

949,742.

O. J. MORTENSON.
INDICATOR FOR STREET RAILWAYS.
APPLICATION FILED OCT. 29, 1908.

Patented Feb. 15, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

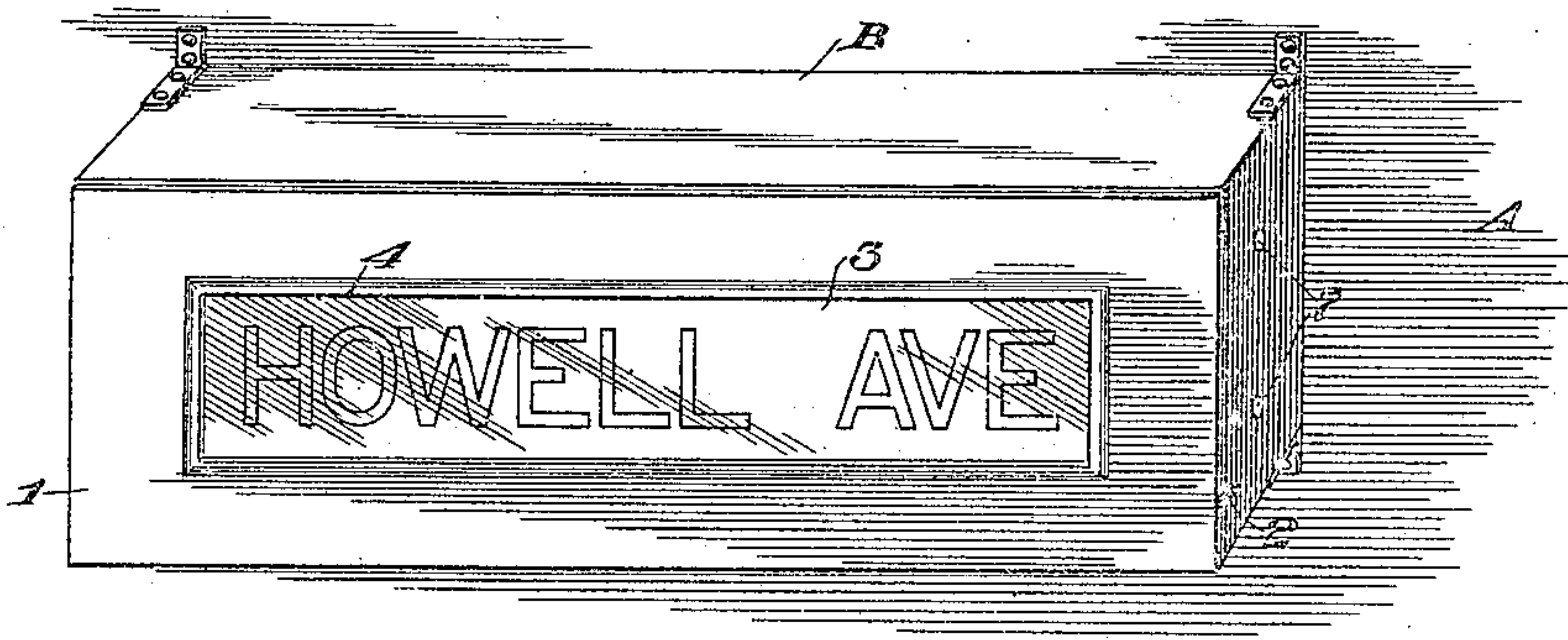


Fig. 3.

