

No. 620,462.

Patented Feb. 28, 1899.

J. LANIUS.  
CAR REPLACER.

(Application filed July 22, 1898.)

2 Sheets—Sheet 1.

(No Model.)

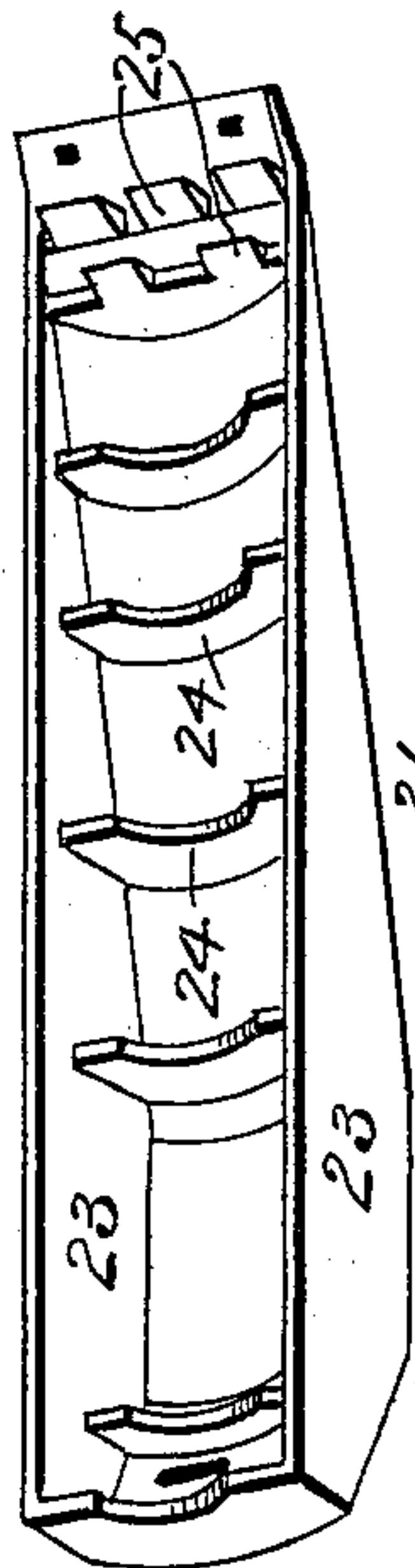


Fig. 6.

Fig. 2.

