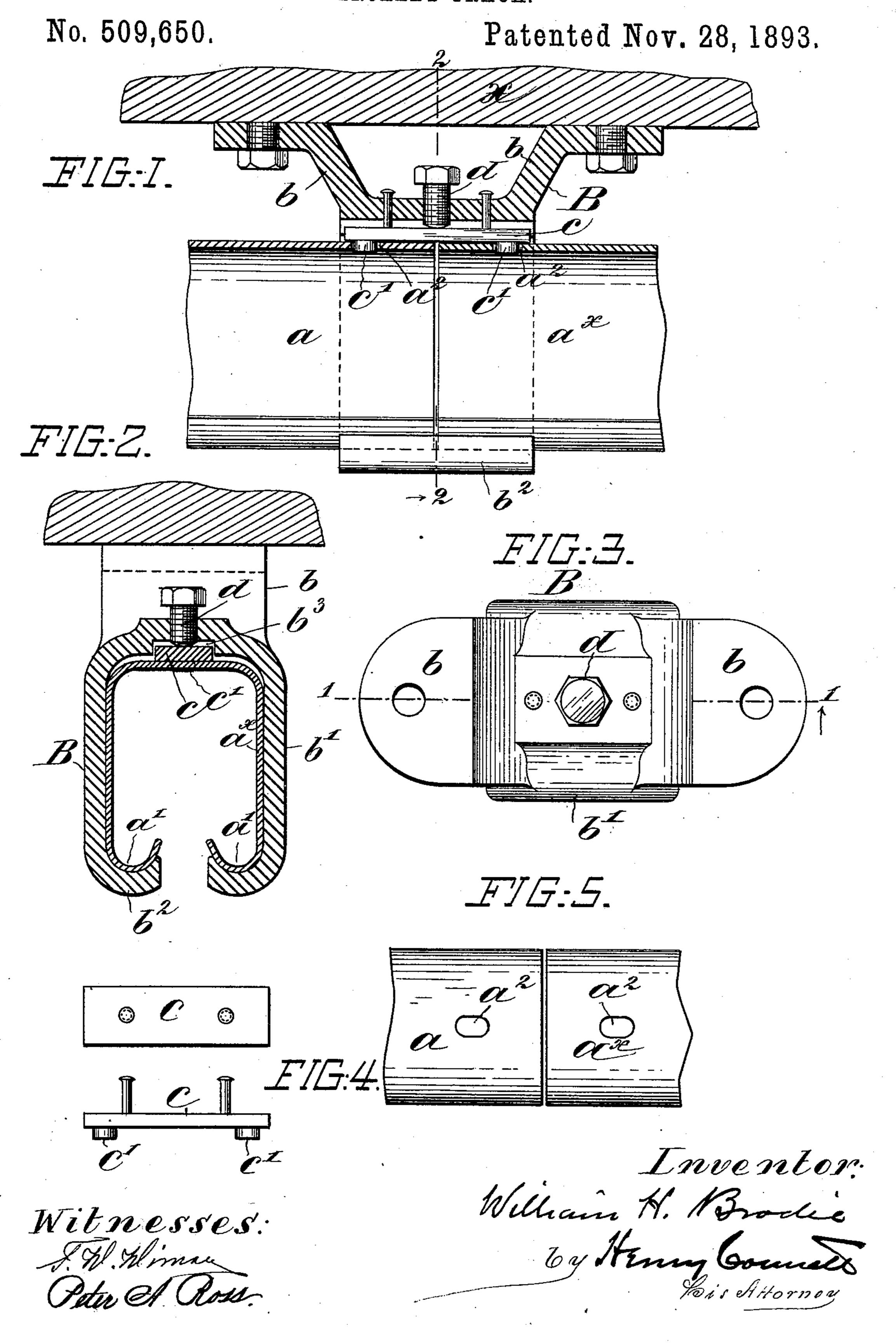
## W. H. BRODIE. TROLLEY TRACK.



THE NATIONAL LITHOGRAPHING COMPANY, WASHINGTON, D. C.

## United States Patent Office.

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## TROLLEY-TRACK.

SPECIFICATION forming part of Letters Patent No. 509,650, dated November 28, 1893.

Application filed September 2, 1893. Serial No. 484,619. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BRODIE, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New 5 York, have invented certain new and useful. Improvements in Trolley-Tracks, of which

the following is a specification.

My invention relates to overhead trolleytracks, and particularly to that class of such 10 tracks as employ a tubular track or way made up of sections, placed end to end and formed from sheet or plate steel, such as the well known Coburn track, for example; and the object of the invention is to provide a sus-15 pending bracket to support the sections of the track at their abutting ends and lock and clamp them fast. As the sections of this form of track are made from rather thin plate, they are apt to be slightly warped or bent so 20 that it is difficult to fit them together in the or shoulder at the junction and these inequalities produce a rough, noisy track for the trolley. To obviate this difficulty I provide 25 means for clamping, locking and pressing down the ends of the section in the supporting bracket as will be hereinafter described.