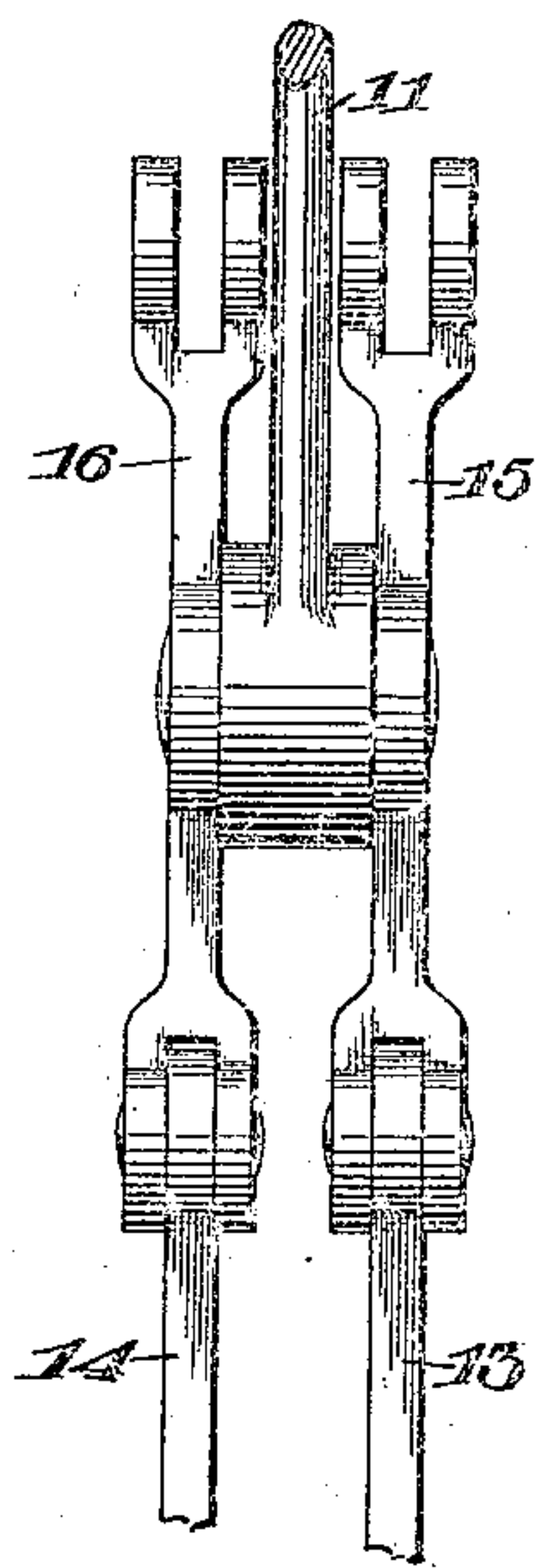
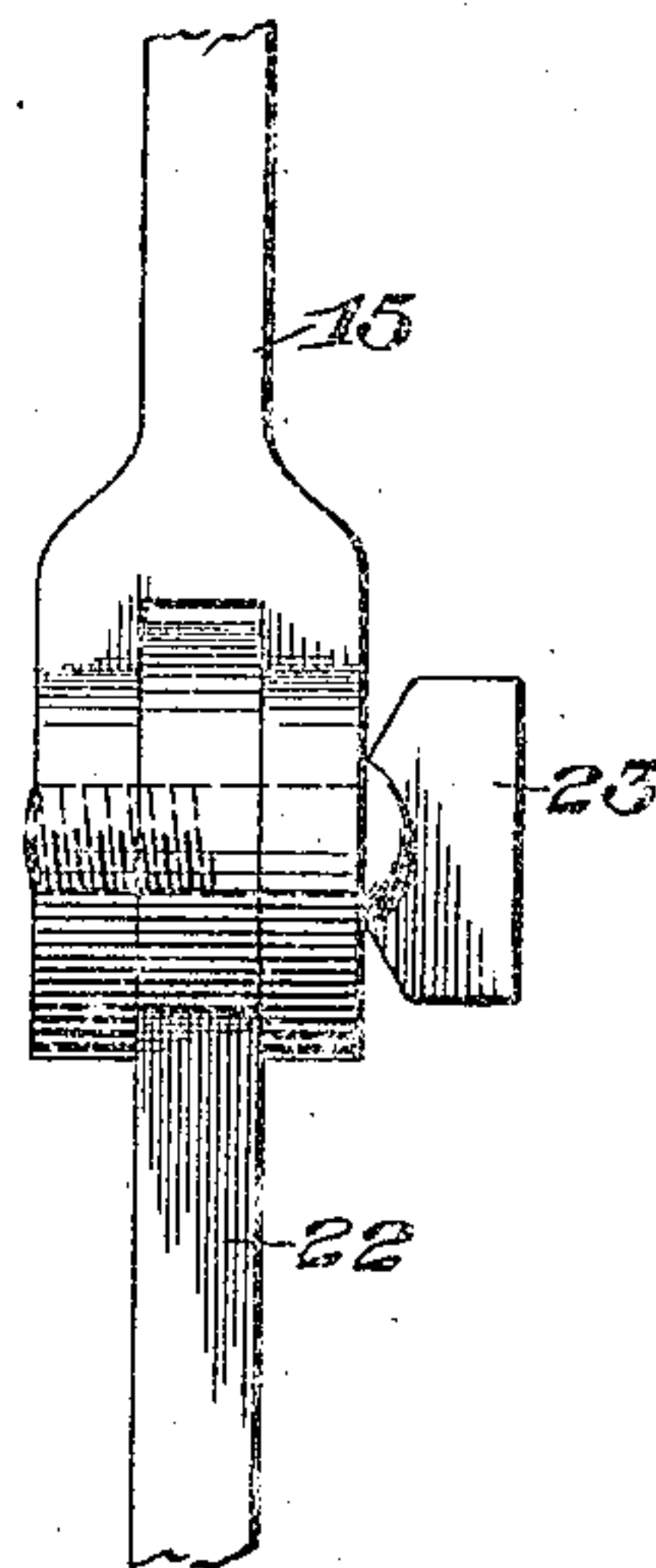