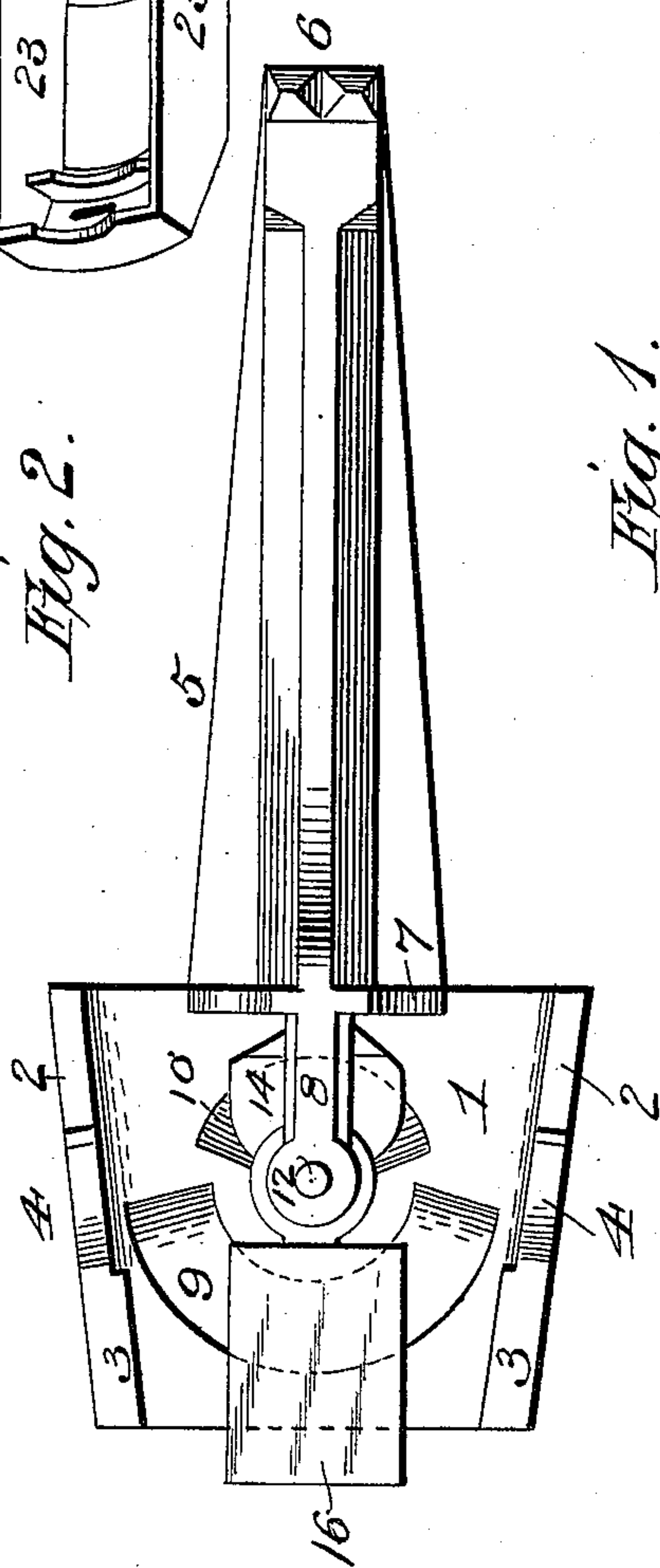
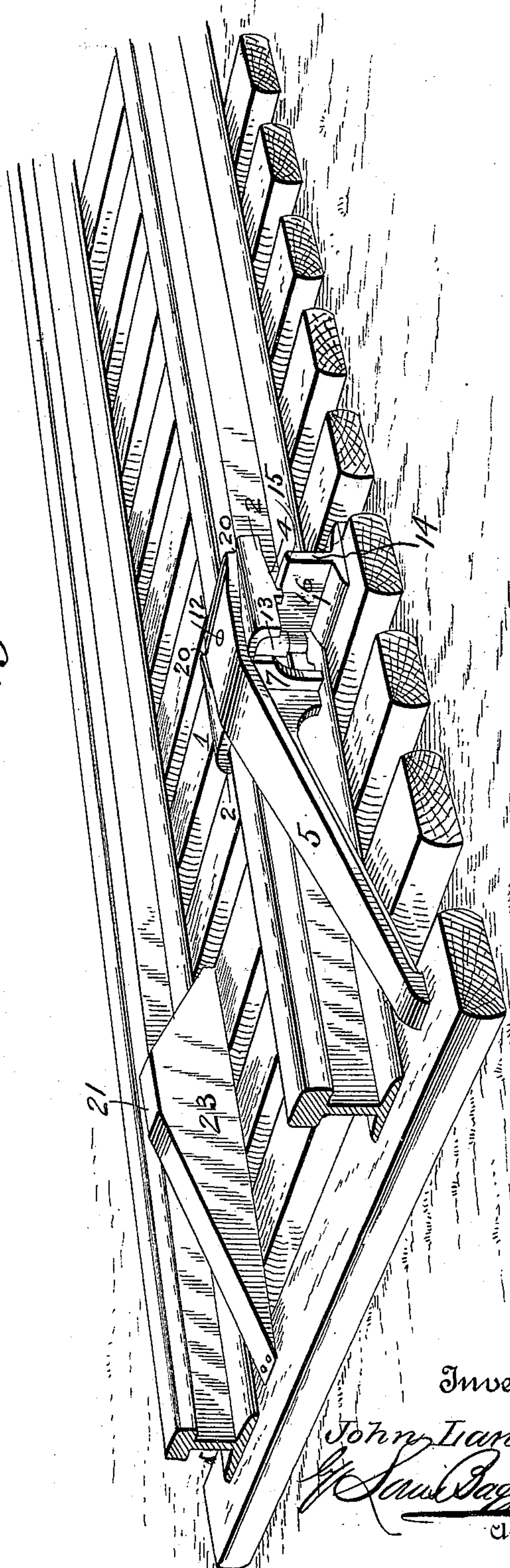


Fig. 1.



