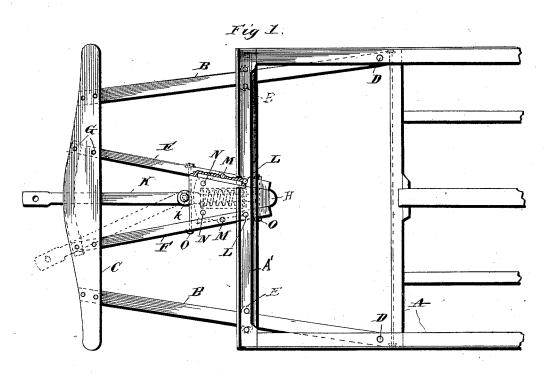
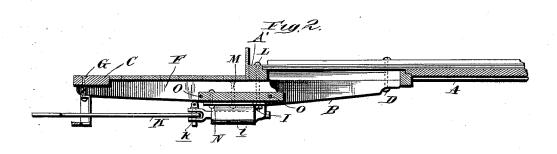
(No Model.)

## W. V. H. WILLSON. CAR PLATFORM.

No. 422,677.

Patented Mar. 4, 1890.





Witnesses. Haeder Thos. & Robertson. Walter Vander Reyden Willson
By J.M.Robertson

Attorney

## United States Patent Office.

WALTER VANDER HEYDEN WILLSON, OF TROY, NEW YORK.

## CAR-PLATFORM.

SPECIFICATION forming part of Letters Patent No. 422,677, dated March 4, 1890.

Application filed October 26, 1889. Serial No. 328, 308. (No model.)

To all whom it may concern:

Be it known that I, WALTER VANDER HEY-DEN WILLSON, a citizen of the United States, residing at Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Car-Platforms, of which the following is a specification, reference being had therein to the accompanying drawings.

This improvement relates to that class of car-platforms designed more particularly for street-cars and especially such as are used with electric motors; and the invention consists in the peculiar construction, combination, and arrangement of parts hereinafter described

and then definitely claimed.

In the accompanying drawings, Figure 1 represents a plan of my platform without the flooring and part of the floor-frame of the 20 car; and Fig. 2 is a vertical central longitudinal section of the same with the floor in posi-

Referring now to the details of the drawings, A represents the frame of the floor of the car terminating in an end sill A'; BB, two long platform-sills extending from the side sills of the car-frame to the front cross-sill C. and secured to the main frame by bolts D and clips E E, the latter being shown in dotted

30 lines in Fig 1.

F F are two shorter platform-sills, each of which is fastened to the front cross-sill of the main frame, and the two diverge until they reach the front platform-sill, where they are 35 securely fastened by bolts G and form the support for the central part of the platformfloor. Between the rear ends of these central sills is a block H, tenoned into them, as shown by the part broken away at X. Below this block is a easting I, forming a box i and bearing for the spring J, and draw-bar K, which draw-bar is pivoted at k in the usual manner. This casting is secured to the under side of the block H by bolts L, which pass through said casting I, the sills F, and the front sill of the frame, and by other bolts M, that pass through the casting I and sills F, and by still other bolts N, that pass through the casting I and block H. At the front and rear of the block H are

bolts O, which pass through the sills horizontally, one of which also passes through the block H, and the other runs in a groove cut in the front of the block, by which means and the bolts before referred to the short sills, the 55 block H, and the casting are so thoroughly connected to each other and the front sill of the main frame as to be, in effect, one solid

piece of great strength.

Platforms for street-cars are usually made 6c with four parallel sills, of the same length, running back as far as my sills BBrun. This is objectionable, inasmuch as the long central sills interfere with the location of the rheostats in electric cars of the Thomson-Houston sys- 65 tem; but with my arrangement the central part of the frame immediately back of the platform is entirely open, so that there is plenty of room for the rheostats. Besides this advantage the arrangement of the central sills, so 70 that they converge toward the frame of the car, forms a very convenient connection for the draw-bar K, and thus the materials usually required to carry the draw-bar box are dispensed with and a much stronger connection 75 made between the draw-bar and the frame of the car.

What I claim as new is—

1. A car-platform having two long side sills B and two shorter central sills diverging 80 toward the front of the platform and connected to the front sills of the platform and main frame, substantially as described.

2. The combination, in a car-platform, of two diverging sills connected to the front sills of 85 the platform and main frame, and the block H, set between and connected with said diverging sills, substantially as described.

3. The combination, in a car-platform, of two diverging sills connected to the front sills of 90 the platform and main frame, the block H, set between said diverging sills, and the casting I, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 25th day of 95

October, 1889.

WALTER VANDER HEYDEN WILLSON.

Witnesses:

T. J. W. ROBERTSON, T. E. ROBERTSON.