No. 835,295. PATENTED NOV. 6, 1906.

L. ALLENBRAND.

CAR BRAKE.

APPLICATION FILED APR. 12, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

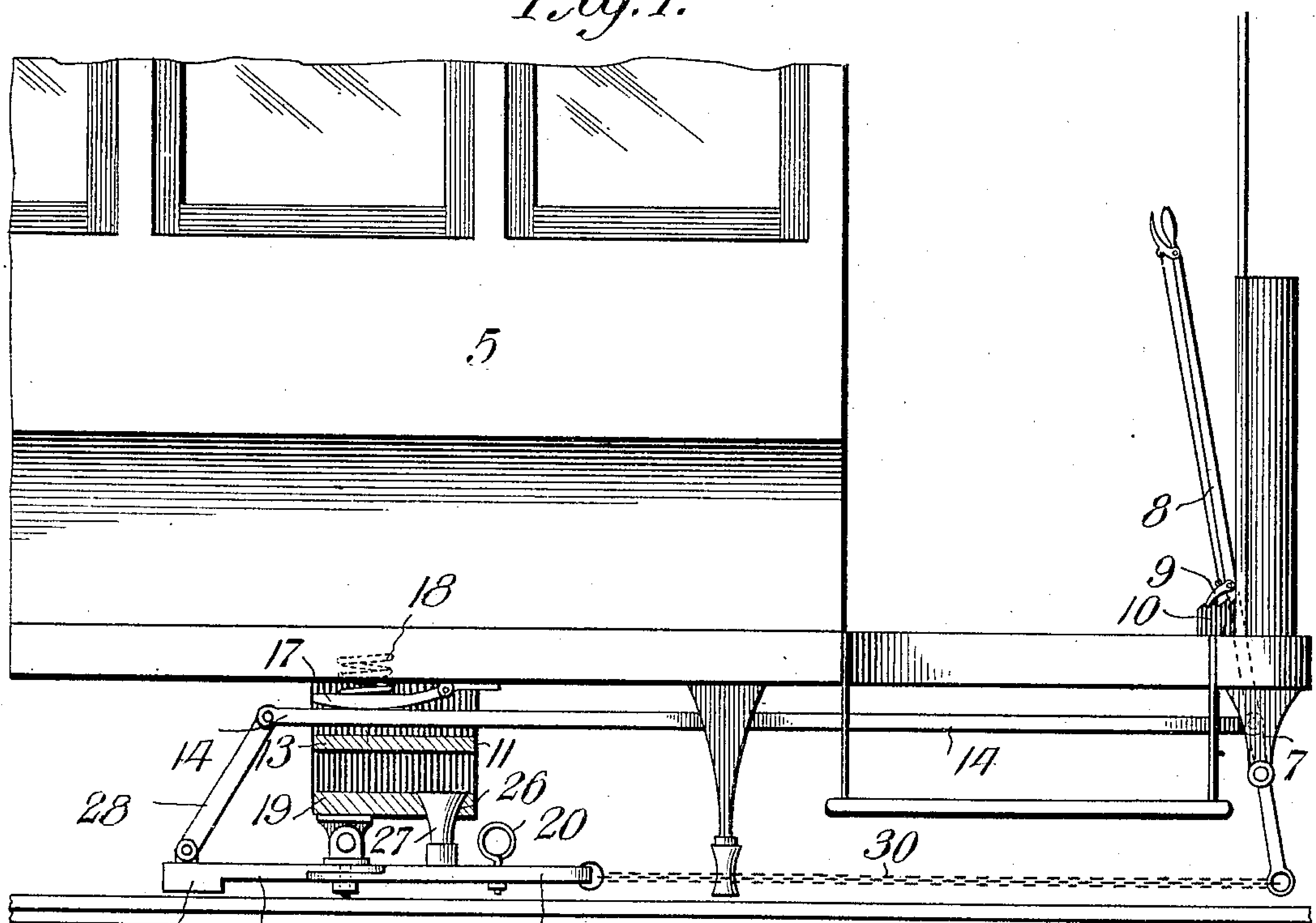
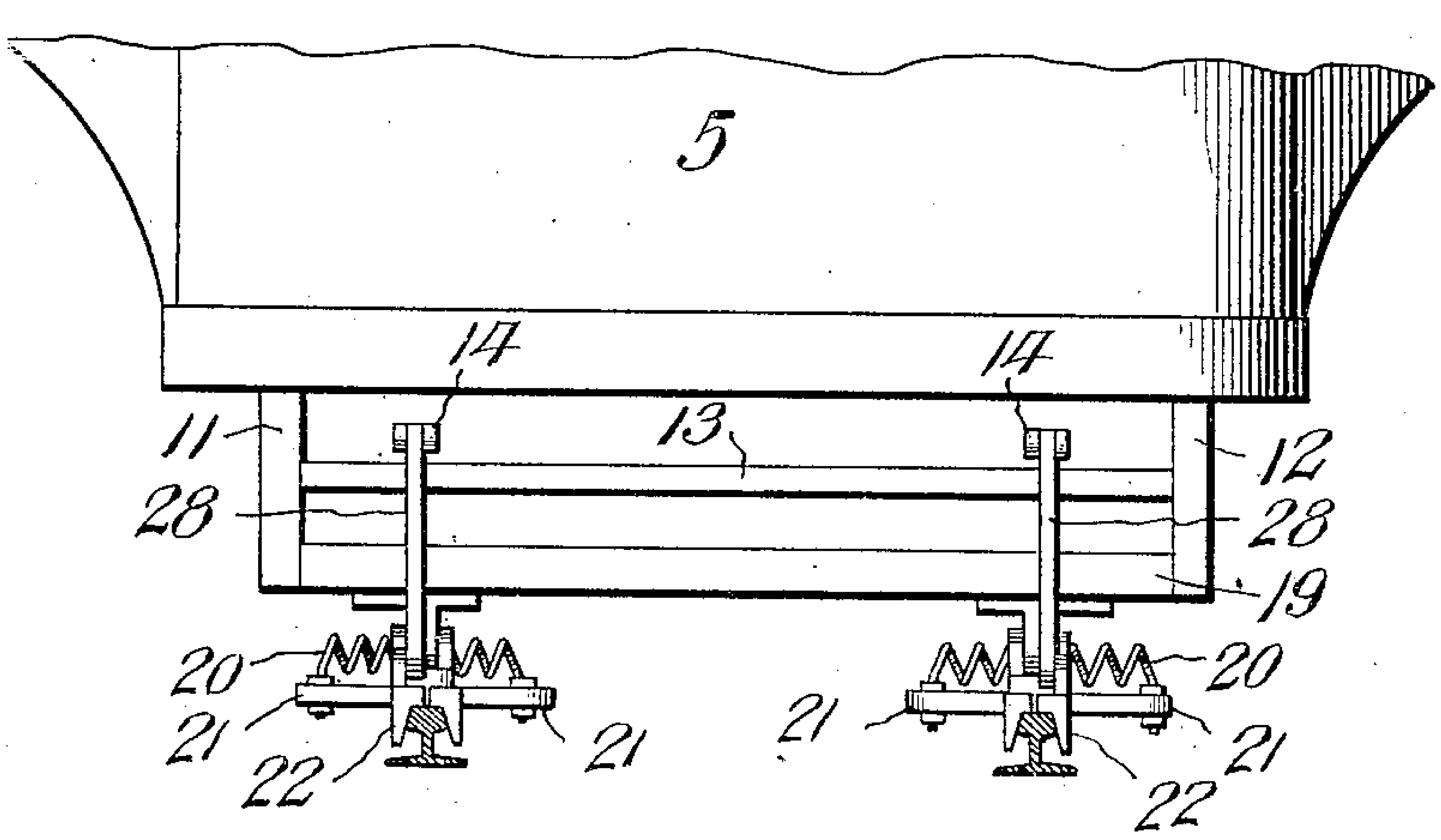


