



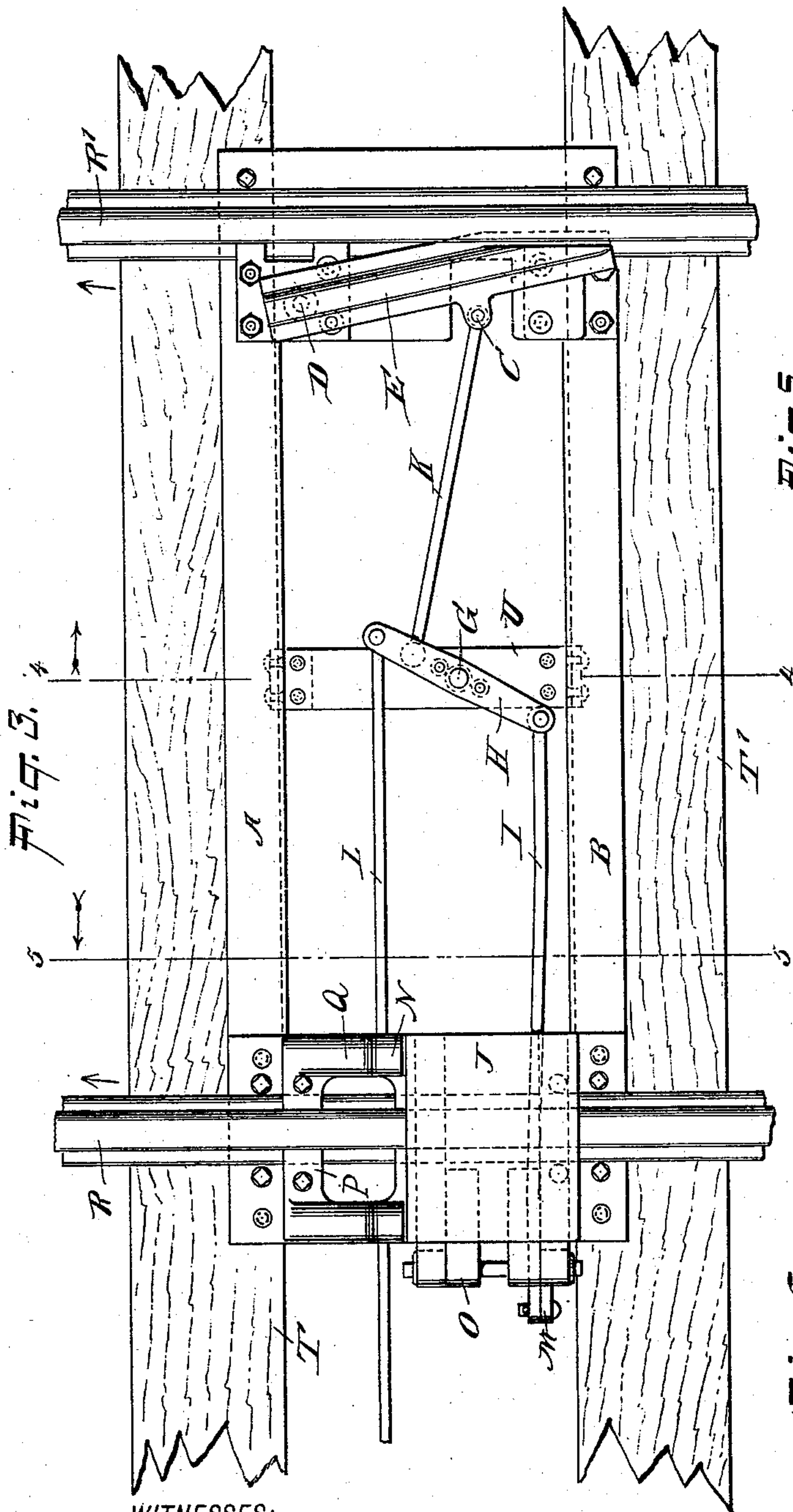
(No Model.)

