

The committee expresses its belief that the present method of apportioning track expenditures is too general and that no well-defined means exists for properly measuring the relative needs of the different sections and districts, with the vastly different conditions which affect cost. A good deal of data must be collected to this end.

Progress is reported on the specifications for the size and spacing of rails and discussion is invited. Suggested programs for study are presented. (For the 1913 report of the committee on track the reader is referred to *The Canadian Engineer* for January 22, 1914, page 203).

**Report of Committee on General Clauses and Specifications.**—This committee consists of Mr. H. Holgate, chairman, and Messrs. E. G. M. Cope, R. de L. French, W. Chipman and J. G. G. Kerry. A carefully compiled form of general clauses is presented, from which it is evident that much correspondence, study, revision and alteration has been devoted to the subject. By the use of it, it is suggested, the form of contract and of specifications may be very much abbreviated.

The committee recommends that all contracts should embrace, in one document: (1) The agreement or contract itself; (2) the tender or a certified copy of it; (3) the specification; (4) the general clauses; (5) the signed drawings as tendered on, and (6) any modified drawings agreed to prior to signing of contract.

**Report of the Committee on Concrete and Reinforced Concrete.**—The committee consists of Mr. Walter J. Francis, chairman, and Messrs. S. Baulne, E. Brown, E. Brydone-Jack, J. Galbraith (deceased), P. Gillespie, H. M. Mackay, E. S. Mattice, C. N. Monsarrat, Michael Morssen, P. B. Motley, and H. Rolph.

This committee presented a draft at the annual meeting last January of the standard general specifications for concrete and reinforced concrete. It brought forth a certain amount of discussion at the meeting. (For the draft and this discussion relating thereto, see *The Canadian Engineer*, January 22, 1914, page 198, and February 5, 1914, page 274, respectively). Subsequent discussions from branches and individual members were invited and varied contributions totalling 30,000 words, were received.

In his letter of transmittal, Mr. Francis refers to the loss the committee suffered in the death of Dr. John Galbraith.

The series of tests advocated at the last annual meeting were made during the year. The Atlas Construction Company, Limited, through their president, Mr. C. M. Morssen, M. Can. Soc. C.E., a member of the committee, made sixty-four 8 in. x 12 in. concrete beams, 11 ft. long. In the laboratories of McGill University these beams were tested under the direction of Prof. H. M. MacKay and Prof. Ernest Brown, both members of the committee. All the beams were tested to destruction, some at the age of two months and the balance at the age of three. The results were most conclusive, and were subsequently considered by the committee. Since that time weekly sessions of the committee were held, and the draft was analyzed and deliberated upon in greatest detail.

Nickel in the form of nickel sulphate and as metallic nickel is saved from the electrolytes used in refining blister copper. Most, if not all blister copper carries a little nickel which goes into solution, and gradually accumulates in the electrolyte. During 1913, according to the United States Geological Survey, an equivalent of 481,565 lbs. of nickel, valued at \$79,393, was thus saved by refineries. About one-fourth of the product was produced as electrolytic nickel.

## Coast to Coast

**Ottawa, Ont.**—A new road is proposed between Ottawa and Prescott, to be financed in a manner similar to the Toronto-Hamilton road. It is estimated to cost \$10,000 per mile, and is 58 miles in length.

**Ottawa, Ont.**—Mr. D. W. McKughlin, engineer-in-charge of the Hudson's Bay terminal works at Port Nelson, reports that splendid progress has been made on the terminal and harbor works during the past season.

**Vancouver, B.C.**—As a result of some vessel dragging an anchor or grappling-hook while passing through the First Narrows one of the two 18-inch water mains recently laid across the bed of the Narrows, and supplying the city with 3,000,000 gallons of water per day from Capilano, was pulled apart, and the other dislodged from its proper position.

**Saanich, B.C.**—The long-proposed extension and improvement of the Lake Road in South Saanich municipality is about to become a reality. Tenders are already in hand, and it is expected that the contract will be awarded without delay. The estimated cost is \$29,500. This improvement involves the construction of a subway under the Victoria and Sydney Railway, and a culvert to drain surplus water from the Swan Lake district. Considerable grading is required on a section of the road about 6,000 yards in length. Another road improvement in this vicinity entails the expenditure of about \$30,000 on Shelbourne Street.

**Port Arthur, Ont.**—The Western Dry Dock and Shipbuilding Co., Limited, of Port Arthur, have taken out a building permit for a forge shop to cost about \$30,000. Besides the construction of steamships, this company will manufacture engines and boilers of all kinds, hoisting and excavating machinery, structural steel and cabinet work. In the last two years they have turned out several large steamships, and are well equipped for the manufacture of the above machinery. This company have also received a large order from the British Government for shells and other war materials.

**Edmonton, Alta.**—The next piece of construction that will be effected by the Canadian Northern Railway is reported to be a branch line from Edmonton to Peace River Landing or Dunvegan the key to the Peace River and Grande Prairie country. Already a line from Edmonton has been completed for a distance of sixty miles to a point in the immediate neighborhood of the source of the Prairie River. From this point the branch will be directed north-west to either of the two places, thus giving an all-rail route from Edmonton to the homesteading country in the Peace River and Grande Prairie district.

**Moose Jaw, Sask.**—Bills before the Dominion government asking for new railway charters include one relating to the Brule, Grand Peace River Railway Co., seeking the right to construct railway, telegraph and telephone lines, commencing at Brule Lake, on the main line of the Grand Trunk Pacific and Canadian Northern Railways, north-westerly to Grande Prairie, thence north-westerly to a point in British Columbia, connecting with the terminus of the Pacific and Great Eastern Railway at or within the Peace River block, also commencing at Grande Prairie northerly to the Pacific, Peace River and Athabasca Railway at or near the point where the railway crosses the Montagneuse River, passing at or near Spirit River settlement, and crossing the Peace River at or near Dunvegan, approximately 400 miles in all.