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

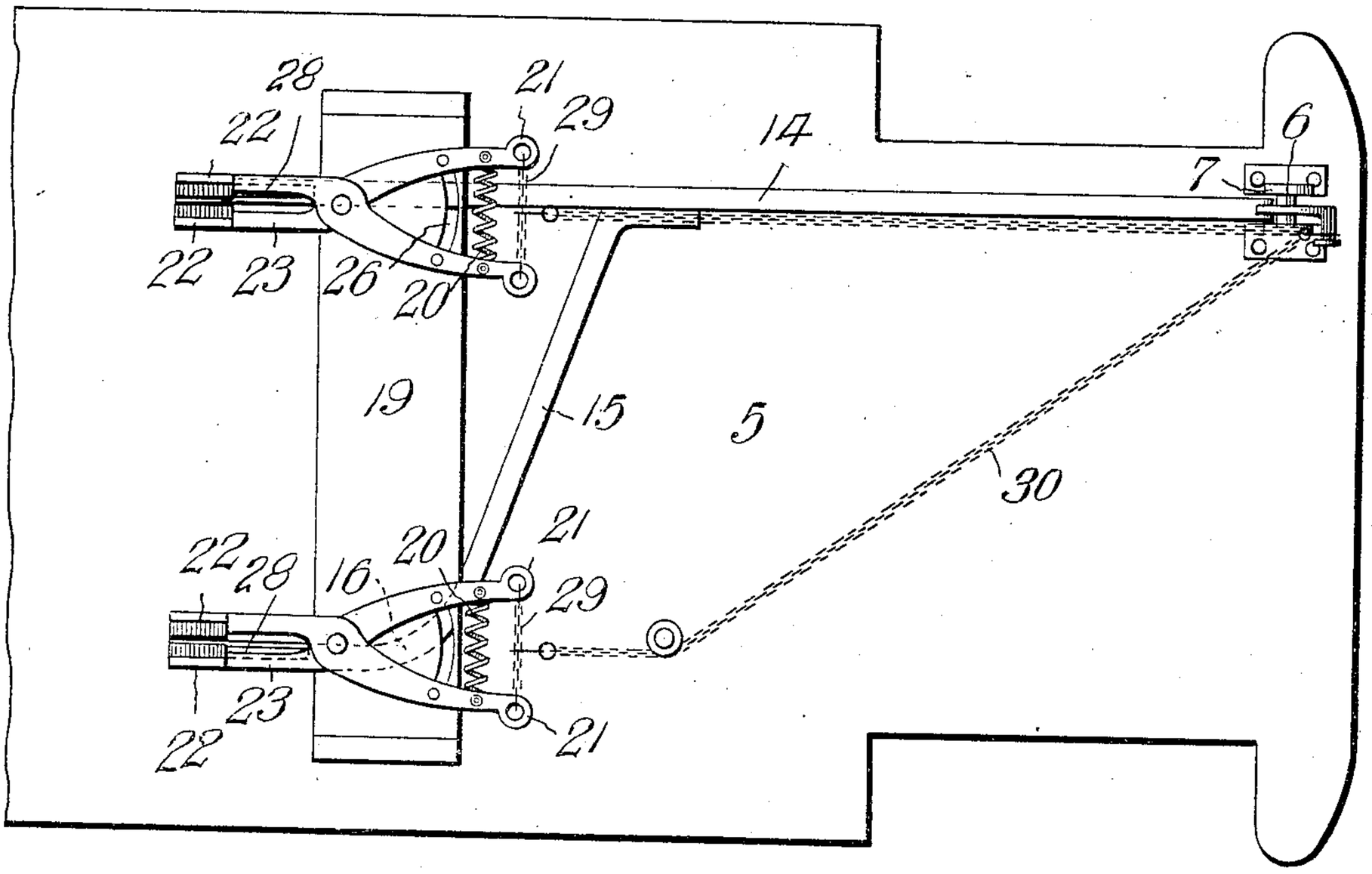
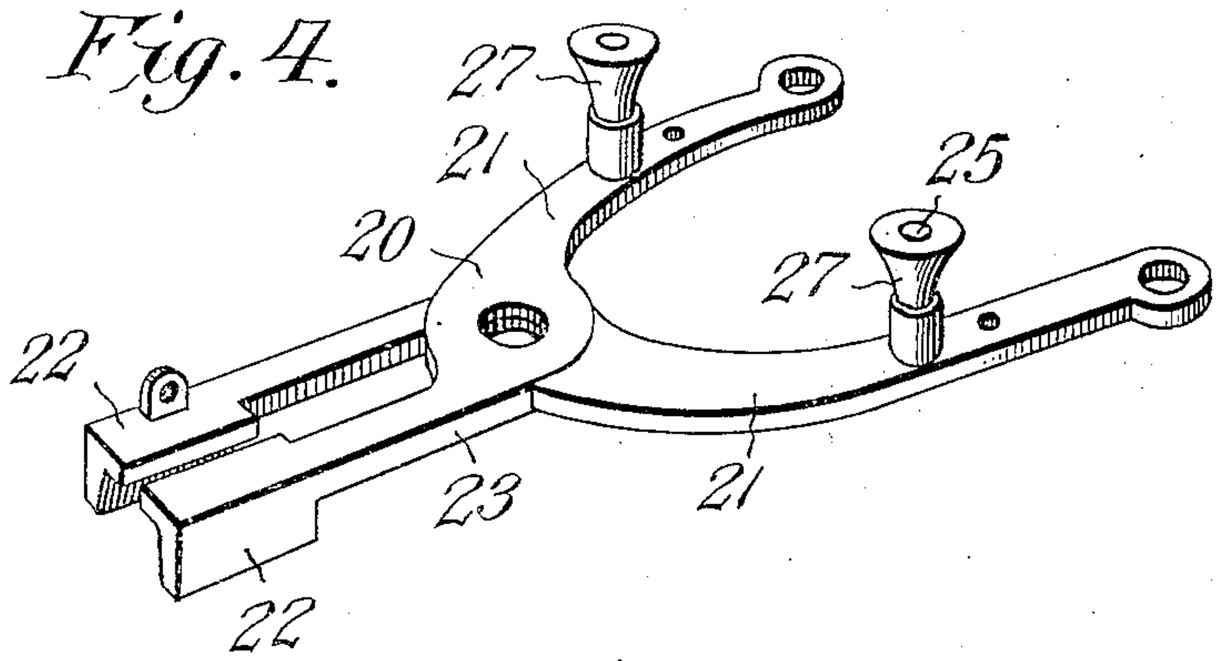