2 Sheets—Sheet 2.

P. SCHUSTER.  
CAR ARRESTER.

No. 543,270.

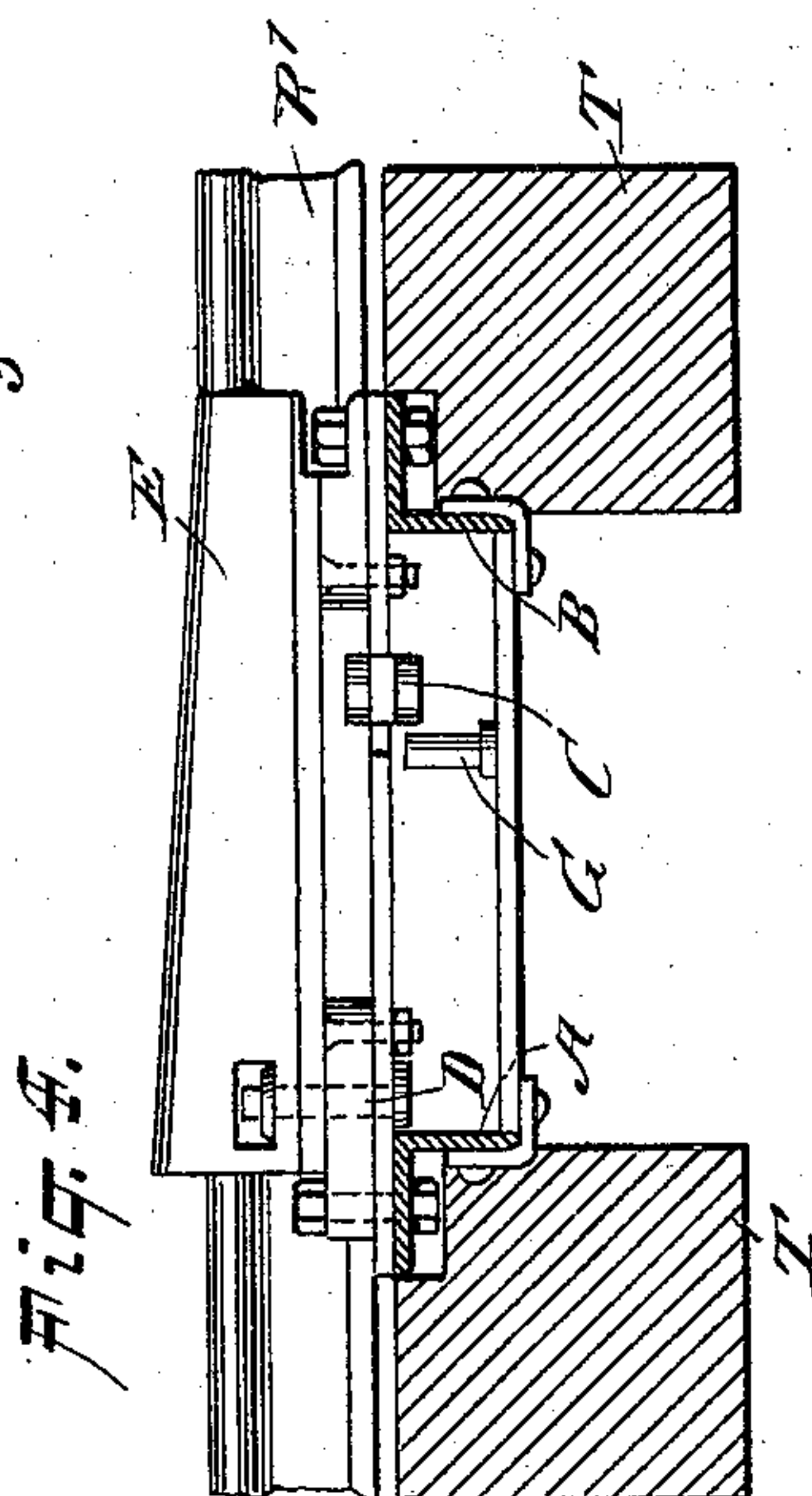
