No. 798,874. PATENTED SEPT. 5, 1905.

V. CHISHOLM.

TRACK CLEARER FOR STREET CARS.

APPLICATION FILED APR. 24, 1905.

Fig. 1.

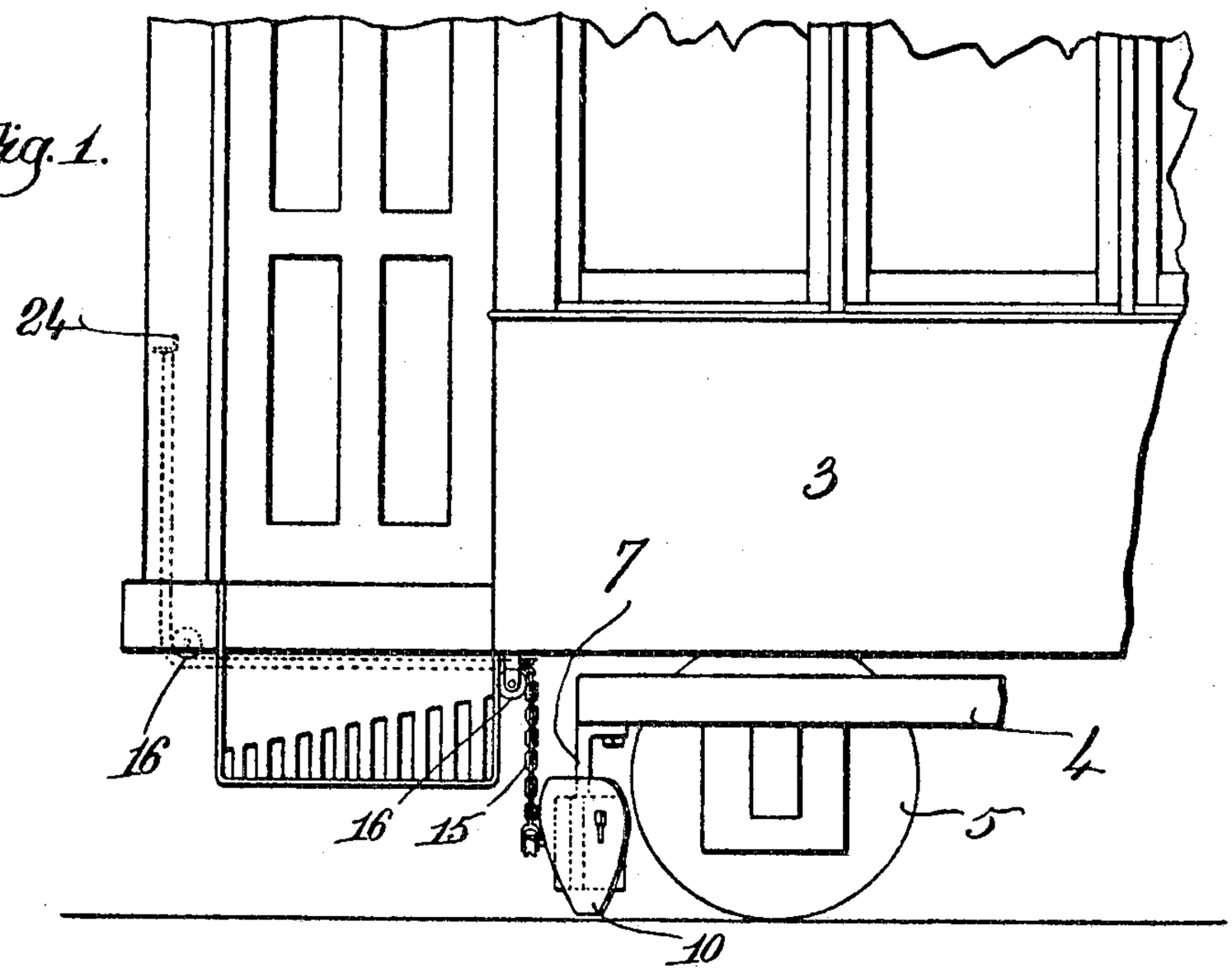


Fig. 2.

