

T. S. HAUSER.  
 AUTOMATIC CAR BRAKE.  
 APPLICATION FILED SEPT. 22, 1910.

997,810.

Patented July 11, 1911.

2 SHEETS—SHEET 1.

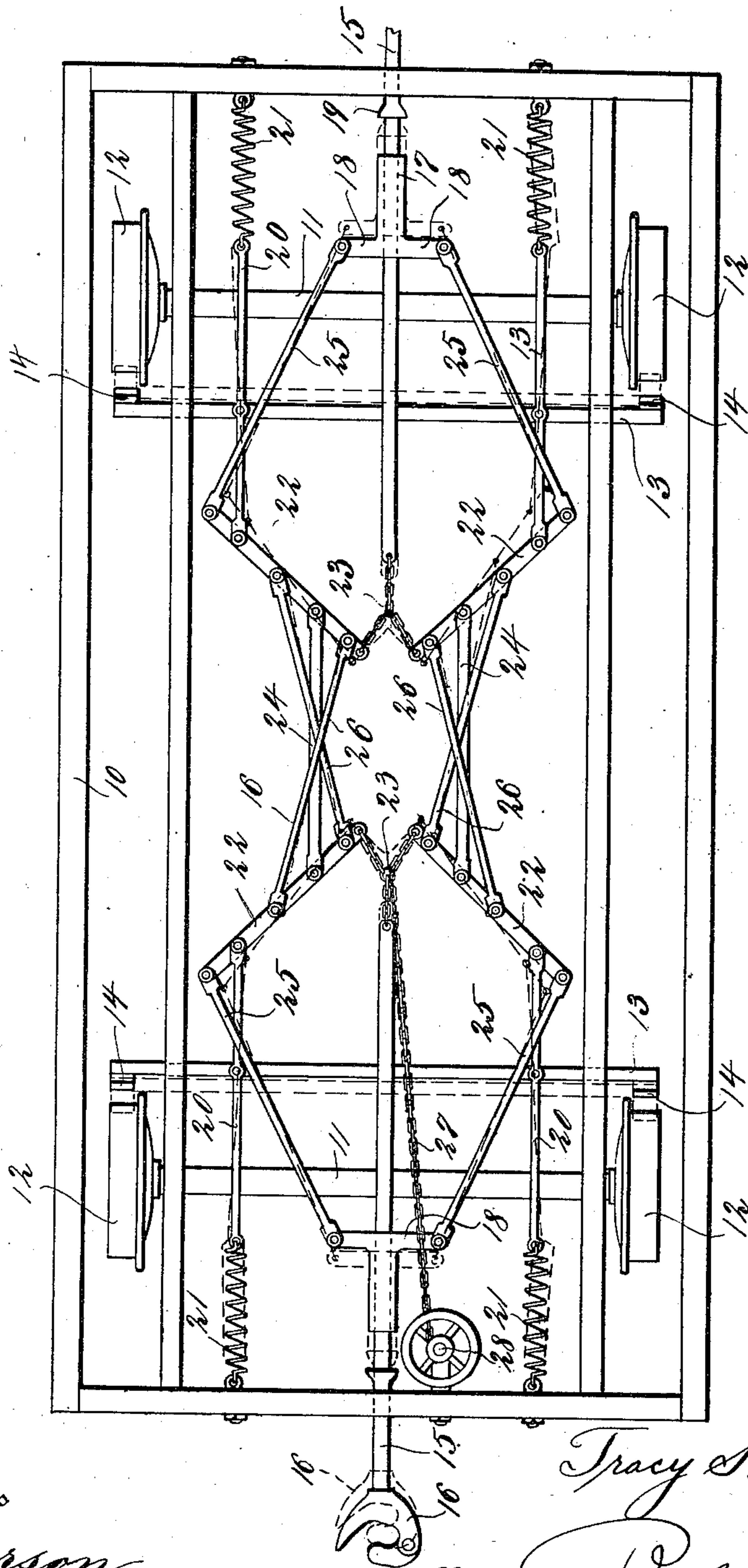


Fig. 1

Witnesses

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*Charles A. Wilson*

