work; and the fact that the railway entered a 1,300-foot tunnel after spanning the canyon greatly increased the engineering difficulties experienced in its erection. An abutment was built on the tunnel side and the massive steel girders were placed in position by means of a huge derrick, which swung over the gorge. The main span of the bridge is 210 feet long, the total length of the structure being 245 feet. It rests on a pier which is nearly 100 feet down to rock; and it is built of truss girders and of the most substantial type. At low water the railway will cross the canyon at a height of about 80 feet.

Vancouver, B.C.—The preliminary work in connection with the dock upon which construction has commenced for Messrs. McNeill, Welsh and Willson, of Vancouver, consists of the erection of a wharf 308 feet long by 176 feet wide, a roadway approach, and the reclamation of a tract between the proposed dock and the railway bridge. The plans which have been prepared by Messrs. J. R. Matheson and Sons for the sheds and warehouse buildings to be constructed provide for two large structures 204 feet long by 75 feet wide, which will flank a central roadway and "gridiron" landing slip for scows. Additional loading facilities for barges will be provided on the western side of the wharf, and the reclaimed area between the eastern edge of the dock and the railway bridge will be utilized for trackage purposes. A strip 50 feet wide will be filled in, to connect the dock with the bridge. The warehouses will be of substantial construction and covered with galvanized iron. The roadway and the scow landings will also be enclosed. The dock will be approached by a driveway 200 feet long. A feature of the sheds will be the absence of pillars, massive trusses being used to support the roof.

Brandon, Man.—A joint power committee was formed in Brandon on March 5th, and at its session on the following day passed three resolutions, the first proclaiming that the committee recognized the importance to Manitoba of the preservation of the water powers on the Winnipeg River, and that it be represented to the government of this province that it is necessary in the provincial interests that the province vigilantly guard the rights of the province in the matter of the water flow on the said river. The second motion proposed that it be respectfully represented to the government of the province that is is expedient in the interests of this province that the matter of the distribution of electrical energy to the towns and villages, and as far as possible to the rural municipalities of this province, be made the continuous study of those experts in hydraulic and electrical engineering, and that it be represented that the matter may be a fit one upon which to invoke the continuous thought and attention of the engineering branches of the Manitoba university. The third resolution provided for securing an itemized statement of the power used between Portage and Carberry, and the same information regarding Carberry.

Victoria, B.C.—The report of the first year's work of the Water Rights Branch of the Provincial Department of Lands was given recently in the British Columbia Legislature by the Hon. W. R. Ross, Minister of Lands. He stated that a definite order of work was adopted and followed throughout the season in all the water districts into which the Province has been divided on the following basis:—Engineering investigation of old records; systematic and continuous work in stream measurement; a study of the proper duty of water; the prevention of wasteful use of water; the policing of streams; the economic distribution and delivery of water; the inspection of cisterns to determine their efficiency and safety; the determination of storage possibilities; and the investigation of water powers; also the chief draughtsman of the Water Rights Branch reports that a series of standard water rights maps, on a scale of 20 chains to the inch, has been inaugurated, and 228 of these have been drawn in 15 of the new water districts, each showing about 35 square miles, making a total of 8,000 square miles covered. Reports of engineers of the several districts are also submitted together with a series of valuable tables dealing with hydrographic stream measurements and a number of maps and diagrams showing the work of the department.

Montreal, Que.—During last summer about 60 miles of the 132 miles of macadamized road which the Quebec Government is building between Charlemagne and St. Augustin on the north side of the St. Lawrence River was levelled, and this year Mr. H. Beauregard, general contractor for the work, expects to have that district entirely completed. By next fall, it is expected that the completed road will extend as far as Berthier, which will exceed the 30 miles stipulated in the contract by 3½ miles. Mr. Beauregard has sub-let the eastern portion of his contract to Messrs. Massicotte and Gagnon, and is supervising personally the western section, or that which extends from Charlemagne to within 3½ miles of Berthier. The line for the greater part of the distance will be in full view of the St. Lawrence. Generally speaking, the old high roads are utilized, but where the grade is somewhat heavy the line deviates, the land being expropriated by the department having charge of the important work. Hundreds of gullies and ravines have to be crossed, but the statement was made yesterday by Mr. Beauregard himself that the remarkably favorable grade of 2 per cent. would be maintained throughout the entire road except a short distance near the Jacques Cartier River on the lower end of the contract. Besides the 30 miles from Charlemagne or more which the contractor expects to hand over this fall he will also level and additional stretch and everything will be done so as to secure the certainty of a completed road by the fall of 1915, the time specified in the contract.

Victoria, B.C.—The bill giving further aid to the Pacific Great Eastern Railway Company has passed its second reading in the Provincial Legislature. It provides for 30 miles of railway at $35,000 a mile, constituting an additional mileage over the 450 miles named in the original agreement between the Government and the company. This extra mileage is due to the fact that a deviation in the route was made by the engineers in the neighborhood of Clinton, as the route along the Fraser River was found not to be a feasible one, and the new alignment opened up a new section for settlement. It also provides for an increase of $7,000 per mile over the entire mileage of 480 miles, thus raising the guarantee to $42,000 a mile over the entire distance; and for 330 miles at $35,000 a mile into the Peace River country. The average cost of the Pacific Great Eastern is over $58,000 per mile, according to the estimates recently prepared by the engineers. This brings the total cost to about $27,840,000. If the guarantee is raised to $42,000 per mile, it will leave $16,000 a mile to be found by the Pacific Great Eastern, or an aggregate of $7,680,000. The whole length of the line between Vancouver and Clinton is of very heavy construction. The cost from the head of the sound to Clinton, a distance of 164 miles, has been over $61,000 per mile, or a total of something more than $10,000,000. The 44½ miles from Vancouver to the head of Howe Sound has been at the rate of $103,500 per mile, owing to expensive right of way in North Vancouver, and heavy rock excavation along the shores of English Bay and Howe Sound. The balance of the line, from Clinton to Fort George, has been of lighter construction, thereby reducing the average cost to $58,000 per mile.