In the accompanying drawings which serve to illustrate my invention—Figure 1 is a ver-30 tical, longitudinal mid-section of one of the brackets and parts of the two abutting tracksections therein, the plane of the section being indicated by line 1, 1, in Fig. 3. Fig. 2 is a transverse section of the same taken in 35 the plane indicated by line 2, 2, in Fig. 1. Fig. 3 is a plan of the bracket. Fig. 4 shows the clamping and locking plate in plan and side elevation, detached. Fig. 5 is a plan view of the ends of two adjacent sections of 40 -the track, showing the slots or elongated apertures to receive the locking studs.

x represents an ordinary overhead beam of wood from which the track is suspended.

a and  $a^{\times}$  represent the abutting ends of two 45 sections of the Coburn trolley track.

An end view of a track-section, showing its

form, is seen in Fig. 2.

B represents a supporting bracket. This bracket has two flanges, b, b, by which it may 50 be secured by bolts to the beam x, and a pend-

to the shape of the track and embraces the ends of the same, as seen in Fig. 2. The lower edges  $b^2$  of the portion b' are hollowed out to receive the inwardly curved portions 55 a' of the track, and in order to provide a smooth way for the trolley and prevent vibration, it is essential that these portions of the track shall fit down snugly in the hollow of the bracket; and to attain this end the 60 opening in the bracket is made somewhat deeper, measured vertically, than the depth of the track, so that the latter may be entered freely, and a clamping and locking plate, c, (seen detached in Fig. 4) is mounted in a re- 65 cess,  $b^3$ , formed in the inner face of the crownplate of the bracket so that it may rest on the crown-plates of the track-sections a and  $a^{\times}$ , as clearly shown in Fig. 1. This plate c has on its lower face two short locking studs, 70 c', which enter apertures or slots,  $a^2$ , in the bracket in such a manner as to avoid a jog | crown-plates of the track-sections, when in place. The plate c is pressed down upon the track-sections, and they are pressed thereby down firmly in the bracket, by means of a 75 stout screw d, which screws through the crownplate of the bracket and bears on the clamping plate c. The slots  $a^2$  permit of longitudinal expansion and contraction of the tracksections, and the studs c' serve to lock and 80 hold the said sections in place. If there is a tendency in one of the sections to spring up above the level of the other at their adjacent abutting ends, the devices described will prevent this. In a track constructed in this man-85 ner the trolleys will move along almost noiselessly and without obstruction or jar. I have shown the flanges b on the bracket as projecting in a longitudinal direction with respect to the track merely because, in most 90 cases, these brackets will be secured to the lower face of a comparatively narrow beam, x, suspended by hangers from the ceiling of a room; but these flanges may as well extend laterally, or transversely to the axis of the 95 track, especially if the beams which support the track extend transversely thereof. To prevent the plate c from falling out when the track-sections are removed, it is, by preference provided with two pins,  $c^2$ , which pro- 100 ject upwardly through holes in the crownent portion, b', which conforms substantially I plate of the bracket and have heads or en-

largements on their upper ends which cannot pass through said holes.

Having thus described my invention, I claim—

5 1. In an overhead trolley-track, the combination with two sections of tubular track, of a bracket B, having securing flanges, the pendent portion of said bracket embracing and taking under the track-sections, a clamping 10 plate c, occupying a recess in the lower face of the crown-plate of the bracket and adapted to rest on the crowns of the abutting tracksections in the bracket, and a screw d, set in the crown-plate of the bracket over the plate 15 c, substantially as set forth.

> 2. In an overhead trolley-track, the combination with a bracket B, provided with attaching flanges, and a pendent portion which embraces the abutting track-sections, of the 20 said track-sections provided with apertures  $a^2$  in their crowns, the locking and clamping plate c, occupying a recess in the crown-plate of the bracket and provided with locking

studs c', adapted to enter the apertures  $a^2$  in the track-sections when the latter are in place, 25 and the clamping screw d, set in the crownplate of the bracket over the plate c, substantially as set forth.

3. In an overhead trolley-track made up of sections of tubular track, as set forth, the 30 combination with a track-embracing supporting bracket B, provided with a clamping screw d set in its crown-plate, of the clamping plate c, occupying a recess in the bracket under said screw d, and provided with headed 35 retaining pins  $c^2$ , fixed in the plate c and adapted to play in apertures in the crownplate of the bracket, substantially as shown and described.

In witness whereof I have hereunto signed 40 my name in the presence of two subscribing witnesses.

WILLIAM H. BRODIE.

Witnesses: HENRY CONNETT, JAMES K. DUFFY.