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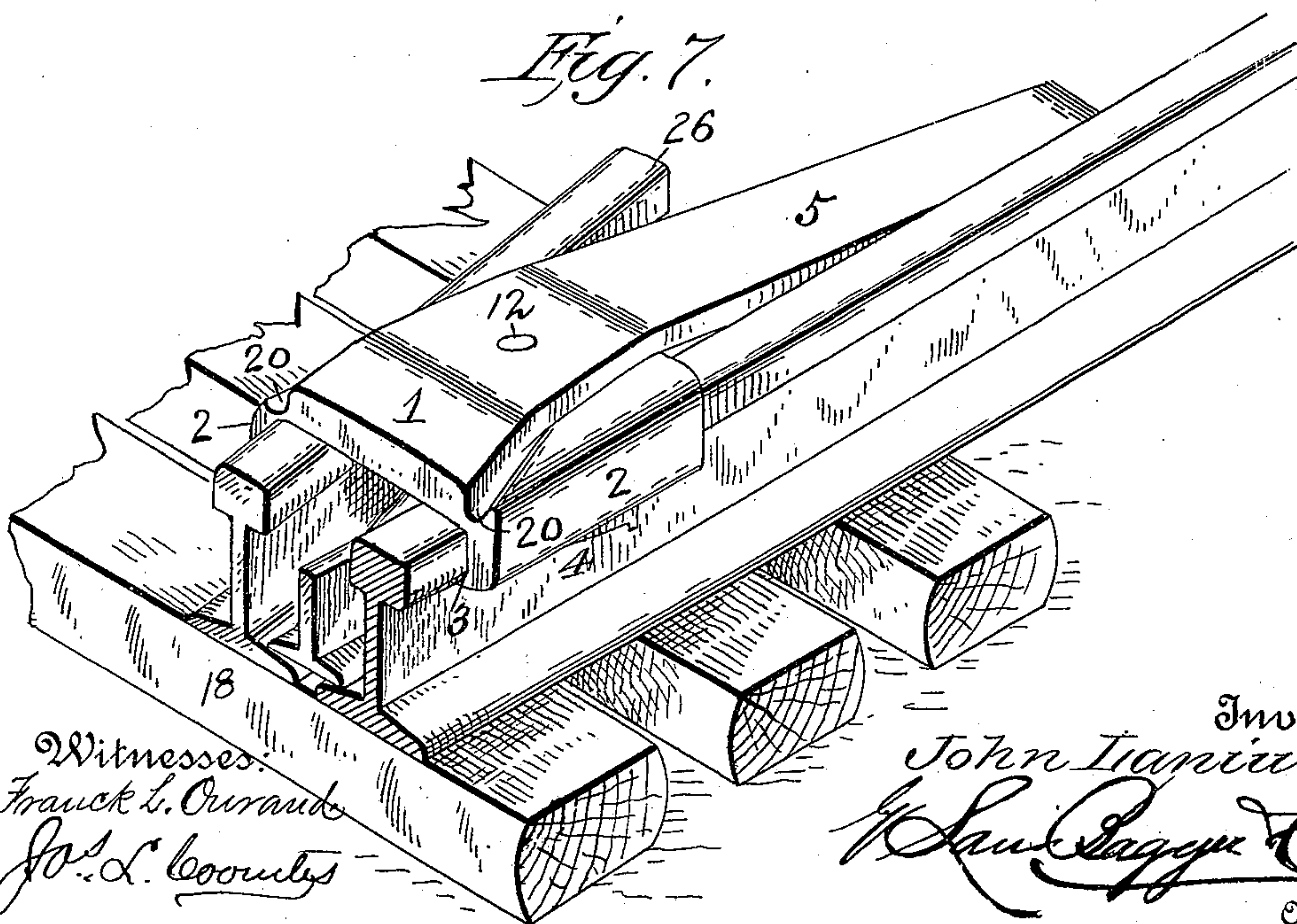
