have been built driving is a delight. The Lapresse road, one mile in length, was completed last year. That is the first mile in the "cut" through to St. Phillippe getting away from the impossible Laprairie section. The remainder of the nine miles is fast being constructed and will be completed, it is thought, by August. By that time all the various sections yet untouched will be linked up with the already completed good sections, and the good road will exist in its entirety. The last contracts for the work were signed immediately on the return from abroad of Sir Lomer Gouin, premier of the province, and the completion of the new highway is going on rapidly.

Victoria, B.C.—Now that Victoria is looking forward to the construction of one of the largest graving docks in the world at Esquimalt, some notes about the Gladstone dock at Liverpool, which is the largest in existence, will be of interest. The capacity is about 50 million gallons, and the cost was about $2,430,000, or about that of the proposed dock here. Work began at Seaforth in September, 1910, and after the necessary bank had been erected to keep the water out, in January, 1911, the work of excavation was begun on the shore proper. A commodious dock over 1,000 feet in length has been constructed, lined with half a million tons of concrete, with granite coping. The striking feature lies in the fact that the new receptable may be used not only as a graving dock, but as a wet dock, and that achievement is an interesting one. The ordinary graving dock is constructed in quite a different way from the wet dock. The sides slope and are provided with steps to facilitate the shoring of the vessel. The Gladstone dock is planned differently; it is so constructed that the giant vessel can either discharge cargo, as in the ordinary wet dock, or be repaired when the water has been run off. Exceptional circumstances necessitated the experiment, the plans for which, prepared by A. G. Lyster, were carried out by W. H. Jones. Dock gates were found to be impracticable. Two sets would have had to be fixed, and to obviate this it was decided to provide a sliding caisson. The caisson, when not in use, is kept in a chamber that runs off the dock, and is operated with ease. In another chamber the pumping machinery is installed. A commodious place, very like a small dock, it will be fitted with five Diesel engines, each of a thousand horse-power. The employment of oil engines is an innovation, for all the other pumping machinery on the dock estate is dependent on steam.

Edmonton, Alta.—Regarding the Rabbit Hills gravity system the Montreal experts have presented the following report: The system seems to have a number of points which would immediately commend themselves, namely, a natural intake which would form a rough settling basin in the river. Within a distance of a mile and a half of this point on the river there is a hill 120 feet above the general level of North and South Edmonton. Nearby there is a much smaller hill 32 feet higher than the former one. There is said to be in the immediate vicinity a supply of lignite which would enable the coal to be sent direct from the mine south to the boilers in the pumping station at the riverside. By locating the reservoir on the larger hill and running liberally proportioned mains to the city it would be possible to deliver water from this source at a pressure of, say, 30 or 35 pounds per square inch at the centre of the city on the general level. It would doubtless be necessary to raise this pressure in the city by booster pumps, although we have not included a price for such a pumping station in the estimates. On the plan we have indicated an intake and pump-house at the approximate elevation of 2,070, which would deliver the water through a pressure main to the raw water reservoir on the top of the highest hill, a distance of about two and a half miles through an elevation of 322 feet. From the raw water reservoir the water would pass by gravity through the filters to the main reservoir on the general elevation of 2,360, whence it would be delivered to the city through a double 36-inch pipe line about seven miles in length. Such a system would have the advantage of uniform continuous pumpage at the pump house, and it would give a low but uniform pressure in the pipe line leading to the city. The details of the estimate of cost of the Rabbit Hills gravity system are as follows: for a population of 100,000 the estimated cost is $6,263,133; a population of 150,000 will cost $7,189,983, and 200,000 will cost $9,447,172.

PERSONAL.

F. S. LAZIER, of the Department of Railways and Canals, who was stationed at Campbellford until recently, has just returned from an extensive tour of Western Canada. Mr. Lazier is now making Toronto his headquarters.

K. A. DUNPHY has been appointed resident engineer of the Canadian Pacific, District No. 2, Alberta division, with headquarters at Calgary, Alta., in place of J. Robertson.

MR. W. D. MURRIN, of London, Eng., formerly with the London United Railway, has been appointed mechanical superintendent of the entire system of the British Columbia Electric Railway Company, succeeding Mr. S. P. Thompson, of New York, who resigned.

MR. T. KENNARD THOMPSON, the well-known consulting engineer of New York, has been re-elected president of the Canadian Club of New York for another year.

MR. D. McD. CAMPBELL, city engineer of Sydney, N.S., has resigned owing to ill health, after serving the city for the past thirteen years.

MR. GEORGE H. TOD, of Toronto, who is the Canadian representative for Ashworth-Parker engines, Bennis mechanical stokers and Broadbent's cranes, capstans, etc., is making a six weeks' tour of Western Canada. Mr. Tod recently opened a western office at 601 Union Bank Building, Winnipeg.

MR. C. M. WATERMAN, manager of the Eugene Dietzgen Company, Limited, Toronto, is making a month's trip through Western Canada. Mr. Waterman will call on his return at his firm's Chicago factory, which is making every effort to fulfil all the requirements of the Canadian field. Mr. Dietzen, a brother of the founder of the firm, and one of the present heads of the business, will make an extensive trip through Canada later in the season.

OBITUARY.

There has just died at Hayward Heath, forty miles south of London, an Englishman whose name is known to railroad men throughout Canada; John Saxby, of the firm of Saxby & Farmer. He died, at the age of 92, on Wednesday, April 23. The first patent bearing Saxby's name was taken out in 1854, for a signal lamp with a movable inner case which changed the color of the light as the signal arm moved up or down. This was the joint invention of Saxby and W. V. Greenwood. Saxby's first interlocking patent—the invention which has made his name a household word among signal men all over the world—was taken out in June, 1856. His first installation was an interlocking of eight signals and six switches at Bricklayers' Arms Junction, where fifteen years before the semaphore designed by Gregory had been first introduced. In 1860, Austin Chambers patented an improvement on Saxby's idea, but a few months later Saxby made still further improvements, and thereafter kept the lead over all his competitors. His patent for preliminary latch locking