Fig. 4.



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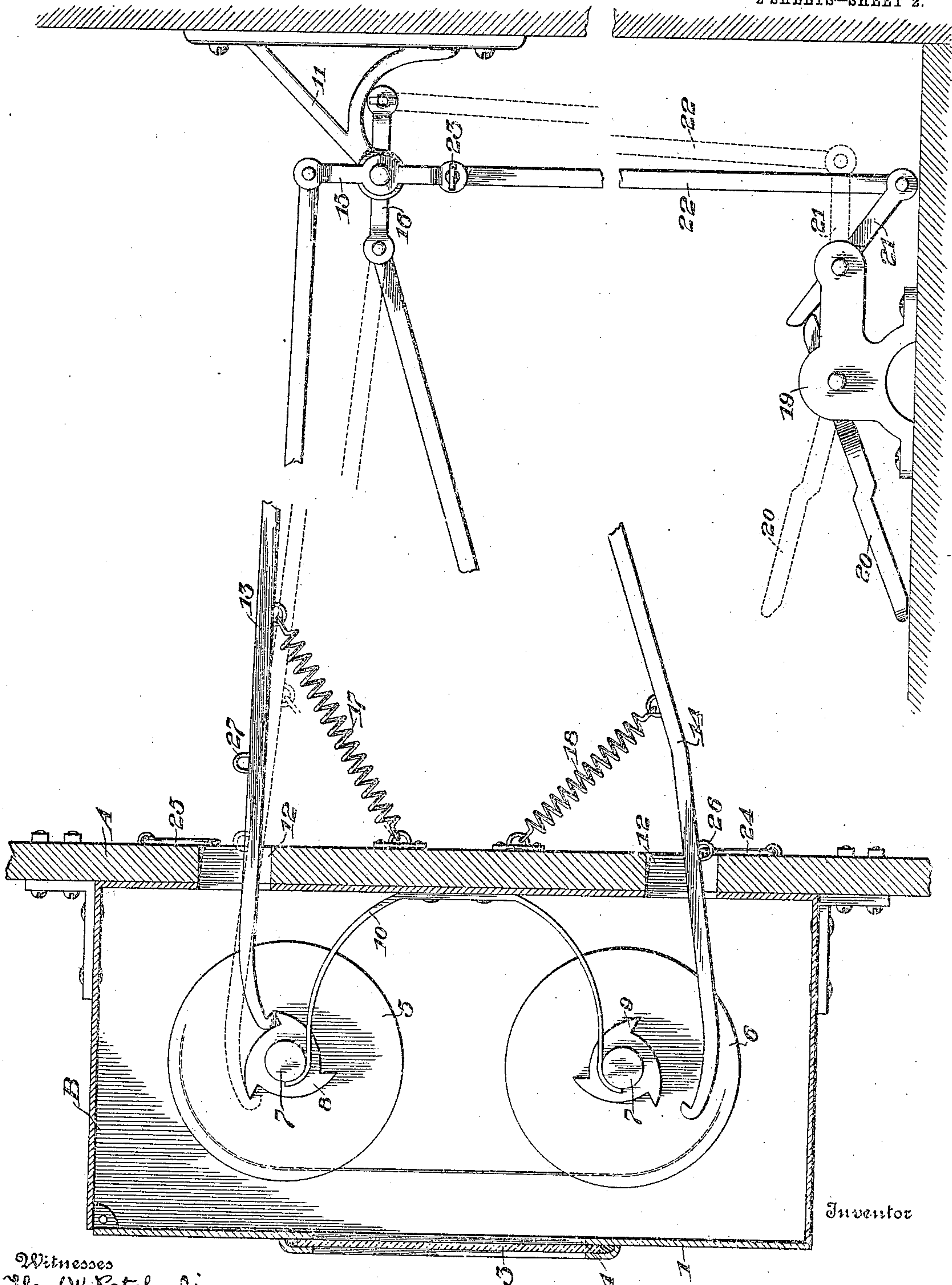
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UNITED STATES PATENT OFFICE.