Fig. 4.



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LAWRENCE ALLENBRAND, OF BASEHOR, KANSAS.

CAR-BRAKE.

No. 835,295. Specification of Letters Patent. Patented Nov. 6, 1906.

Application filed April 12, 1905. Serial No. 255,204.

To all whom it may concern:

Be it known that I, LAWRENCE ALLENBRAND, a citizen of the United States, residing at Basehor, in the county of Leavenworth, State of Kansas, have invented certain new and useful Improvements in Car-Brakes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to brakes for cars, and more particularly to track-brakes, and has for its object to provide a brake which will include two track-engaging members so arranged that by a single movement of an operating-lever the members will be initially moved into position for engagement of the rails of the track upon which the car rests and will then be moved into engagement with the rails.

Other objects and advantages will be apparent from the following specification, and it will be understood that changes in the specific construction shown and described may be made and that any suitable materials may be used without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a view of a car provided with the present invention, the car being shown in side elevation. Fig. 2 is a rear elevation, the members being shown in engagement with the rails. Fig. 3 is a bottom plan view of the car. Fig. 4 is a perspective view of one of the track-engaging devices.

Referring now to the drawings, there is shown a car 5, beneath the floor of which there is journaled a transversely-extending shaft 6, this shaft being supported by suitable brackets 7. Secured to the shaft and extending therebeyond in both directions there is a vertically-extending lever 8, which projects upwardly through a slot in the floor of the car, this lever being provided with a spring-actuated dog 9, arranged for movement into and out of engagement with a notched segment 10 to hold the lever at different points of its movement.