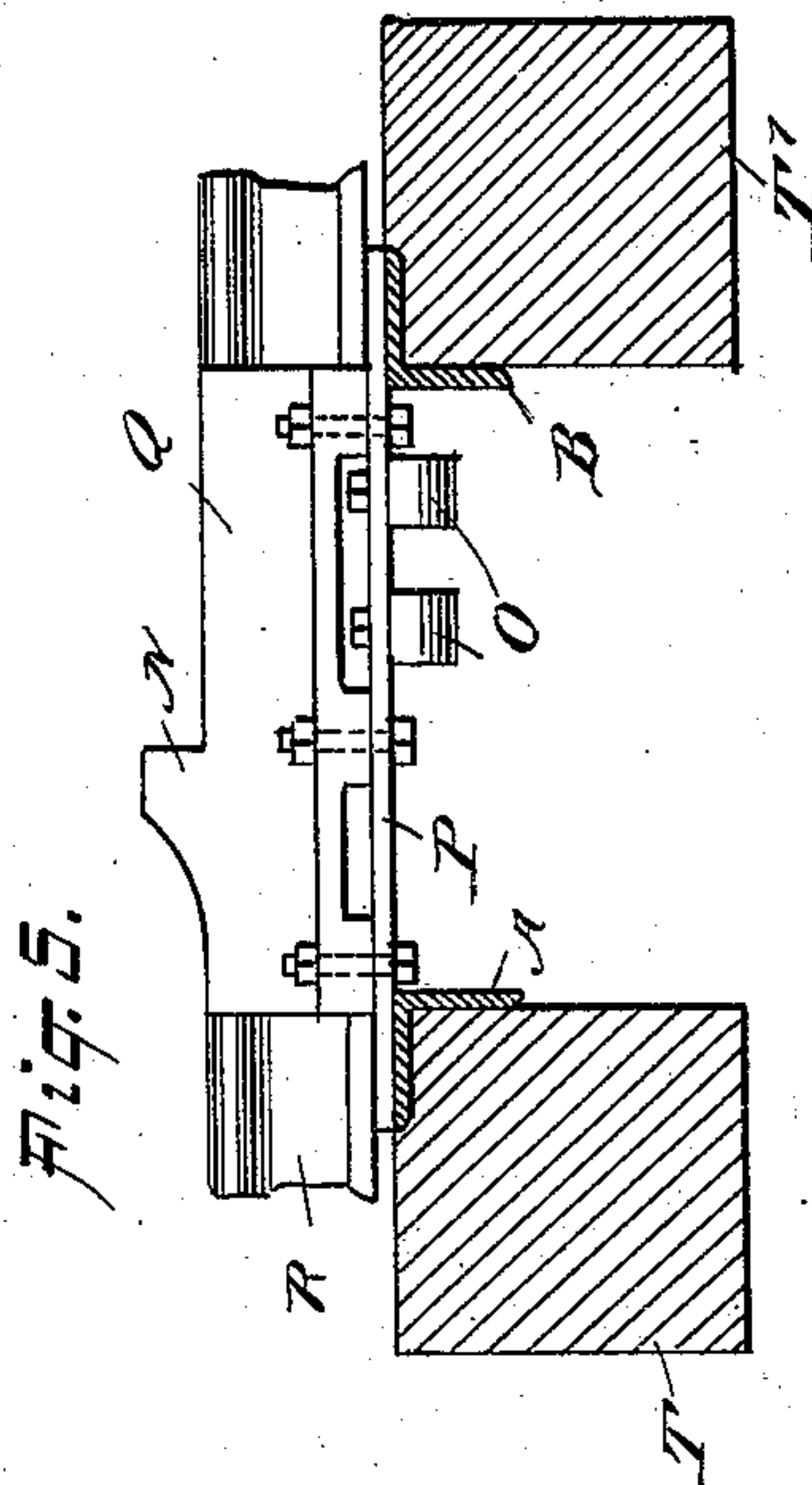
Patented July 23, 1895.