OTTO J. MORTENSON, OF FARGO, NORTH DAKOTA, ASSIGNOR OF ONE-HALF TO ANDREW O. BUNDE, OF HARTFORD, SOUTH DAKOTA.

INDICATOR FOR STREET-RAILWAYS.

949,742.

Specification of Letters Patent.

Patented Feb. 15, 1910.

Application filed October 29, 1908. Serial No. 460,097.

To all whom it may concern:

Be it known that I, OTTO J. MORTENSON, citizen of the United States, residing at Fargo, in the county of Cass and State of North Dakota, have invented certain new and useful Improvements in Indicators for Street Railways, of which the following is a specification.

My invention relates to an improvement in indicators for street cars, and the object is to provide means whereby reels may be operated whereby a canvas or webbing having the names of different streets printed thereon at certain intervals can be rolled upon the rollers by the motorman to designate the different streets.

The invention consists of certain novel features of construction and combinations of parts which will be hereinafter described and pointed out in the claims.

In the accompanying drawings:—Figure 1 is a perspective view of my invention; Fig. 2 is a sectional view showing one of the operating rods in engagement with one of the ratchet wheels and the other out of engagement; and Figs. 3 and 4 are detail views.

A represents the end of the car and B is the casing which is placed in the car in such a position that the street indicated upon the canvas can be observed by the occupants of the car. A cover 1 is hinged to the front of the casing and is held closed by hooks 2. A glass 3 is placed in an opening 4 in the covering, through which the street shown upon the canvas may be observed. Rolls 5 and 6 are mounted on axles 7, 7, which are journaled in suitable bearings in the casing, and mounted upon the axles are ratchet wheels 8 and 9. Springs 10 are secured to the rear side of the casing and are adapted to bear upon the axles 7 to act as a brake to prevent the rolls from revolving too fast and preventing the canvas from running off the roll too fast as it is unwound.

A bracket 11 is secured to one side of the vestibule of the car and extending through openings 12, 12 in the end of the car are operating rods 13 and 14, which are connected to pivoted arms 15 and 16 on the bracket 11. The arms 15 and 16 are pivoted, one on each side of the bracket, the arm 15 being connected to the operating rod 13, and the arm 16 being connected to the operating rod 14. Springs 17 and 18

are connected to the rods 13 and 14 and to the end of the car to give the desired tension to the rods for turning them back into position so that they will engage the ratchet teeth on the ratchet wheels 8 and 9. The ends of the rods 13 and 14 being provided with hooks for the engagement of the teeth on the ratchet wheels. A base plate 19 is secured to the floor or platform of the car, and pivotally mounted thereon is a foot lever 20. A lever 21 is pivotally connected to the base plate and is in engagement with the end of the lever 20. A link 22 is pivotally connected with one end of the lever 21 and the link has a swivel connection with one end of the arm 15. This connection is made by the thumb-bolt 23 which permits of the link being disengaged from the arm 15 and connected up with the arm 16.

