and sinking fund. The superintendent plans to make enough out of the plant to lay aside \$100,000 for obsolesence fund. For the power plant, Superintendent Turner is asking for an expenditure of about \$500,000 for new machinery and extensions; and estimates the revenue of the power plant as follows: for power sold to the electric light and power department, \$504,726; for power sold to the street railway, \$241,613; for pumping charges to the waterworks department, \$176,982; making a total estimated revenue of approximately one million dollars.

Victoria, B.C.-Mr. H. A. Elgee, manager in Victoria, for the firm of Sir John Jackson, Limited, which is constructing the breakwater section of the Victoria harbor improvements, states that the progress to date is satisfactory in every way and that the work will be completed within contract time -December, 1915. About 300 men are engaged at present upon the work, either at Ogden Point, at the Albert Head branch, or on the office or general engineering staff. At the quarries, activity is now principally centred. Between 1,300 and 1,400 tons of rock are being taken out every day and deposited along the line of the breakwater, being transported to the harbor by five scows. And Mr. Elgee claims that it will not be long before the quarries will be so well developed that it will be possible to take out a much larger quant v of material than at present; that heretofore the work has been in every respect of a preliminary character; and that, anticipating this increase in the output of the quarries a new scow is being built for the work, while a steam hopper is being sent from Singapore. Another two months is expected to see the completion of the present operations which consist chiefly of depositing rock from Ogden Point out a distance of 1,000 feet, the object being to bring the breakwater up to a point 20 feet below low water mark. The character of this task can be appreciated when it is remembered that in some parts the water's depth is 70 feet. And, when this work is finished, the laying of granite blocks from Ogden Point out to sea, will commence.

Vancouver, B.C.-When unfolding to the waterworks committee recently the plan of the Federal Government for the development of False Creek, Mr. H. H. Stevens, M.P., said that the dredging facilities would be added to in order to complete the work of dredging the False Creek channel to a uniform depth and to a width of 350 feet; that it was the Government's intention to take over the old Kitsilano Indian Reserve of 80 acres and to develop it for public purposes, providing terminal facilities docks, piers, etc., for vessels and railways, in conjunction with the development of the creek; and that this would involve the expenditure of millions of dollars. While details of the whole scheme could not be outlined Mr. Stevens told the committee that the development work was very extensive, and that in view of this it would not be advisable to lay the Point Grey water main at a depth of 40 feet, which would, no doubt, interfere with the development scheme. However, when the plans had been worked

out to completion it might be possible to devise a means of safely laying the pipes to a depth of 40 feet; and if the department thought that the laying of the pipe interfered with its plans, it would not grant permission for the pipes to be laid.

## PERSONAL.

C. J. SIMMS, assistant division engineer of the Saskatchewan division of the Canadian Pacific Railway, with headquarters at Moose Jaw, has been appointed to a similar position in connection with the Vancouver division.

H. V. ARMSTRONG, who is at present on a brief holiday, returns to Estevan, Sask., next week as town engineer. Mr. Armstrong, a graduate in civil engineering of the University of Toronto, has spent 4½ years in Estevan, supervising the installation of a water supply, sewage disposal system, etc. The town will shortly go into the question of filtration of water supply.

H. B. WALKEM, who has been assistant division engineer for the Canadian Pacific Railway at Vancouver, B.C., for the past five years, and who, during 30 years of railway work in the West, has had charge of some prominent engineering works for the C.P.R., has been appointed engineer-incharge of the Kootenay and Boundary districts, with head-quarters at Nelson, B.C.

## OBITUARY.

The death occurred recently of Mr. Alfred Williams, formerly associated with Mr. M. J. Heney in the construction of the White Pass Railway and of the Copper River and Northwestern Railway. Mr. Williams was president of the Ocean Shore Line, with headquarters in San Francisco.

## CANADIAN SOCIETY OF CIVIL ENGINEERS.

The annual meeting of the Canadian Society of Civil Engineers, will be held at Montreal on January 27th, 28th and 29th. A later issue will contain details of the arrangements.

## COMING MEETINGS.

MINING AND METALLURGICAL SOCIETY OF AMERICA.—Annual Meeting will be held in New York City, January 13th, 1914. Secretary, W. R. Ingalls, 505 Pearl Street, New York.

AMERICAN CONCRETE INSTITUTE.—Tenth Annual Convention to be held in Chicago, February 16th to 20th, 1914. Secretary, E. E. Krauss, Harrison Building, Philadelphia, Pa.

NATIONAL CONFERENCE ON CONCRETE ROAD BUILDING.—Meeting will be held in Chicago, Ill., February 12th to 14th. Secretary, J. P. Beck, 72 W. Adams Street, Chicago, Ill.

AMERICAN SOCIETY OF ENGINEERING CONTRACTORS.—Annual Convention to be held in New York City, January 16th. Secretary, J. R. Wemlinger, 13 Park Row, New York City.

CANADIAN SOCIETY OF CIVIL ENGINEERS.—Annual Meeting will be held in Montreal, Que., January 27-29. Secretary, Prof. C. H. McLeod, 176 Mansfield Street, Montreal, Que.