

W. E. BEE.
TROLLEY.
APPLICATION FILED NOV. 30, 1921.

1,408,248.

Patented Feb. 28, 1922.

FIG. 1

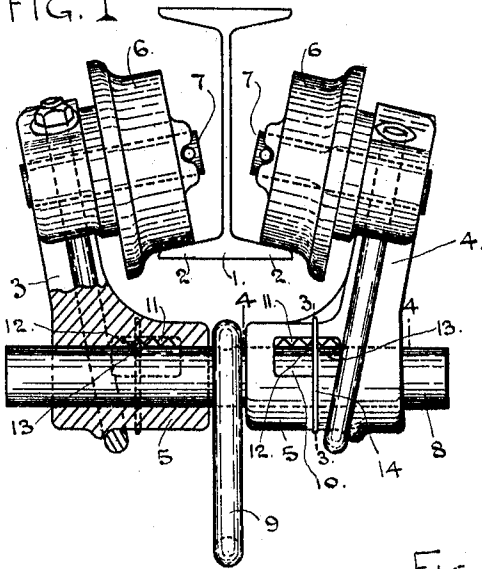


FIG. 2

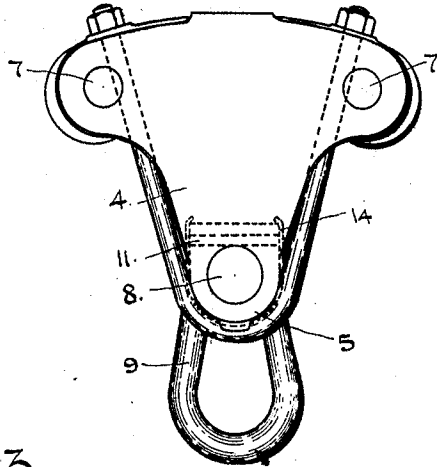


FIG. 3

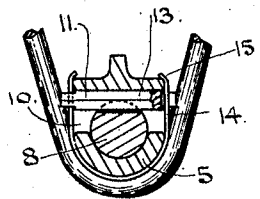


FIG. 4

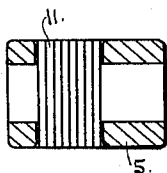
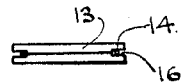


FIG. 5



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TROLLEY.

1,408,248.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM E. BEE, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Trolleys, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to trolleys and refers particularly to that type of trolley which travels upon an elevated or overhead track which is formed by the flanges of an I-beam, T-rail or the like. The invention has for its object the provision of a trolley having side frames which may be readily adjusted toward and away from each other to engage various sizes of track. With this object in view, the invention resides in the novel features of construction as more fully hereinafter set forth.

In the drawings:

Figure 1 is a front elevation partly in section of a trolley embodying my invention;

Figure 2 is a side elevation thereof;

Figures 3 and 4 are cross sections on the lines 3—3 and 4—4 respectively of Figure 1;

Figure 5 is a plan view of the locking member.

1 is a track which as shown in the present instance is formed by the lower flanges 2 of an I-beam. The trolley frame comprises the side frames 3 and 4 which are substantially triangular in elevation and have the transverse inwardly extending cylindrical enlargements or bosses 5 at their lower ends. 6 are traction wheels travelling upon the flanges 2 forming the track and journaled upon the studs 7 extending transversely inward from the side frames near their upper ends. 8 is a pin extending through the enlargements 5 of the side frames 3 and 4 for connecting these side frames to each other, and 9 is a suitable clevis engaging in a central groove of the pin and adapted to carry the load.

For the purpose of adjusting the side frames 3 and 4 toward and away from each other so that the trolley will fit various sizes of track, the cylindrical enlargements 5 each have the transverse opening 10 therethrough elongated in the direction of the axis of the enlargement and furthermore have the series of serrations or teeth 11 of substantially the same length as the opening and located

above the pin 8. This pin has the two grooves 12 which are positioned at substantially equal distances from the central groove in the pin and are adapted to register with the spaces between the teeth, both the spaces and the grooves being V-shaped in the present instance. 13 are locking pins which as shown are square and pass transversely through the enlargements of the side frames and engage in the grooves and in alternative spaces between the teeth, thereby holding the side frames from longitudinal movement relative to the pin.

To hold the locking pins from accidental disengagement from the side frames the U-shaped spring clips 14 are provided embracing the enlargements 5 of the side frames 3 and 4 and having the inwardly bent end portions 15 engaging over the upper edges of the enlargements to stay in place, these spring clips passing through the slots 16 in the ends of the locking pins. These clips may be readily applied or removed and when applied securely hold the locking pins from becoming disengaged from the side frames.

With this arrangement, the side frames may be readily and quickly adjusted toward and away from each other to adapt the trolley to various sizes of track. Also, since the serrations or teeth in the side frames are always exposed to view a balanced construction of trolley can be readily secured in which the side frames are spaced equally from the load carrying clevis.

What I claim as my invention is:

1. In a trolley, the combination with side frames, of a connecting pin secured to one of said side frames and extending through the other, a series of visible teeth upon said other side frame and extending longitudinally of said pin, a groove upon said pin for cooperation with said teeth, and a locking member extending transversely through said other side frame and engaging in said groove and the spaces between adjacent teeth.

2. In a trolley, the combination with side frames, of a connecting pin extending there-through and secured to one of said side frames, the other side frame having an elongated opening extending longitudinally of said pin, a series of teeth upon said last-mentioned side frame registering with said opening and extending longitudinally of said pin, a groove in said pin for cooperating with said teeth, and a locking member

engageable in said groove and in alternative spaces between said teeth.

3. In a trolley, the combination with side frames having transversely extending enlargements with elongated apertures extending transversely through said enlargements, of a connecting pin extending through said enlargements and provided with grooves, series of teeth registering with said apertures and extending transversely of said enlargements and longitudinally of said connecting pin, and locking pins extending transversely through said enlargements and engageable in said grooves and in alternative spaces between adjacent teeth of said series of teeth.

4. In a trolley, the combination with side frames having transversely extending enlargements at their lower ends with elongated longitudinally extending apertures therethrough, of a connecting pin extending through said enlargements and provided with a pair of V-shaped grooves, a series of V-shaped teeth upon each of said enlargements registering with said elongated apertures and extending longitudinally above said connecting pin, a polygonal locking pin extending transversely through each of said enlargements and engageable in a V-shaped groove and in alternative spaces between adjacent teeth, and means for holding said locking pin from disengagement.

5. In a trolley, the combination with side

frames, of a connecting pin extending therebetween, and secured to one of said side frames, cooperating serrations upon the other of said side frames and said pin, a locking member engageable in said serrations, and a spring clip engaging said locking member to prevent disengagement of said clip from said side frame.

6. In a trolley, the combination with side frames having transverse enlargements, of a connecting pin extending through said enlargements and secured to one of said side frames, cooperating serrations upon the enlargement of the other side frame and said pin, a locking member engageable in said serrations, and a spring clip embracing said last-mentioned enlargement and engaging the ends of said locking member.

7. In a trolley, the combination with a side frame, of a pin secured thereto, a second side frame through which said pin extends and provided with an opening extending longitudinally of said pin, a series of teeth upon one of said last-mentioned members registering with said opening, a groove upon the other of said last-mentioned members, and a locking member engageable in said groove and in alternative spaces between said teeth.

In testimony whereof I affix my signature.

WILLIAM E. BEE.