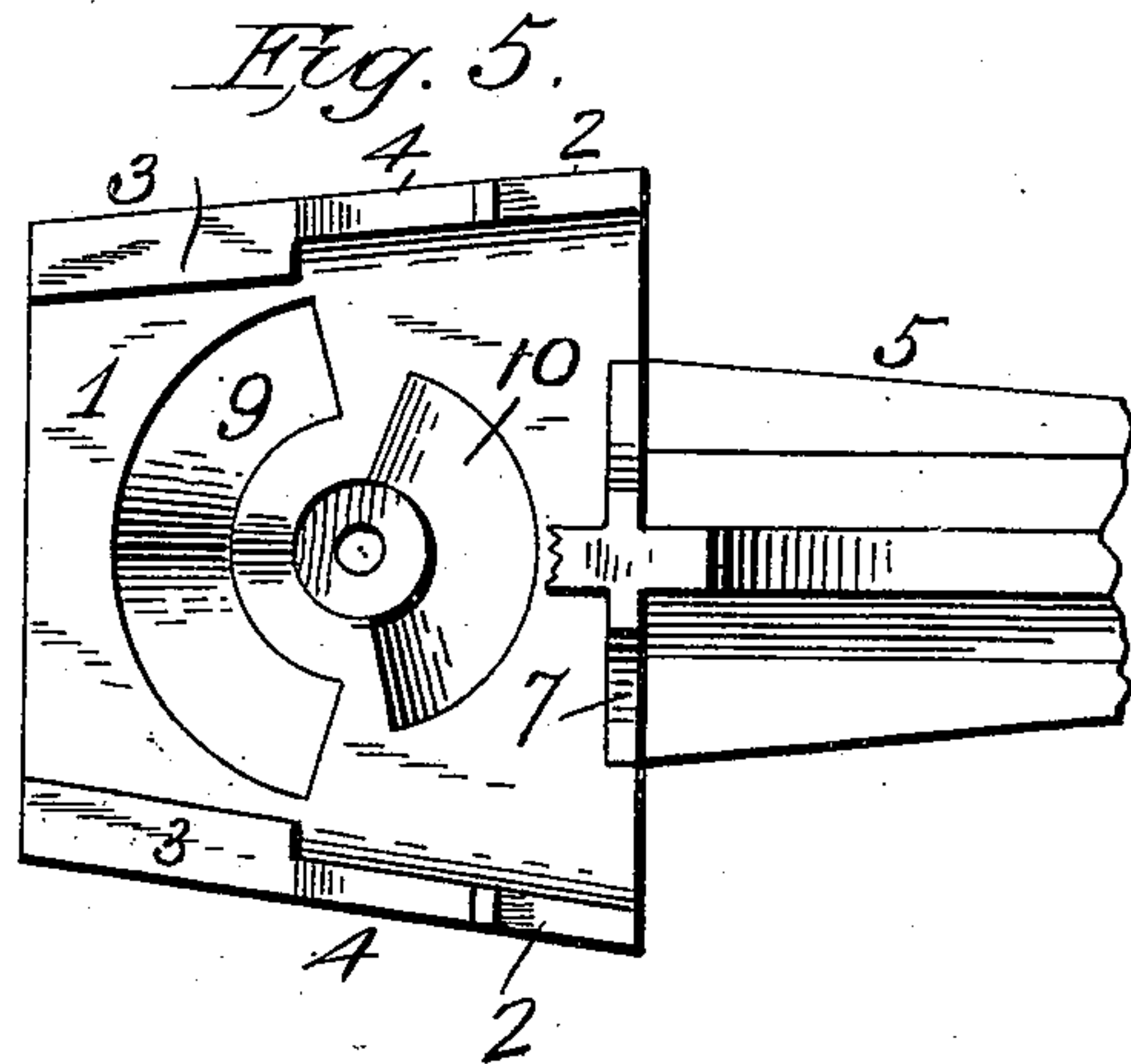
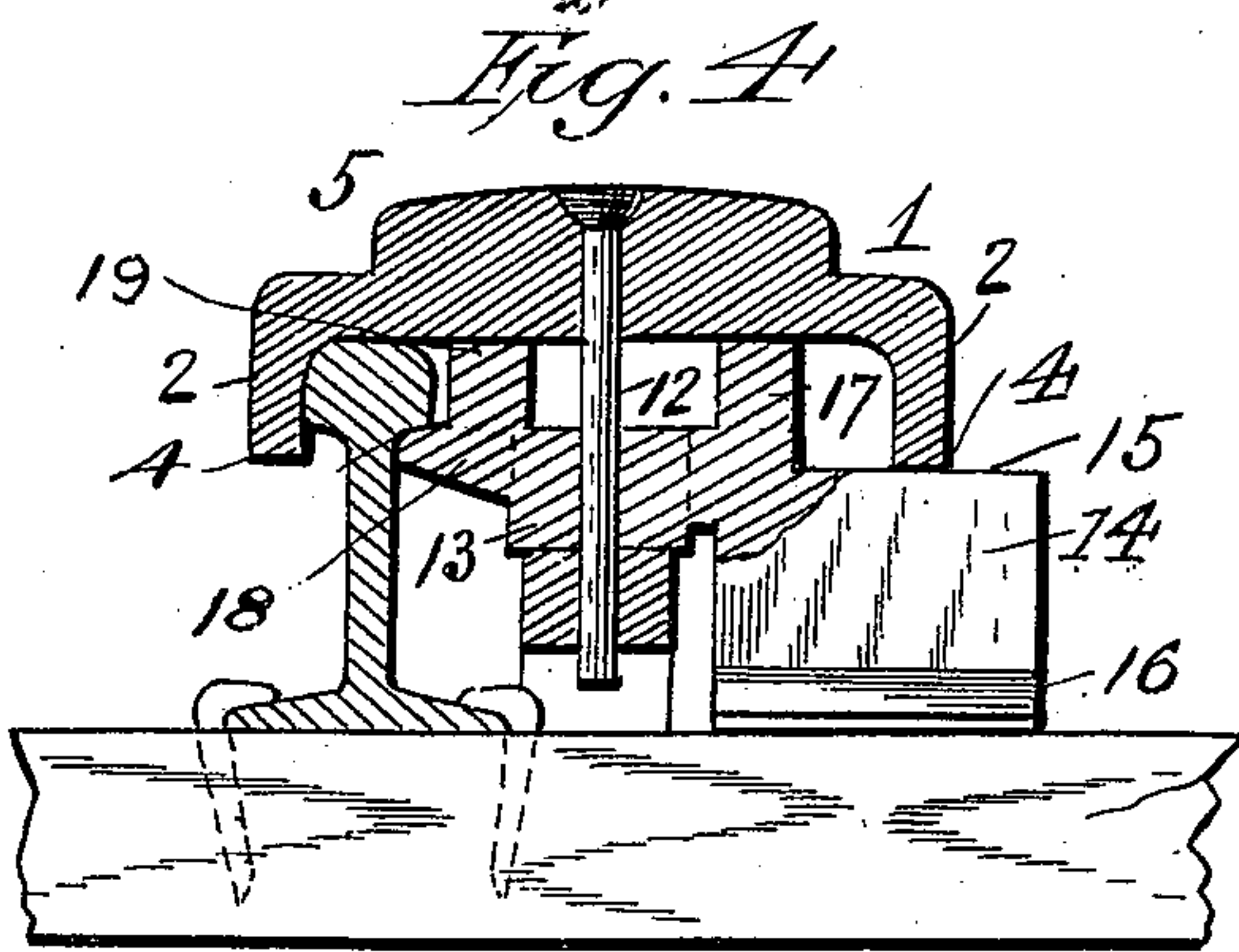
