

(No Model.)

P. G. EMERY.
BELL CORD SUPPORT FOR STREET CARS.

No. 554,218.

Patented Feb. 4, 1896.

Fig. 1

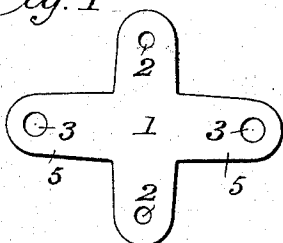


Fig. 2.

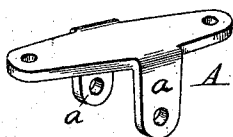


Fig. 3.

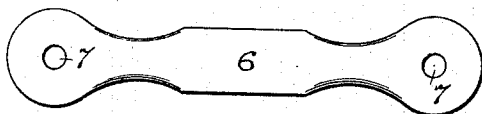


Fig. 4.

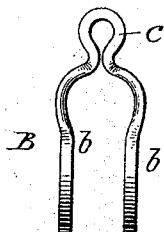


Fig. 5.

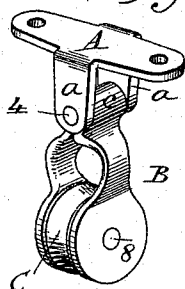


Fig. 6

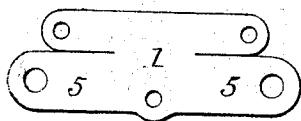
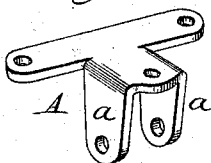


Fig. 7.



Witnesses,

Sidney P. Hollingsworth

Chas. A. Place.

Fig. 8

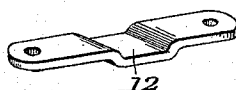


Fig. 9

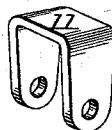


Fig. 10.

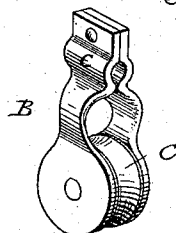


Fig. II.

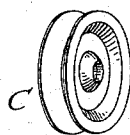


Fig. 12.



Fig. 13.



Inventor,

Plato G. Emery,

by G. W. L. Thomas
attest

UNITED STATES PATENT OFFICE.

PLATO G. EMERY, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE ADAMS & WESTLAKE COMPANY, OF ILLINOIS.

BELL-CORD SUPPORT FOR STREET-CARS.

SPECIFICATION forming part of Letters Patent No. 554,218, dated February 4, 1896.

Application filed October 15, 1894. Serial No. 525,973. (No model.)

To all whom it may concern:

Be it known that I, PLATO G. EMERY, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bell-Cord Supports for Use on Street and other Cars, of which the following is a specification.

This invention relates more especially to a swinging support for a bell-cord, which, so far as I am informed, has heretofore been made of cast metal.

The invention has for its object in part the construction of such devices of sheet or malleable metal capable of being bent, thus obtaining a cheaper, neater, and stronger article of its class than that heretofore in use.

In the accompanying drawings, Figure 1 represents the blank of which the bracket or stationary part of the frame of the support is formed. Fig. 2 represents the same blank bent to its finished shape. Fig. 3 shows the blank from which the lower or swinging part of the frame of the support is formed. Fig. 4 represents the last-mentioned blank bent to the right and left of the center of its length to form the walls between which the cord-pulley is mounted and looped for attachment to the bracket or stationary part. Fig. 5 is a perspective view of the entire device, a solid pulley being included therein. Fig. 6 represents a blank from which a modified form of the bracket or stationary part is made. Fig. 7 shows the same blank bent to shape. Figs. 8, 9, and 10 show further modifications. Fig. 11 is a perspective view of a pulley formed of two pieces of sheet metal bent or stamped to shape and riveted together. Fig. 12 is a vertical section of one-half of the sheet-metal pulley. Fig. 13 is a view of a bushing adapted to be placed between the two halves of the sheet-metal pulley.

Similar letters and figures of reference indicate similar parts in the respective views.

Referring to Figs. 1 to 5, inclusive, 1 is the sheet-metal blank of which the bracket or stationary part of the support, adapted to be attached to the ceiling of the car or other fixture, is made. The blank 1 may be stamped out and completed so as to include the several perforations 2 2 and 3 3, or they may be subsequently added to the imperforate blank.

The perforations 2 2 are designed for the reception of screws or other fastening devices by means of which the bracket or stationary part, represented generally by A, is secured to the ceiling or other fixture, while the holes 3 3 are intended to receive the pin or rivet 4, by means of which the part A is secured to the swinging portion B of the frame of the support, as hereinafter described. Fig. 2 shows projections 5 5 of the blank 1 bent so as to be parallel with each other and to form ears *a*, between which the swinging part B is held.

6 represents the blank of which the swinging part B is formed, it having at each end a circular hole 7, which, when the blank 6 is bent so as to form side walls *b*, as shown in Fig. 4, stand in line and register with each other so as to receive the rivet 8 on which the cord-pulley C is mounted. The blank is also bent so as to form the approximately-cylindrical loop *c*. The fixed and swinging parts A and B, respectively, of the support and the cord-pulley C are shown assembled in Fig. 5, a rivet 4 passing through the ears *a* and loop *c* transversely of the axis of the pulley.

Referring now to Figs. 6 and 7, the blank 1, from which the bracket or stationary part A is made, is of modified form, while the swinging part B is as hereinabove described. The modified construction of the bracket or stationary part A will be readily understood, ears *a* being formed, as before described.

In Figs. 8 and 9 the bracket or stationary part A is shown in two parts, the upper forming a saddle for the lower. The parts may be riveted together or the cross part 11 of the lower part may be nested in the depression 12 of the upper.

Fig. 10 shows the swinging part B formed of two pieces riveted together above the loop *c*.

The pulley C may be formed in two pieces of sheet metal bent or stamped to shape and riveted together, as shown in Figs. 11 and 12, a bushing, Fig. 13, being held between the two halves. The pulley C may be solid.

It will be observed that the confinement of the cylindrical or tubular loop of the swinging part of the support between the ears of the stationary part causes the swinging part

to be in a measure braced, and that while it is free to swing upon its hinging point it is held against movement in the direction of the pull of the cord.

5 Having described my invention, I claim—

1. In a support of the character described, a stationary part or bracket A having projections 5 bent down parallel to each other to form ears *a*, and a swinging portion B bent to form side walls *b* and an approximately-cylindrical loop *c*, combined with a grooved cord-pulley held between the walls *b*, a pin 8 serving as the axis of the pulley and riveted over the exterior of the walls *b*, and a pin 4 10 passing through the ears *a* and loop *c*, said pin 4 serving to hold the loop *c* at a right angle to the axis of the pulley and being riveted over the exterior of said ears, substantially as set forth.

20 2. A bell-cord support, consisting of a stationary part composed of a metallic blank having projections bent down parallel to each

other to form ears, said ears being perforated, combined with a swinging part carrying a cord-pulley, said swinging part being com- 25 posed of a metallic blank bent so as to form a cylindrical socket to fit between the ears of the stationary part, and which socket is pivotally pinned to said ears so as to be capable of oscillation in one direction, while pre- 30 vented by said ears from movement in the other direction, said last-named metallic blank being, further, bent to form side walls between which the cord-pulley is mounted upon an axis standing transversely of the 35 pin connecting the stationary and the swinging parts of the support, substantially as set forth.

In testimony whereof I hereto set my hand and seal.

PLATO G. EMERY. [L. s.]

Witnesses:

B. McMILLAN,

L. A. GRAY.