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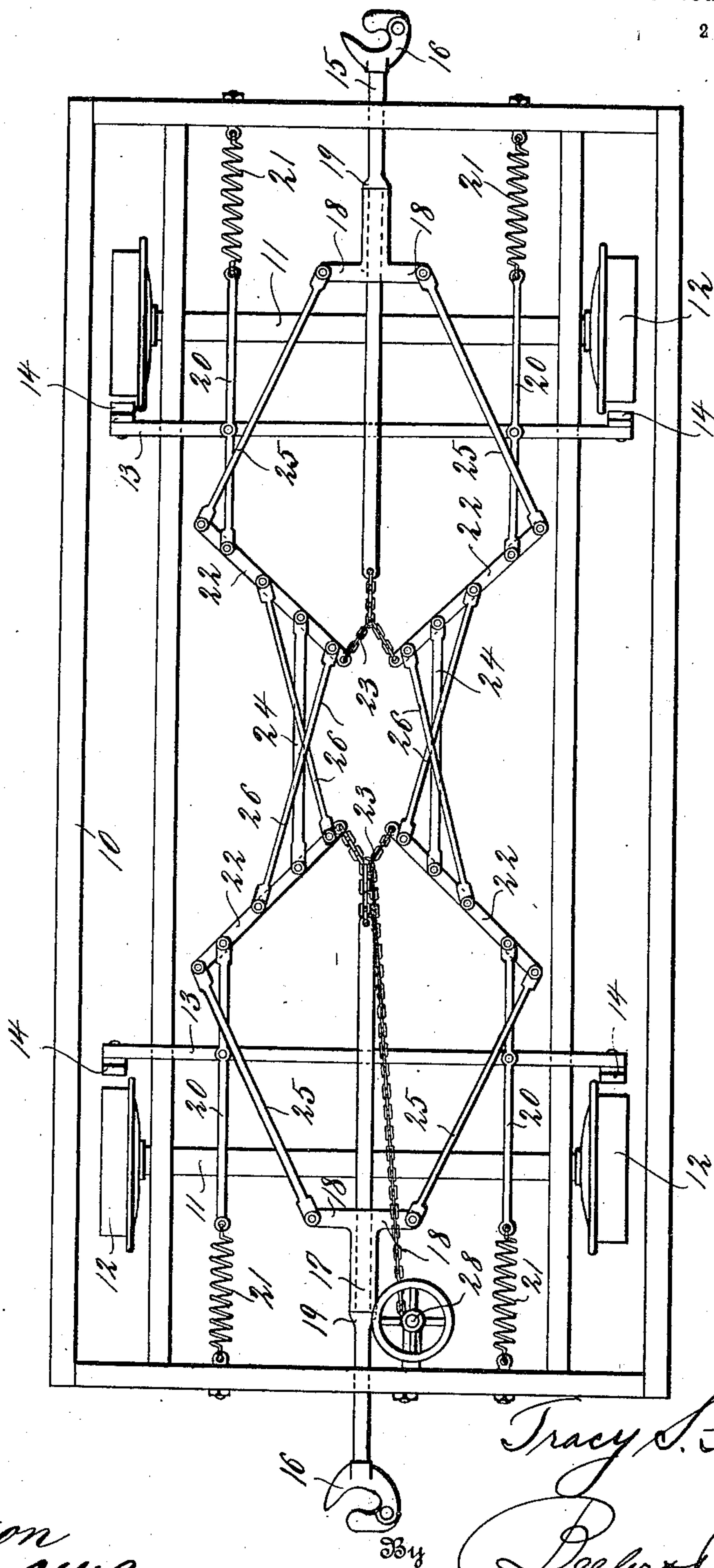


Fig. 2

Witnesses

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# UNITED STATES PATENT OFFICE.

TRACY S. HAUSER, OF NORTHUP, OHIO, ASSIGNOR OF ONE-HALF TO EARL W. MAUCK,  
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## AUTOMATIC CAR-BRAKE.