Extending transversely of the car beneath the floor thereof there is a depending frame 11, which includes side pieces 12 and a horizontal member 13, secured at its ends to the end pieces approximately midway between the ends thereof. An arm 14 is pivoted at its forward end to the lever 8 above the pivot-point of the latter and extends rearwardly above and beyond the member 13, this arm lying above one of the rails of the track upon which the car is disposed, and secured to this arm there is a laterally-extending arm 15, having a rearwardly-directed end portion 16 extending over the member 13 and lying above the other rail of the track.

Secured at their forward ends to the floor of the car and lying above each of the arms 14 and 15, at the rearward portions of these arms, there are blocks 17, which are arranged for vertical movement of their rearward ends and which are held with these ends depressed and in engagement with the arms 14 and 15 by means of helical springs 18, disposed between the blocks and the floor of the car. The arms are thus held yieldably against upward movement, and these arms are slanted downwardly and rearwardly, so that rearward movement of the upper portion of the lever 8 results in downward movement of the rearward ends of the arms.

Secured horizontally between the end pieces 12, adjacent to the lower ends thereof, there is a supporting member 19, to which are pivoted track-engaging devices 20, each of these devices including a pair of horizontally-extending members 21, which are pivoted to each other in crossed relation to form coöperating jaws 22 and forwardly-extending arms 23. The jaws 22 extend downwardly below the arms 23 and are adapted for the reception of rails between these downwardly-extending portions, and the pivotal mounting of the track-engaging device is such that they are movable to bring the downwardly-extending portions of the jaws into position to lie at opposite sides of the rails upon which the car is disposed, it being understood that one of these devices is disposed above each of the rails. The jaws are held normally in spaced relation by helical springs 24, engaged in the arms 21.

Guide-openings 26 are formed in the supporting member 19 and receive therewithin upwardly-extending rollers 27, which are carried by the arms 21, these rollers resting against the sides of the openings 26 and receiving a portion of the strain incident to operation of the mechanism. Links 28 are connected with the rearward ends of the arms

14 and 15 and also with the portions of the track-engaging devices which lie rearwardly of their pivotal connection with the member 19, and the arrangement of these links is such that when the lever is operated to move the arms 14 and 15 rearwardly and downwardly the track-engaging devices are brought into position for engagement of the rails of the track.

The forward ends of the arms 23 are connected by means of chains 29—that is, the arms of each track-engaging device are thus connected—and these chains are connected at their centers with the lever 8 below its pivot-point by means of chains 30, the arrangement being such that movement of the lever to operate the arms 14 and 15, as mentioned above, moves the arms 23 toward each other, thus resulting in coöperation of the jaws 22 of each device 20 to grasp a rail, these devices having been already moved by the arms 14 and 15 into position for engagement of the rails.

What is claimed is—

1. The combination with a car, of a depending frame carried thereby, a track-engaging device pivotally connected with the frame for movement into and out of position to engage a track, a lever pivotally connected with the car, an arm pivoted to the lever at one side of its pivot-point, connections between the arm and the track-engaging device, means for directing the arm downwardly to bring the track-engaging device into position to engage a track when the lever is moved in one direction, and connections between the track-engaging device and the lever for movement of said device to engage a rail when the lever is moved to bring the device into position to engage a rail.

2. The combination with a car, of a vertical lever pivoted thereto and extending oppositely beyond its pivot-point, an arm pivoted to the lever at one side of its pivot-point and extending rearwardly therefrom, a frame carried by the car, a track-engaging device pivotally connected with the frame for movement into and out of position to engage a track, means for directing the rearward end of the frame downwardly when it is moved rearwardly, a link pivoted to the frame and to the track-engaging device for movement of the latter downwardly and into position to engage a rail when the arm is moved rearwardly, and connections between the track-engaging device and with the lever at the opposite side of the pivot-point from the arm, for operation of said device to engage a rail when the device is moved into position to engage a rail.

3. The combination with a car, of a depending frame carried thereby, a track-engaging device pivoted to the frame for movement into and out of position to engage a rail, said device being operable to engage a rail, means for holding the device yieldably against operation, and means for moving said device into rail-engaging position and for operation of said device to engage a rail.

In testimony whereof I affix my signature in presence of two witnesses.

LAWRENCE ALLENBRAND.

Witnesses:
H. L. EDMINSTER,
ROBERT MAYFIELD.