superstructure it will be noticed that the railway tracks are made secure by iron fender beams, which will effectually prevent running off, and will support the bottom of the cars in case of a breakdown. To guard against obstructions by heavy snows these tracks are without flooring, but covered by iron grate bars, laid close enough to render impossible even the falling through of a child.

The wire ropes are supported on small rollers every 15 feet. They are to be driven by steam engines, located on the Brooklyn side. These engines will be double cranks, set at right angles. Duplicate sets of engines and boilers will be provided, so that one set may always be kept in order, ready for action, should anything occur to the other. There will also be a spare wire rope, ready laid down upon the tracks, so that the old one may be replaced at any time at night, should it become necessary.

Suppose there was an invasion by a foreign enemy, landing on the Long Island shore, and it became necessary to transport large masses of soldiers and trains of artillery from New York to Brooklyn in as short a period of time as possible. In such an emergency the Bridge would be taken possession of by the military authorities until all the troops had been passed. Running full trains day and night, say one train every five minutes, twelve trains with 1,000 men each will be passed over to Brooklyn every hour, or 288,000 men in twenty-four hours in one direction. Adding the men who can pass on foot over the central walk and over the road-