

crushed stone was 183 cars, containing 5,570 yards; in 1913, 319 cars and 9,732 yards. In 1914, from Bird's Hill, the output of gravel was 189 cars containing 5,370 yards; in 1913, 213 cars and 6,440 yards. In 1914, the sales to the city storekeeper were 4,575½ yards crushed stone, 3,419 yards gravel, 91 yards sand, and 34 yards granite, a total of 8,119½ yards. Last year the sales were: crushed stone, 9,416 yards; gravel, 6,427 yards; sand, 388 yards; granite, 39 yards.

Toronto, Ont.—The contracts which have just been let by the Hydro-Electric Power Commission of Ontario in connection with the development of power at Eugenia Falls, will involve an expenditure of \$230,000. The work entailed is the construction of dams, canals and penstocks. Dam No. 1 will be a reinforced concrete structure 2,000 feet long, and varying in height from 40 to 50 feet; while Dam No. 2 will be similar, though not as large. Tenders are now being called for the necessary hydraulic and electrical equipment, which will be used to develop 4,000 horsepower; although the headworks, canals and storage reservoir of the undertaking contemplate an ultimate development of 8,000 horsepower.

Victoria, B.C.—The estimated cost of the work to be undertaken at Songhees Point, Victoria, B.C., and for which tenders are being called, is about \$250,000. A retaining wall, approximately 2,000 feet long and 6 feet above high water mark, extending from Songhees Point to the proposed Johnson Street bridge, is to be constructed; and 13 acres of land must be reclaimed. The successful contractors will probably have the option of two alternative schemes in connection with the construction of the retaining wall. One will be by surrounding the site by a cofferdam for the construction of the concrete in the dry, while the other alternative may be by means of cribwork. Considerable dredging will have to be carried out, as it is proposed to have 20 feet of water outside the retaining wall at low tide.

Cobalt, Ont.—A report from Cobalt states that about 120 feet of the Dominion Government 400-foot dam at the foot of Lake Timiskaming, has fallen away; and the cause for this is as yet unfathomed. The portion of the dam affected includes 3 piers on the Quebec side of the dam in the deepest part of the channel, 60 feet of sluice gates and 60 feet of piers. This dam was erected at the foot of the lake at South Timiskaming, and has given considerable trouble previously to the engineers. The water in the lake is falling very fast; and it is estimated that ultimately it will fall ten feet in consequence of this break. This will mean that the new wharf at Ville Marie will not be approachable by boats. The new wharf at Paradis Bay will be in a similar position. The wharves at New Liskeard and Haileybury will be effected only in a minor degree, since there is much better harborage at these points.

Vancouver, B.C.—The mining committee of the Vancouver Board of Trade recently reported to the board in reference to the advisability of encouraging the establishment of an iron and steel industry in Vancouver. The committee stated that there are ample supplies of raw material in the form of magnetite ore on Texada, Nelson, Redonda and other islands, and on the east and west coast of Vancouver Island. There are supplies of limonite ore at Quatsino, Barclay Sound, Green Lake, Chilliwack and other accessible points. Hematite ores are reported from Bella Coola, Bute Inlet and other points. Vancouver Island coal can be converted into suitable coke by the use of proper retort ovens; while there is plenty of limestone for fluxing to be had at nearby points. The committee also stated that pig iron could be produced at \$12.53 a ton, and added that there is a market for \$150,000 tons a year at \$25 a ton. If local coal cannot be made into proper coke the government is willing to remit the tax on coal imported for coking. There are no known deposits of iron ore of commercial value on the

Pacific coast south of British Columbia; but the copper ore shipped out of British Columbia in 1913 totalled 352,300 tons, valued at \$3,035,540.

Vancouver, B.C.—Announcement is made to the effect that, between the Okanagan sections of the Kettle Valley Railway, rail connections are now in course of construction along the entire route from Midway to Hope, which are to be completed within the next 3 months. The completion of a 15-mile link between Carmi and Penticton will mean that the entire line from Midway to Osprey Lake will be ready for service. Along this section, it is stated that bridge building is proceeding rapidly south of Penticton; and steel has been laid to Osprey Lake from which point a section of line is being built to Penticton. All recent publications in connection with progress being made with all sections of the Kettle Valley road, as well as the section of the V.V. and E., which is to be used conjointly by the two roads, would indicate that rail connection between the boundary and Okanagan points and Merritt, will be completely established this autumn.

Fraser River, B.C.—The work which is provided for by the sum of \$60,000 included in the supplementary estimates of the Dominion Government, is the removal of obstructions from the Fraser River, so as to construct a permanent passage for fish to their spawning grounds. Work has been in progress for some time at Hell Gate in the Fraser Canyon, where the river is only about 100 feet wide, and where last December the channel was made considerably narrower by a slide caused by the falling in of the C.N.R. tunnel just above Hell Gate. The contract for the dredging of the channel was given to the Pacific Dredging Company about three months ago; but another six months will be required to complete the work. Night and day shifts have been at work during the past months, and have been moving from 1,000 to 1,500 yards of heavy rock from the bottom of the river to a ledge on the C.P.R. side, 175 feet above water. The rock is being lifted and carried by an overhead cable way which carries a weight of up to 15 tons at each trip and moves 30 feet per second. It is stated that the type of carriage in use is the only one in Canada. It was made in Pittsburg, and carries either buckets full of small rock, or hooks on to 10 or 12-ton rocks. Mr. Stuart Cameron, vice-president of the company, has said that no less than 46 tons of dynamite are being used in the work.

Victoria, B.C.—Mr. J. S. MacLachlan, Government supervising engineer on the breakwater and pier contracts at Victoria, has announced that, during the month of May, 54,114 tons of rock were dumped at the Ogden Point breakwater site. This is a material advance on the amount accomplished in April; while it brings the total amount of rubble dumped since the breakwater contract was started up to 126,504 tons. The increase in May is attributed to the use of a dredge with a capacity of 500 tons. Also, during the month of May, 1,190 tons of granite blocks were laid on the rubble bed under the supervision of divers. Altogether, 1,000 cubic yards of material were excavated and levelled off on the foreshore area during May. This amount is considerably smaller than in previous months. At the site of the piers, during the past month, 7,036 tons of rip-rap were dumped; which material is to form the foundation of the concrete cribwork that is to be constructed on the big floating drydock now moored inside the Inner Harbor. The first shipment of steel is on its way overland to Victoria from the plant of Prior & Co., Nova Scotia; and cement is now under order from the Associated Cement Company, of Bamerton. The Grant Smith & McDonnell quarries at Esquimalt, whence much of the rubble for the contract will be secured, are being opened up; and it is expected that material will be shipped from that point this month.