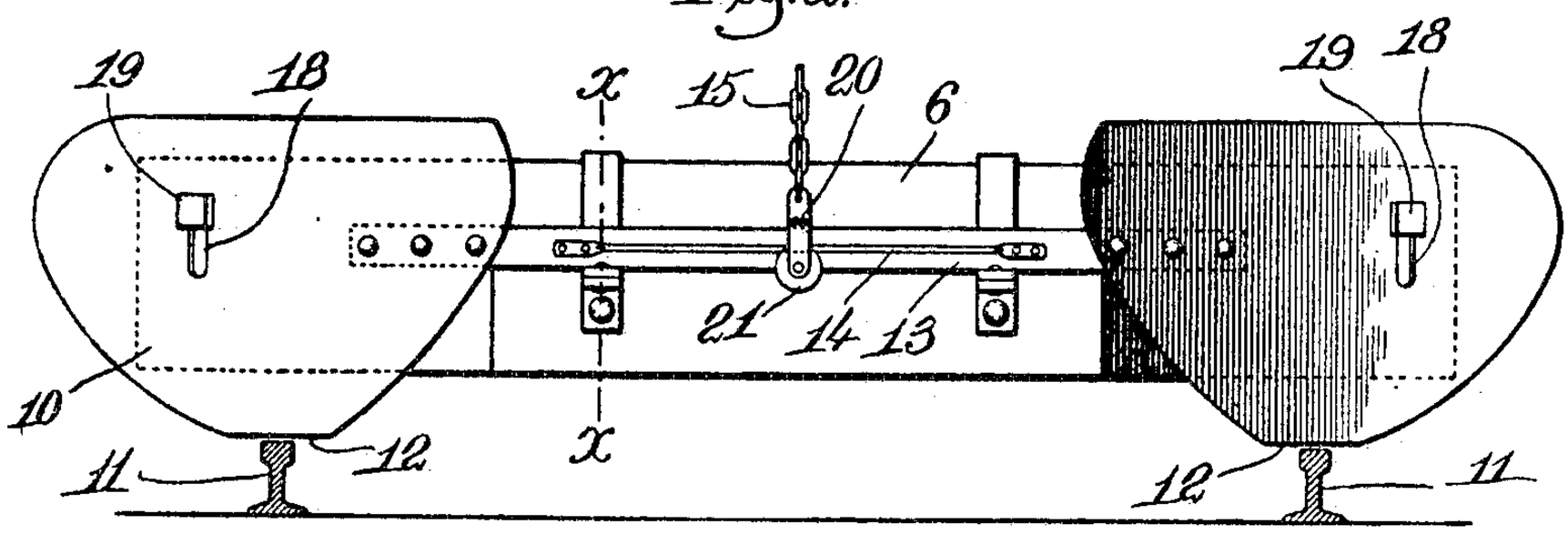


Fig. 3.

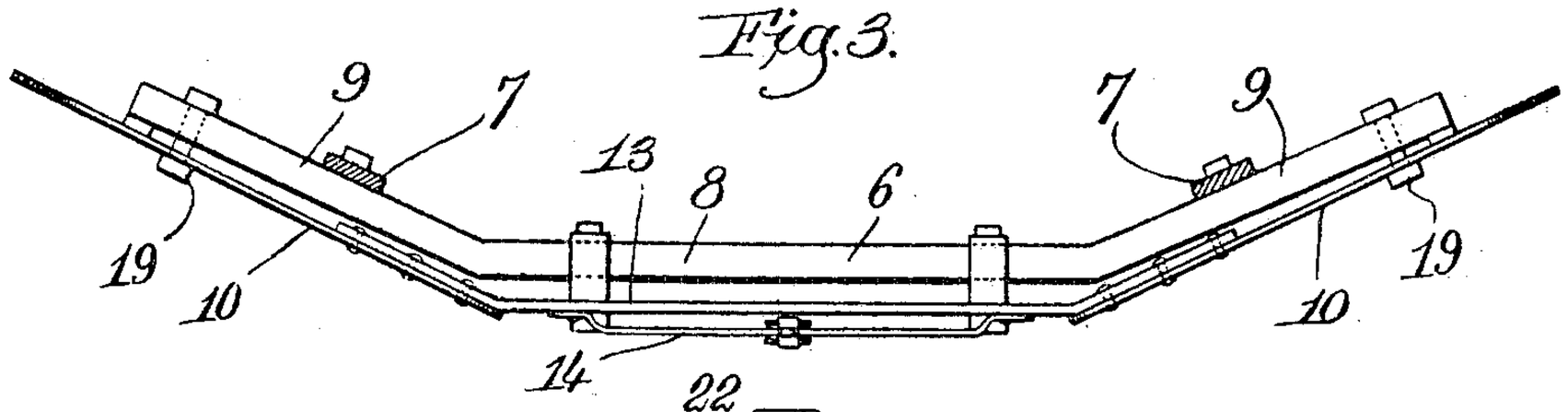
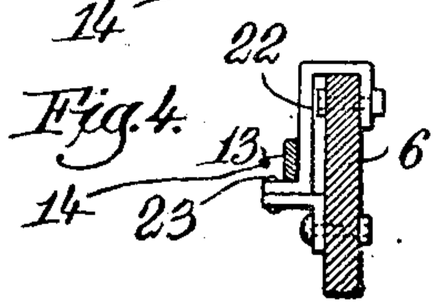


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

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TRACK-CLEARER FOR STREET-CARS.

No. 798,874. Specification of Letters Patent. Patented Sept. 5, 1905.

Application filed April 24, 1905. Serial No. 257,224.

To all whom it may concern:

Be it known that I, VALENTIN CHISHOLM, a citizen of the United States, residing at Rockland, in the county of Knox and State of Maine, have invented an Improvement in Track-Clearers for Street-Cars, of which the following description, in connection with the accompanying drawings, is a specification, like figures on the drawings representing like parts.

