

placed. It stands exactly where for more than forty years the world-renowned Suspension Bridge had spanned this gorge, and was so long regarded as the crowning triumph of engineering skill.

Scarcely less wonderful than the bridge itself is the fact that its construction was completed without the interruption of traffic, the old



OLD SUSPENSION BRIDGE.

bridge serving its regular uses until the new bridge was sufficiently advanced to allow of its removal. The engraving on the outside cover page will give a good general idea of the structure, and the principles involved in its construction. From abutments on either bank springs a steel arch, spanning the gorge, with its highest point 226 feet above the water. The span between the piers is 550 feet, and a trussed span at each end 115 feet long connects the arch with the bluff. The total length of the bridge with its approaches is over 1,100 feet. It has

two decks or floors, the upper one, thirty feet wide, occupied by the double track of the Grand Trunk Railway System, the lower comprising a



NEW STEEL-ARCH BRIDGE.

broad carriageway in the center, with footwalks outside of all, making a total width of fifty-seven feet.

The sustaining strength of the structure is