997,810.

Specification of Letters Patent.

Patented July 11, 1911.

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*To all whom it may concern:*

Be it known that I, TRACY S. HAUSER, a citizen of the United States, residing at Northup, in the county of Gallia and State of Ohio, have invented certain new and useful Improvements in Automatic Car-Brakes, of which the following is a specification.

This invention relates to cars, and particularly to car brakes which will automatically be applied when the force exerted on the draw bar is removed.

It also contemplates the construction of a device of this nature which will automatically remove the brakes whenever a push or a pull is exerted on said draw bar.

With the above and other objects in view, this invention consists in the construction, combination, and arrangement of parts, all as hereinafter more fully described, claimed, and illustrated in the accompanying drawings, wherein—

Figure 1 is a top plan view of a car frame illustrating the mechanism forming the subject matter of the present invention in the positions taken by the elements when a pull is exerted on the draw bar, dotted lines indicating the positions taken by the component parts when the brake is automatically applied; Fig. 2 is a similar view illustrating the positions of the elements of the present invention when a push is exerted on the draw bar.

Referring more particularly to the drawings, 10 indicates a car frame of the usual construction having the axles 11 mounted therein which carry at their terminals the wheels 12. A brake beam 13 coöperates with each set of said wheels 12 and is provided at its terminals with the brake shoes 14 which are adapted to operate against said wheels. In each terminal of the frame 10 is a draw bar 15 reciprocatingly mounted which extends inwardly to and beyond the adjacent brake beam 13, said draw bar being provided with the draw head 16 of the usual standard construction. A sleeve 17 is slidably mounted on each draw bar 15, each sleeve being provided with the diametrically disposed arms 18. The draw bars 15 are provided with circular lugs or flanges 19 which are located to the exterior of the sleeves 17, said flanges or lugs being adapted to bear against the sleeves and cause the same to reciprocate and release the brakes upon applying a push to said draw bar, as

will be hereinafter more fully and specifically described.

A lever 20 is pivoted adjacent to each terminal of each brake beam 13, a portion of said lever extending on either side of the brake beam. The terminal of the levers 20 adjacent to the terminals of the car frame 10 are connected to the strong coiled springs 21 which are in turn connected to the end pieces of the car frame. The opposite terminals of the levers 20 are connected to the levers 22, said connections being spaced from the outer terminals of said levers. The inner terminals of the levers 22 are connected to the draw bars 15 by the chains 23, thus when the draw bars 15 are moved the levers 22 will likewise move. In order to provide a stationary pivotal point for the levers 22, a link 24 is interposed between each adjacent pair of the levers 22 on the same side of the car, the length of this link being constant the levers will remain stationary with respect to longitudinal movement. This connection will provide a pivotal point or fulcrum for the levers 22. The outer terminal of each lever 22 is connected to the adjacent arm of the sleeve 18 by the link 25. From this construction it will be understood that upon any movement of said sleeve, the levers 22 must also move. The corresponding levers 22 located on the same side of the car are connected by the crossed links 26 which cause the levers to operate simultaneously, but in opposite directions.

From the foregoing it will be understood that when a pull is exerted on one of the draw bars 15, the inner terminals of the levers will move about the pivotal point or fulcrum formed by the links 24. This movement will cause a pull to be exerted on the levers 20 carried by the brake beam, thereby removing the shoes 14 from engagement with the wheels 12. The opposite sets of levers 22 are operated in a similar direction by the connecting crossed links 26, thereby insuring the release of both sets of wheels. When a push is exerted on the draw bars, the flange 19 comes into contact with the sleeve 17, thereby exerting a push upon the levers or links 25 causing the inner terminals of the levers 22 to swing outwardly about the pivotal point formed by the links 24, again removing the brake shoes from contact with the wheels through the instrumentality of the levers 20. The crossed



links 26 cause the reverse movement of the corresponding levers on the opposite end of the car. Whenever a push or pull is being exerted on the draw bars, the brake shoes  
5 are brought into contact with the wheels by the tension of the springs 21. Should it be desired to release the brake by hand, a chain 27 is connected to the chains 23 and operates around a brake shaft 28.