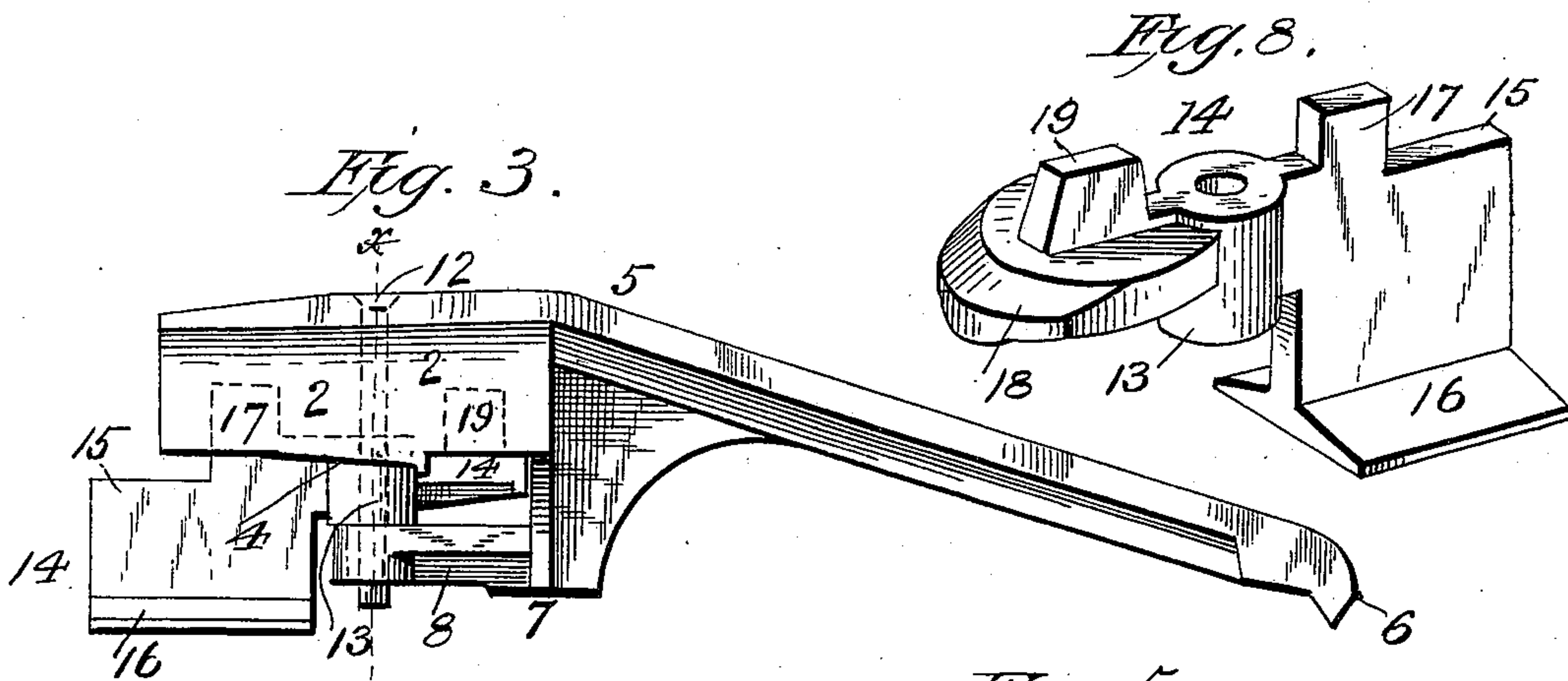
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2 Sheets—Sheet 2.