In the drawing I have shown the link 22 connected to the arm 15, which arm is connected to the rod 13, which is in engagement with the ratchet wheel 8. Hooks 24 and 25 are connected to the end of the car and are adapted to pass through or engage staples 26 and 27 on the rods 14 and 13 respectively. As shown in the drawing, the hook 24 is in engagement with the staple 26 on the rod 14 holding the rod out of engagement with the ratchet wheel 9 of the roll 6.

When the motorman steps upon the foot lever 20, it causes the end of the lever 21, which is in engagement with the lever 20, to move upwardly and the other end of the lever to be pulled downwardly toward the floor or platform of the car, which draws the arm 15 downwardly through the link connection 22. This movement of the arm 15 pulls on the rod 13 causing the roll 5 to be turned through the ratchet connection with the rod 13. This movement winds a certain amount of the canvas upon the roll 5 from the roll 6, bringing another station to view through the glass 3 of the casing. This operation is repeated as the car moves from street to street, and when the car reaches the end of the line and is to return the link 22 is disengaged from the arm 15 and connected to the arm 16. The latch or hook 24 is disengaged from the rod 14, which allows the rod to engage the ratchet teeth of the ratchet wheel 9 on the roll 6. The hook 25 is caused to engage the staple 27 thereby disengaging the rod 13 from the ratchet wheel 8. The same operation is repeated by the

motorman, which causes the canvas to be wound upon the roll 6 and unwound from the roll 5. The ratchet teeth upon the ratchet wheel are so spaced that each operation of the foot lever will rotate the roll sufficient to bring the next station to view through the glass.

From the foregoing it will be seen that I have provided a mechanism which is simple of construction and by which I am enabled to have the different streets brought to the view of the occupants of the car so that the different streets may be ascertained as they are being approached, and which can be accomplished by the motorman simply operating the lever with his foot, causing one of the rolls to be operated. Furthermore, when one of the rolls has been unwound and it is desired to make a return trip, the rods can be connected up so that the canvas can be wound upon the roll from which it has been unwound.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In an indicator for street cars, the combination with a casing, of rolls journaled therein having canvas thereon, ratchet wheels connected to the rolls, a bracket, arms pivoted to the bracket, rods pivoted to the arms and adapted to engage the ratchet wheels, and means adapted to engage either of the arms whereby the rolls and canvas may be operated in either direction.

2. In an indicator for street cars, the combination with a casing, of rolls journaled therein having canvas thereon, ratchet wheels connected to the rolls, a bracket, arms pivoted to the bracket, rods pivoted to the arms

and adapted to engage the ratchet wheels, a base plate secured to the car, a foot lever pivoted in the base plate, a second lever pivoted in the base plate in engagement with the foot lever and a link connecting said lever with one of the arms on the bracket.

3. In an indicator for street cars, the combination with a casing, of rolls journaled therein having canvas thereon, ratchet wheels connected to the rolls, a bracket, two arms pivoted to the bracket, rods pivoted to the arms and adapted to engage the ratchet wheels, a base plate secured to the car, a foot lever pivoted in the base plate, a second lever pivoted in the base plate and in engagement with the foot lever, and a link connected to said lever and adapted to be detachably connected to either of the arms pivoted to the bracket.

4. In an indicator for street cars, the combination with a casing, of canvas carrying rolls journaled therein, ratchets secured to the rolls, a bracket, arms pivoted to the bracket, rods pivoted to the arms and provided at the ends with hooks which engage the ratchets, springs adapted to normally hold the rods in contact with the ratchets, hooks for holding the rods out of engagement with the ratchets, and means connected to the pivoted arms whereby they may be operated for operating the rods which in turn operate the rolls.

In testimony whereof I affix my signature, in the presence of two witnesses.

OTTO J. MORTENSON.

Witnesses:

B. SIMONITCH,
H. A. JENKINS.