

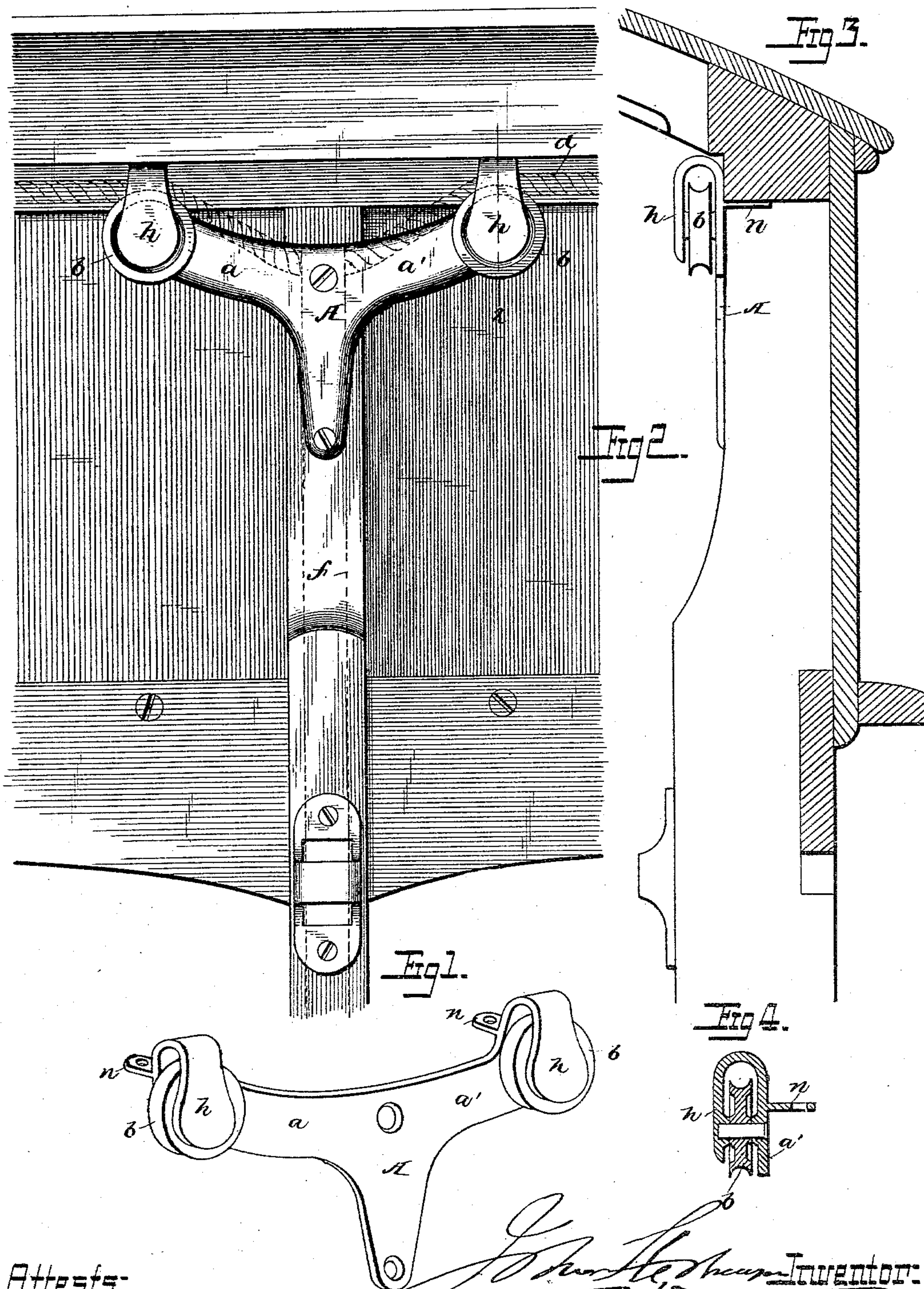
(No Model.)

J. STEPHENSON.

TRAM CAR SIGNAL CORD SHEAVE.

No. 325,705.

Patented Sept. 8, 1885.



Attests:

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# UNITED STATES PATENT OFFICE.

JOHN STEPHENSON, OF NEW YORK, N. Y.

## TRAM-CAR SIGNAL-CORD SHEAVE.

SPECIFICATION forming part of Letters Patent No. 325,705, dated September 8, 1885.

Application filed July 1, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN STEPHENSON, a citizen of the United States, residing in the city, county, and State of New York, have  
5 invented certain new and useful Improvements in Tram-Car Signal-Cord Sheaves, of which the following is a specification.

My invention has for its object to properly support in desirable position in relation to  
10 the pulls the signal cords or straps used in tram-cars; and my invention consists of a sheave-housing having a vertical stem and side arms bent and supporting sheaves, as fully set forth hereinafter, and as shown in the accom-  
15 panying drawings, in which—

Figure 1 is a perspective view of my improved sheave-housing. Fig. 2 is an elevation showing my sheave-housing as arranged with-  
in a tram-car. Fig. 3 is a side or edge view  
20 of the sheave-housing in position. Fig. 4 is a section on the line 1 2, Fig. 2.

In a tram-car provided with a signal system accessible to passengers while seated the pendent pulls are suspended on the cord which  
25 operates the bell or other device. The bell-cords along the upper verges of the side walls are held in position by eyes or guides alternating with pendent pulls, usually located at each pillar in the side walls. The cords are  
30 apt to stretch and sag between the widely-separated supporting-eyes, allowing the pendants to descend inconveniently low, obstructing operation of the signal, and with the friction of the cords through the eyes preventing  
35 recoil of the cord, causing the signal to be inoperative. My invention obviates these difficulties, for which purpose I make a metal housing in the form of a Y, having at the tip of each of the two members *a a'* a sheave-  
40 wheel, *b*, for the purpose of carrying the cord *d*, (shown in dotted lines,) which cord upholds between the pair of sheave-wheels a pendent pull, *f*, (dotted lines,) for the use of passen-  
gers.

45 To prevent the cord from shifting off the wheels, I extend the tip of each limb of the housing and return it over the cord while on

the sheave-wheel, the end of the extended tip forming a palm-holder, *h*, for the outer end of the sheave-axle, which may be either an inte- 50  
gral part of the housing or an independent piece.

To prevent the limbs of the housing from becoming bent or distorted, I place at the back side of each limb a lug, *n*, of such size and 55  
location as that a screw may pass through it to secure it to the frame of the car-body. The vertical member of the housing has screw-holes for a like purpose.

As an article of manufacture, sale, or use, 60  
I claim—

1. A sheave-housing consisting of a vertical body and two arms extending in opposite directions, each arm terminating in a palm holding the end of an axis, the forearm bent 65  
over to bring the palm parallel with it, and lodging the other end of the axis in the forearm, as and for the purpose set forth.

2. A sheave-housing with two arms bent over at their wrists, the palms parallel with 70  
the forearms and each holding a sheave-wheel on an axis with one end in the palm and the other in the forearm, as and for the purpose set forth.

3. A sheave-housing with a body and two 75  
arms uplifted and bent forward at the wrists, bringing the palms parallel with the forearm, and each holding a sheave on its axis, the wrist at the bend being elevated above the sheave and formed to retain and guide an 80  
operating-cord, as and for the purpose set forth.

4. A sheave-housing with two arms, each holding a sheave-wheel, and at the posterior side, near the elbows, projecting lugs with holes 85  
for fastening-screws, as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN STEPHENSON.

Witnesses:

JOS. B. STEPHENSON,

STUART A. STEPHENSON.