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# UNITED STATES PATENT OFFICE.

JOHN LANIUS, OF GALION, OHIO.

## CAR-REPLACER.

SPECIFICATION forming part of Letters Patent No. 620,462, dated February 28, 1899.

Application filed July 22, 1898. Serial No. 686,605. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN LANIUS, a citizen of the United States, residing at Galion, in the county of Crawford and State of Ohio, have  
5 invented new and useful Improvements in Car-Replacers, of which the following is a specification.

My invention relates to devices for replacing derailed cars upon their tracks; and its  
10 object is to provide an improved construction of the same which shall possess superior advantages with respect to efficiency in operation.

The invention consists in the novel construction and combination of parts herein-  
15 after fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a car-replacer constructed in accordance with my invention,  
20 showing the same as it appears in use. Fig. 2 is a bottom view of the replacer, showing the pivoted clamp in a longitudinal position. Fig. 3 is a side view. Fig. 4 is a transverse section on the line  $x\ x$ , Fig. 2, the pivoted  
25 clamp being shown as when in use or in a transverse position. Fig. 5 is a bottom view of the plate which rests on the rail. Fig. 6 is a bottom view of the auxiliary rail. Fig. 7 is a perspective view showing a different  
30 manner of securing the tapering plate to the rails. Fig. 8 is a perspective view of the hub and clamp.

In the said drawings the reference - numeral 1 designates a tapering metal plate  
35 having one end larger than the other and having the sides turned downwardly, forming depending flanges 2, provided at their lower inner ends with ribs 3. These flanges are also formed with cams 4. Formed integral with  
40 or secured to said plate is an inclined rail 5, the lower end of which is provided with teeth 6, adapted to take into a railroad-tie. This rail is prismoidal in cross-section and is also formed integral with a downwardly-extending  
45 standard 7 at the large end of said plate and formed at the lower end with a rearwardly-extending arm 8. The underside of said plate 1 is formed with a segmental cam-groove 9, inclined from the center toward the  
50 ends, and with a similar opposite groove 10 of a less radius.