Most street-cars are provided with a shovel or scraper attached to the body of the car in front of the wheels and in position to be dropped onto the tracks when it is desired to clear the rails of snow. These shovels or scrapers are usually hinged to the car-body and situated some distance in front of the wheels. The result of this construction is that when the car is passing over a curve the scrapers are thrown to one side of the rails and do not contact with the latter.

The object of my present invention is to provide a novel form of scraper for street-cars which is so sustained as to be directly over the rails even when a car is passing around a curve.

According to my invention I employ a scraper or blade for each rail and sustain said scrapers or blades directly on the wooden fender, which is secured to the truck-frame and is situated directly in front of the wheels of the truck. This brings the blades very close to the wheels, and because they are suspended from the truck-frame rather than the car and are close to the wheels they are not thrown out of alinement with the rails even when the car is going around the corner.

Referring to the drawings, Figure 1 is a side view of one end of the car having my improvements applied thereto. Fig. 2 is a front view of the wooden fender of the car, showing the manner of supporting my blades or scrapers therefrom. Fig. 3 is a plan view of Fig. 2. Fig. 4 is a section on the line *x x*, Fig. 2.

3 designates an electric car of any suitable construction, 4 a part of one of the car-trucks, and 5 a car-wheel.

The trucks of electric cars are always provided with some form of fender, usually of wood, which extends across the truck directly in front of the wheels. These fenders are constructed in different ways, according to the style of truck. In the drawings this fender is designated generally by 6 and is supported on suitable brackets 7, carried by the truck-frames. Said fender has a transversely-extending portion 8 intermediate its ends and an inclined portion 9 at its ends.

In accordance with my invention I support two blades or scrapers 10, one for each rail 11, directly from the fender 6, and where the fender is made with the inclined portions 9 at its ends said blades or scrapers are situated directly in front of such inclined portions. The blades may have any suitable shape or configuration; but preferably they are made comparatively wide at the top and narrow at the bottom, each having the scraping edge 12, which is adapted to contact with the rail. The two blades are connected together by a suitable connection or bar 13 and are constructed to be moved up and down with relation to the fender to raise and lower the scraping edges 12. The blades are held in position by means of suitable bolts or pins 19, carried by the inclined portions 9 of the wooden fender, and to permit the up-and-down movement of the blades each is provided with a slot 18, through which the bolt 19 extends.

15 designates a lifting-chain which is connected to the bar 13 and which extends over suitable direction-pulleys 16 into position to be operated by the motorman. Said chain 15 may be secured to the bar in any suitable way. As herein shown, it has the yoke 20 at its lower end, which embraces a rod 14, carried by the bar 13, and carries a pulley 21, which engages the under side of the rod. The purpose of having this loose connection between the lifting-chain and the bar 13 is to permit the lateral movement of the bar with reference to the chain, which would be caused by relative movement of the car-body and truck-frame, due to passing around a curve.

22 designates spacing members which are secured to the fender and which serve to space the bars 13 therefrom. Said spacing members are shown as made of strap-iron, which are bent over the upper end of the fender and are spaced therefrom, said spacing members being bent at their lower ends, as at 23, to present a rest or stop for the bar 13.

When the blades are in their lowered position, as shown in Fig. 2, the bar 13 rests on the shelf or ledge 23, as shown in Fig. 4, and the latter therefore limits the downward movement of the blades,

When the blades are not in use, the motorman raises them by means of the chain 15 and supports them in their elevated position by hooking the chain over a suitable hook or pin 24 or in any other suitable way.

It will be noted that the blades 10 are angularly arranged, and the snow which is scraped from the rails, therefore, is thrown up on the outside of the rails. Because the fenders or scrapers are carried by the truck-frame rather than by the car-body they will not be thrown out of alinement with the rails when the car is passing around a curve.

The blades are very easy to manufacture and may be applied to any car now in use and are more effectual in clearing the tracks than the pivoted blades commonly employed and hung on the car-body.

While I have shown only one form of truck, it will be understood that my invention may be applied to any of the car-trucks now in common use.

The form of my invention herein shown is that which I deem preferable; but various changes in the construction and arrangement of the parts may be made without departing from the invention.

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

1. In a car, a car-truck, a fender carried by the car-truck, and vertically-slidable blades or scrapers for the rails carried by said fender.

2. In a car, a car-truck, a fender rigid therewith and extending across the truck in front of the wheels and blades each occupying a vertical plane carried by said fender.

3. In a car, a car-truck, a fender rigidly secured to the truck and extending across the same in front of the wheels, and a pair of connected blades or scrapers supported by said fender.

4. In a car, a car-truck, a fender rigidly secured to the truck and extending across the same in front of the wheels, and a pair of connected blades or scrapers supported by said fender, said fenders being vertically adjustable, and means for raising the blades from the rails.

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

VALENTIN CHISHOLM.

Witnesses:
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THOMAS HAWKEN.