

down to an even bed to receive it. The eastern abutment is a heavy block of the same description of masonry carried up from the rock foundation to the same level as the western abutment, and constructed to receive the strain of two wrought iron chains, hanging in a catenary curve over the River, and secured by strong anchorage at the back of each abutment. On these chains the Bridge is to be built according to the annexed plans, and as will be specified more particularly afterwards. From the eastern abutment of the Saint John Bridge, a truss Bridge, consisting of three spans, each of 48 feet, extends over the intermediate chasm to a stone abutment, of the same character of masonry as the main Bridge, and firmly founded on the high ground east of the chasm. From this abutment to the Little River, a well finished gravelled Road 26 feet wide, and on an easy grade, is to be constructed according to the plans hereto annexed. The Little River is to be crossed by a trussed Bridge 80 feet span, supported by queen posts, and resting on abutments of squared cedar; the whole length of improvement from Broadway to the east end of Little River Bridge being 2165 feet. From this point to the junction with the present line of the Canada Road, a passable Road for travel, equal to the average of the present Great Roads, is to be completed. In performing this work an expenditure of at least £200 to be made, and the same to be done to the satisfaction of the Chief Commissioner.

MASONRY.

Western Abutment, Saint John Bridge.—The rock to be carefully cleaned off, and all rotten or shaky stone and earth to be removed down to a solid bed before the masonry is commenced. The rubble work is then carried up to a plinth height, 4 feet below the level of the Bridge seat, and carefully levelled off to this height 24 feet 2 inches wide, and running back to nothing where it meets the natural rock, as it rises from the bank of the River. On this bed, first class rubble masonry, with cut stone quoins, commences with a 4 inch set-off all round, and carried up with a batter of 1 in 12, is furnished on top with a cut stone course 1 foot thick, and projecting 4 inches all round. On this course are bedded iron castings that form the seat for the truss Bridge, and the saddles over which the tension chains pass. The stones to receive these castings are dressed perfectly true and level, and between them and the castings a sheet of lead is interposed, to insure perfect contact over the whole surface. The whole of the rubble masonry is to be composed of good flat bedded stones hammer-dressed on the face, and laid on their natural bed; the mortar is to be composed of well burnt lime of approved quality, and the sand the best that can be procured, mixed in the proportion of two and a half of sand to one of lime, and to be well wrought together.

Eastern Abutment, Saint John Bridge.—After the bushes and earth are cleared away over the whole surface covered by the abutment, down to the solid rock, a block of rubble masonry is to be carried up perpendicularly 36 feet long and 29 feet wide to plinth height, 22 feet below the Bridge seat, when the work is carefully levelled and dressed off. On this is a set-off all round of 4 inches, and the same character of first class rubble is carried up as in the western abutment with a curved batter, and finished on the top with a cut stone course of the same dimensions and projection, and castings bedded in the same manner, for the Bridge to rest upon; the two abutments being brought to the same level at the top, and the saddles exactly square and true with each other in every direction. In the middle of the eastern abutment a cavity is to be left in the mason work, protected by a wooden box, down which the main tension chains will pass to the back of the abutment, and be anchored to the lowest courses of the masonry. The average height of the abutment will be 27 feet, and its dimensions at the top about 24 feet by 30 feet. The clear span between the two abutments to be 190 feet, and the quality of work and materials the same.

Intermediate Piers of Lund Arches.—Two intermediate Piers in the Truss Bridge east of the Saint John River to be built of rubble masonry in the form of a double cross, and carried up to a plinth height 33 feet below the roadway. The length of these on the top will be 27 feet, the extreme breadth under the cross sills will be 8 feet, and the thickness of the walls on the top 2 feet, the batter being in all parts 1 in 12 to the bottom. The distance apart from centre to centre will be 48 feet; the height of one from the ground will vary from 4 feet to 6 inches, and the other will average 14 feet. The top of each will be well finished off to receive the sills and cross sills of the