Secured to the arm 8 is a vertical shaft 12,

on which is journaled the hub 13, formed with a clamp 14, cut away at the upper edge, as at  
15, and provided at the lower end with a base  
55 portion 16. The said clamp at its upper edge is formed with a lug 17, which engages with the cam-groove 10. Opposite said lug is a plate 18, also formed with said hub and provided with a projection 19, which engages  
60 with the groove 9.

The plate 1 at opposite sides is formed with grooves 20 to receive the flanges of the car-wheels when the cars are being replaced.

The numeral 21 designates an auxiliary rail  
65 inclined in opposite directions and having downwardly-extending sides 23 and provided with transverse strengthening-ribs 24 and with teeth 25 for taking into the tie for holding it in place.  
70

The manner of using the device is as follows: The plate 1 is placed on the rail with one of the depending sides engaging with the ball or under side of the tread of the rail, with the clamp in a longitudinal position and  
75 the lower end of the rail 5 resting on one of the ties. The auxiliary rail is then secured to the ties opposite the plate 1. The clamp 14 is then turned outwardly, the lug 17 and projection 19 riding in the cam-grooves in the under  
80 side of the plate 1 and forcing the clamp downward. The cut-away end of the clamp will now ride under the cam on the outer flange 2, while the end of the plate 18 will engage under the ball or tread of the rail, thus  
85 securely clamping the device in place. The car is now pushed up onto the rail 5 and from thence onto plate 1 to the track, the wheels at the opposite side of the car riding up onto  
90 the auxiliary rail.

It will be noted that the clamp 14 can move up and down, and the lug 17 and projection 19, engaging with the cam-grooves in plate 1 when the clamp is turned outwardly, will force the clamp downward, but will remain in contact with said plate, so as to aid in strengthening or supporting the same. This vertical  
95 movement of the clamp is permitted by the grooves 9 and 10 in the plate 1. When the clamp is turned at a right angle to the plate,  
100 it is at its lowest position, with the flange 16 resting on one of the ties. When turned in a position longitudinal to the plate, the lugs 17 and 19 will come into coincidence with the



grooves in the under side of the plate 1, thus allowing the clamp to be moved up and down.

The device can be applied to the rails either at the outside or inside thereof and in either  
5 direction.

In Fig. 7 I have shown another way in which the tapering plate 1 may be secured to the rails. In this case the clamp is turned so as to occupy a longitudinal position and one of  
10 the flanges 2 of the plate is engaged with the track. The other flange of the plate is then engaged with a short piece of rail 26, inclined at an angle to the rail and spiked to the ties. By this means the plate is securely held in  
15 place.

Having thus fully described my invention, what I claim is—

1. In a car-replacer, the combination with the tapering plate having downwardly-de-  
20 pending side flanges formed with cams at the lower end, the inclined rail and depending standard formed with a rearwardly-extending arm, of the vertical rod, the hub pivoted thereto, the clamp and the opposite arm, sub-  
25 stantially as described.

2. In a car-replacer, the combination with

the tapering plate formed with cam-grooves in the lower side, the depending side flanges provided with cams at the lower ends, the in-  
clined rail formed with teeth and the depend- 30  
ing standard provided with a rearwardly-ex-  
tending arm, of the vertical rod, the verti-  
cally-movable hub journaled on said rod, the  
clamp cut away at the upper end, the lug, the  
plate integral with said hub, and the projec- 35  
tion thereof, substantially as described.

3. As an improved article, a car-replacer consisting of the tapering plate formed with depending side flanges provided with ribs on the inner sides, and the inclined rail, and one  
40 of said flanges adapted to engage with the rail of a track and the other flange with a short rail inclined at an angle to the track-rail, substantially as described.

In testimony whereof I have hereunto set  
45 my hand in presence of two subscribing wit-  
nesses.

JOHN LANIUS.

Witnesses:

C. R. MILLER,

F. A. KEEN.