between the posts, and form roadways for all kinds of common travel. Iron tramways are laid down 18 inches wide for the wheels to run on, the same arrangement as on the Cincinnati Bridge, leaving a width of 4 feet 8\(\frac{1}{2}\) inches in the clear for the horses to walk on. The remaining 6 feet serve as a sidewalk for pedestrians.

All vehicles and passengers who go by these roadways will take the right-hand track, which arrangement will prevent crowding and confusion. The next two spaces are 18 feet wide each, and are to be provided with steel rails for the running of two passenger trains of cars, back and forward, alternately. These trains will be attached to an endless wire rope, which is to be propelled by a stationary engine, located on the Brooklyn side, underneath the floor. These two tracks, therefore, will be treated exactly like an inclined plane, an operation perfectly simple and perfectly well understood. There is no novel feature and no experiment involved in this arrangement.

We know what power of engine and what size of rope is needed to move a certain load over an incline, and we also know the speed which may be safely attained. I propose an effective running speed of twenty miles per hour, as perhaps the one most likely preferred. But this speed in the centre of the Bridge may be increased to thirty and even forty miles per hour, with entire and absolute safety. In well built cars, moving on a straight line and over a perfect track, this