WITNESSES:

William Gaebel.

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INVENTOR

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# UNITED STATES PATENT OFFICE.

PAUL SCHUSTER, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO  
EDWARD HENNIG, JR., OF SAME PLACE.

## CAR-ARRESTER.

SPECIFICATION forming part of Letters Patent No. 543,270, dated July 23, 1895.

Application filed January 28, 1895. Serial No. 536,420. (No model.) Patented in Germany December 9, 1888, No. 47,797.

*To all whom it may concern:*

Be it known that I, PAUL SCHUSTER, of New York city, in the county and State of New York, have invented a new and useful Car-Arrester, (for which I have obtained a patent in Germany, No. 47,797, dated December 9, 1888,) of which the following is a full, clear, and exact specification.

The object of my invention is to prevent cars which are standing on side tracks from running into the main line if set in motion by wind or other cause.

The invention will be described hereinafter with reference to the accompanying drawings, and the features of novelty pointed out in the appended claims.

In the said drawings, Figure 1 is a plan of the device in an inactive position—that is, allowing cars to pass from the side track to the main track. Fig. 2 is a cross-sectional elevation taken essentially on line 2 2 of Fig. 1. Fig. 3 is a view similar to Fig. 1, but showing the device in position to arrest cars moving toward the main track. Figs. 4 and 5 are cross-sections taken on lines 4 4 and 5 5, respectively, of Fig. 3.

Like letters of reference denote like parts in all the views.

R R' are the rails of the side track, the switch to the main track being situated in the direction indicated by the arrows at the ends of the rails in Figs. 1 and 3. To the ties T T' are secured angle-irons A B extending transversely of the track. Adjacent to the rail R a plate P is secured to the angle-irons A and B, said plate carrying ribs Q, which extend longitudinally of the track and may be made somewhat in the shape of rails, as shown. Each of the ribs Q is made with a projecting lug N, forming a shoulder, for a purpose to be stated hereinafter. The portion of the rib adjacent to the shoulder is preferably level, as will be seen best in Fig. 5. On the plate P is secured a bracket O, to which is pivoted a lever M carrying a block J, which may either assume the position shown in Figs. 1 and 2, when it will not interfere with the passage of cars on the side track, or be turned down to rest on the ribs Q, one of its end faces bearing against the lugs N, so that the wheel of a car running toward the switch will be ar-

rested by the block J, the lugs N forming a backing for the block to enable it to better resist the shock.

One arm of the lever M is connected by means of a rod I to the lever H, fulcrumed at G upon a support U, the said lever H being operated through the medium of a rod, a double chain or wire or other suitable connection L, which extends to the operating mechanism of the switch and is connected thereto in such a manner that when the switch is set to allow cars to pass from the side track to the main track, or vice versa, the block J will assume the position shown in Figs. 1 and 2, allowing the car-wheels to pass unobstructed over the rail R. When, however, the switch is set to be open to the main track, the lever H will be simultaneously operated to bring the block J down upon the ribs Q, as indicated in dotted lines in Fig. 2 and in full lines in Fig. 3. It will be observed that the portion of the ribs Q on which the block J is adapted to rest is approximately level with the head of the rail R, and that the ribs are sufficiently spaced from the rail to form no obstruction to the passage of the car-wheels. With the lever H is also connected one end of a rod K, whose other end is pivoted at C to a wedge-shaped rail E, the pivot D of which is located at that end which is in the direction of the switch, so that when the wedge-rail E is brought against the rail R', Fig. 3, the flange on the wheel of a car traveling toward the switch will engage the inner face of the rail E at the point thereof. As illustrated in Figs. 2 and 4, the upper surface or head of the wedge-rail E is inclined upwardly from the point toward the pivot end. The connection of the rail E with the lever H is such that when the block J is thrown up from the ribs Q the rail E is swung inwardly from the main rail R', as shown in Figs. 1 and 2, and when the block J is turned down to rest on the ribs Q the rail E is swung outward, so that one side of its wedge-shaped end bears against the inner surface of the rail R'.

