COAST TO COAST.

Vancouver, B.C.—An engineering party of the Pacific Great Eastern Railway under the direction of S. A. Dice, has completed the final location between the Second Narrows through North Vancouver to Point Atkinson lighthouse, and is now engaged on similar work between the lighthouse and Newport at the head of Howe Sound. This is regarded as evidence of the intention of P. Welsh, the contractor, to undertake construction on the lower section without further delay. It has now been definitely established that the maximum grades between those two points will not exceed one per cent. The route will follow the shore line virtually all the way and will only be a few feet above high-water mark. Instead of winding past the Point Atkinson lighthouse the railway will cut through a natural draw east of the lighthouse, then strike Howe Sound and follow it all the way to Newport. The project of bridging several of the indentations along the coast has been abandoned and the road instead will be through a number of tunnels, one of them to be about 820 feet long, thus making several advantageous cutoffs. The construction from the lighthouse to Newport will be exceedingly heavy, as the cost of considerable of the milage, it is estimated, will be at least $100,000 a mile. The location of the line between Lillooet and the vicinity of Fort George, a distance of 290 miles, is now in progress. The work now being undertaken is on the lower section of the route north of Lillooet, actual construction on which is to be undertaken this summer. Eleven hundred men are now employed in the various camps along the route from Lillooet south along Seaton and Anderson Lakes and beyond to Pemberton Portage.

Ottawa, Ont.—Chief Engineer Bowden of the Railways and Canals Department, and Engineer Weller, who is in charge of the work on the Welland Canal, have returned from a trip to Panama, where they spent the past month studying and investigating the latest engineering developments as exemplified on the Panama Canal, with a view to applying the ideas to the new Welland undertaking. The government is anxious for the Welland to be the latest word in modern canal construction. The two engineers are starting work at once on designing the canal construction, and tenders will be called for as soon as possible. The preliminary work is already well under way, the route having been decided upon and the first surveys being also about complete. It is almost impossible for the contractors to get more than a start this year, but the next five years will see great activity along the line of the "big ditch" across the Niagara peninsula. The canal that is being planned is designed to meet future needs for a long period, and will be one of the greatest works of its kind on the continent.

Niagara Falls, Ont.—Regulation by the state of the amount of water which may be diverted from the Niagara River above the Falls on the American side for power purposes will be provided for in a bill introduced by Majority Leader Wagner, of the United States Senate. The measure, which embodied the recommendations of Attorney-General Carmody, recently submitted to the legislature by the governor in a special message, is designed to repeal practically all outstanding grants for diversion for power purposes and to limit diversions to the Niagara Falls Power Company and the Hydraulic Power Company.. If the measure becomes law, future diversions by these two companies will be restricted to 8,600 and 6,500 cubic feet per second respectively. These are the same restrictions which were contained in the Burton Act, which expired in March last. Provision will be made that the remainder, 4,400 cubic feet per second, not utilized under the Burton law, remain under the jurisdiction of the conservation commission. The bill would vest in the conservation commission authority over measurements of waters diverted and would provide severe penalties for violation.

PERSONAL.

MR. GEO. SMITH, engineer of Lindsay, Ont., has been appointed town engineer of Midland, Ont.

MR. MERVIN D. HALLMAN, of Berlin, has been appointed county road superintendent for the county of Waterloo.

MR. H. J. BOWMAN, M.Can.Soc.C.E., and partner of the firm of Bowman & Connor, consulting engineers, of Toronto and Berlin, has been appointed engineer of the county of Waterloo., Ont.

MR. E. G. AITKEN, chief geographer of the Lands Department of British Columbia, has been elected a Fellow of the Royal Geographical Society of London. Mr. Aitken, who came to the provincial service from the Geological Survey Branch at Ottawa, has had long experience in the United States and also at the Edinburgh Geographic Institute.

STEWART McPHIE, of Hamilton, Ont., has formed a partnership including B. Frank Kelly and E. H. Darling as consulting engineers. Mr. McPhie was for several years connected with the Hamilton Bridge Company. Mr. Darling is a mechanical engineer, graduate of Toronto University, and an associate member of the Canadian Society of Civil Engineers. Mr. Kelly is a member of the Ontario Association of Architects.

MR. R. A. ROSS, acting manager of the Toronto Hydro-Electric System, has made the following appointments on the Hydro staff: Percy E. Hart, as electrical engineer; J. Orr, general superintendent; George Stevenson, general inspector; Geo. Schwanger, as engineer of distribution; J. M. McNeilly, superintendent of meter department; R. J. Lee, contract agent; J. B. Kitchen, engineer of operation department, and G. Devlin, as head salesman.

MR. H. H. COUZENS, general manager and electrical engineer of the corporation of Hampstead, London, Eng., has been appointed general manager of the Toronto Hydro-Electric System. Mr. Couzens has had a wide experience in the practical work of designing and carrying out of the construction work involved in the complete installation of electrical plants, having held important positions on an ascending scale with the corporations of Taunton, Bristol, West Ham, and Hampstead. He will assume his duties in a few weeks.

A. R. KETTERSON, A.M.Can.Soc.C.E., and Associate of the Royal Technical College. Glasgow, Scotland, has been appointed assistant engineer under J. G. Sullivan of the Canadian Pacific Railway, looking after bridge works, western lines. Mr. Ketterson has been in the employ of the Canadian Pacific Railway about seven years. He commenced as field inspector on bridge work in Quebec, Ontario, Alberta and British Columbia. His next step up was the appointment as bridge draughtsman in the office of the engineer of bridges, Montreal, and his third rise was to the position of engineer, designing bridges in the same office. Mr. Ketterson left that position to come to Winnipeg.

The following engineers have been assigned to fixed districts in regards to the hydrographic work of the British Columbia government: F. W. Knewstubb, who surveyed the upper Columbia River watershed; E. Davis, who reported on the watershed of the Kootenay, west of the Selkirks, and the Slocan River watersheds; Clifford Varcoe, who mapped the