10 Having thus fully described my invention, what is claimed as new is:—

1. The combination with a car frame, of wheels carried thereby, brake beams carrying brake shoes coöperating with said wheels,  
15 draw bars operating in the ends of said frame, levers pivotally carried by said brake beams and extending on both sides thereof, levers pivotally connected to said last named levers, and having a connection between  
20 their inner terminals and the inner terminals of said draw bars, means interposed between the outer terminals of the levers carried by the brake beams and the end pieces of said car to normally cause said  
25 brake shoes to engage said wheels, and means whereby a pull or push on the draw bars will release said shoes.

2. The combination with a car frame, of wheels carried thereby, brake beams carrying brake shoes coöperating with said wheels,  
30 draw bars operating in the ends of said frame, levers pivotally carried by said brake beams and extending on both sides thereof, levers pivotally connected to said last named levers, and having a connection between  
35 their inner terminals and the inner terminals of said draw bars, means interposed between the outer terminals of the levers carried by the brake beams and the end pieces of said  
40 car to normally cause said brake shoes to engage said wheels, a connection between the corresponding levers at opposite ends of the car, and means whereby said corresponding  
45 levers may be operated oppositely to disengage said brake beams from the wheels.

3. The combination with a car frame, of wheels carried thereby, brake beams carrying brake shoes coöperating with said wheels,  
50 draw bars operating in the ends of said frame, levers pivotally carried by said brake beams and extending on both sides thereof, levers pivotally connected to said last named levers, and having a connection between  
55 their inner terminals and the inner terminals of said draw bars, means interposed between the outer terminals of the levers carried by the brake beams and the end pieces of said  
60 car to normally cause said brake shoes to engage said wheels, a connection between the corresponding levers at opposite ends of the car, and crossed links connecting the corresponding levers at the opposite ends of the car for causing the same to operate in oppo-

site directions to disengage said brake shoes from the wheels aforesaid. 65

4. The combination with a car frame, of wheels carried thereby, brake beams carrying brake shoes coöperating with said wheels, draw bars operating in the ends of said frame, levers pivotally carried by said brake  
70 beams and extending on both sides thereof, levers pivotally connected to said last named levers, and having a connection between their inner terminals and the inner terminals of said draw bars, means interposed between  
75 the outer terminals of the levers carried by the brake beams and the end pieces of said car to normally cause said brake shoes to engage said wheels, a connection between the corresponding levers at opposite ends of the  
80 car, crossed links connecting the corresponding levers at the opposite ends of the car for causing the same to operate in opposite directions to disengage said brake shoes from the wheels aforesaid. 85

5. The combination with a car frame, of wheels carried thereby, brake beams carrying the brake shoes coöperating with said wheels, draw bars reciprocatingly mounted in the opposite ends of said car extending  
90 to and beyond said brake beams, a lever and link connection between said draw bars and adjacent to the brake beams, springs connected to said lever and link connection whereby the brake shoes normally engage  
95 the wheels, a sleeve mounted on said draw bars, and means whereby said sleeve may operate said lever and link connection upon the inward movement of the drawbar.

6. The combination with a car frame, of  
100 wheels carried thereby, brake beams carrying the brake shoes coöperating with said wheels, draw bars reciprocatingly mounted in the opposite ends of said car extending to and beyond said brake beams, a lever and  
105 link connection between said draw bars and adjacent to the brake beams, springs connected to said lever and link connection whereby the brake shoes normally engage the wheels, a sleeve mounted on said draw  
110 bars, a link connection between said sleeves and said lever and link connection, a flange carried by each draw bar adapted to coöperate with the corresponding sleeve causing said lever and link connection to op-  
115 erate upon the inward movement of the drawbar, and means whereby the corresponding mechanisms at the opposite ends of the car may operate in opposite directions.

In testimony whereof I affix my signature 120 in presence of two witnesses.

TRACY S. HAUSER.

Witnesses:

A. C. SOFFORD,  
FRANK S. GATES.