The operation of the device will be readily understood. When the switch is open to the side track, the block J and auxiliary movable rail E are in the position shown in Figs. 1 and



2--that is, they do not interfere with the movement of cars on the side track. When the switch is open to the main track, the parts of the car-arrester are in the position represented in Fig. 3, it being understood that all cars left on the side track are on that side of the car-arrester which is opposite to the switch, and that no cars are left standing between the car-arrester and the switch. If, now, a car is set in motion by wind or other cause and runs toward the switch, the left front wheel of the car will strike the block J, the lugs N also receiving the shock, and at the same time the right front wheel of the car will travel up the inclined surface of the rail E. If the momentum of the car does not exceed a certain limit, the car will be arrested without being thrown off the rails. If, however, the car has acquired a great momentum, it will follow the direction of the obliquely-located rail E, and thus will be derailed. In either event the car will not be allowed to run on that portion of the side track which is between the switch and the car-arrester, and collisions at the switch will therefore be practically impossible. The device will also derail a train running on the side track toward the switch when the latter is open to the main track.

The improved car-arrester can be rapidly thrown from its inactive to the active position, which is of great advantage in cases of emergency. If, for instance, while the switch is open to the side track and the car-arrester therefore inactive to allow a train to pass from the side track to the main track, another train is seen coming toward the switch on the main track, the impending collision will be avoided if the operator can throw the switch open to the main track before the train on the main track reaches the switch and before the train on the side track reaches the car-arrester, as this will derail the train on the side track before it reaches the switch, while the train on the main track will remain on said track instead of entering the side track.

It will be obvious that by placing the movable rail E adjacent to the rail R--that is, reversing the position of the block J and the rail E, the cars will be derailed toward the right instead of toward the left. This change and others may be made without departing from the nature of my invention.

What I claim, and desire to secure by Letters Patent, is--

1. A car arrester, provided with a transversely movable rail arranged along the inner side of one of the track rails and adapted to be moved into contact with the said track rail, or separated therefrom, so as to be out of contact therewith substantially as described.

2. A car arrester, provided with a trans-

versely movable rail disposed along the inner side of one of the track rails and having a wedge shaped end adapted to be brought in contact with the said track rail or separated therefrom, the upper face of said rail being inclined upwardly from the pointed end toward the opposite end, substantially as described.

3. A car arrester provided with a pivoted rail arranged along the inner side of one of the track rails and having a wedge shaped end, the upper face of the pivoted rail being inclined downwardly toward the pointed end, substantially as described.

4. The combination of the movable rail disposed along the inner side of one of the track rails, the movable block arranged adjacent to the other track rail, and an operative connection between the block and the movable rail, whereby they may be simultaneously moved toward the respective track rails to form obstructions in the path of the car wheels, substantially as described.

5. The combination with the track rail forming a continuous support for the car wheels, of the transversely movable arresting rail arranged along the inner side of the track rail and adapted to be moved into or out of contact with the said track rail, substantially as described.

6. The combination of the movable rail adapted to abut against the inner side of one of the track rails and to assume an oblique position relatively thereto, the block pivoted to swing transversely of the track and adapted to be swung over the other track rail, and an operative connection between the block and the movable rail, substantially as described.

7. The combination of the block pivoted to swing transversely of the track and adapted to be swung over one of the track rails, and a supporting plate on which the block is adapted to rest when it extends across the track rail, substantially as described.

8. The combination of the block pivoted to swing transversely of the track and adapted to be swung over one of the track rails, and a supporting plate provided with ribs disposed longitudinally of the rail and on which the block is adapted to rest when it extends across the track rail, substantially as described.

9. The combination of the transversely swinging block, and the ribs arranged adjacent to the track rail to support the block when it extends across the said rail, the ribs being provided with lugs serving as a backing for the block, substantially as described.

PAUL SCHUSTER.

Witnesses:

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JOSEPH WOLF.