

(No Model.)

2 Sheets—Sheet 1.

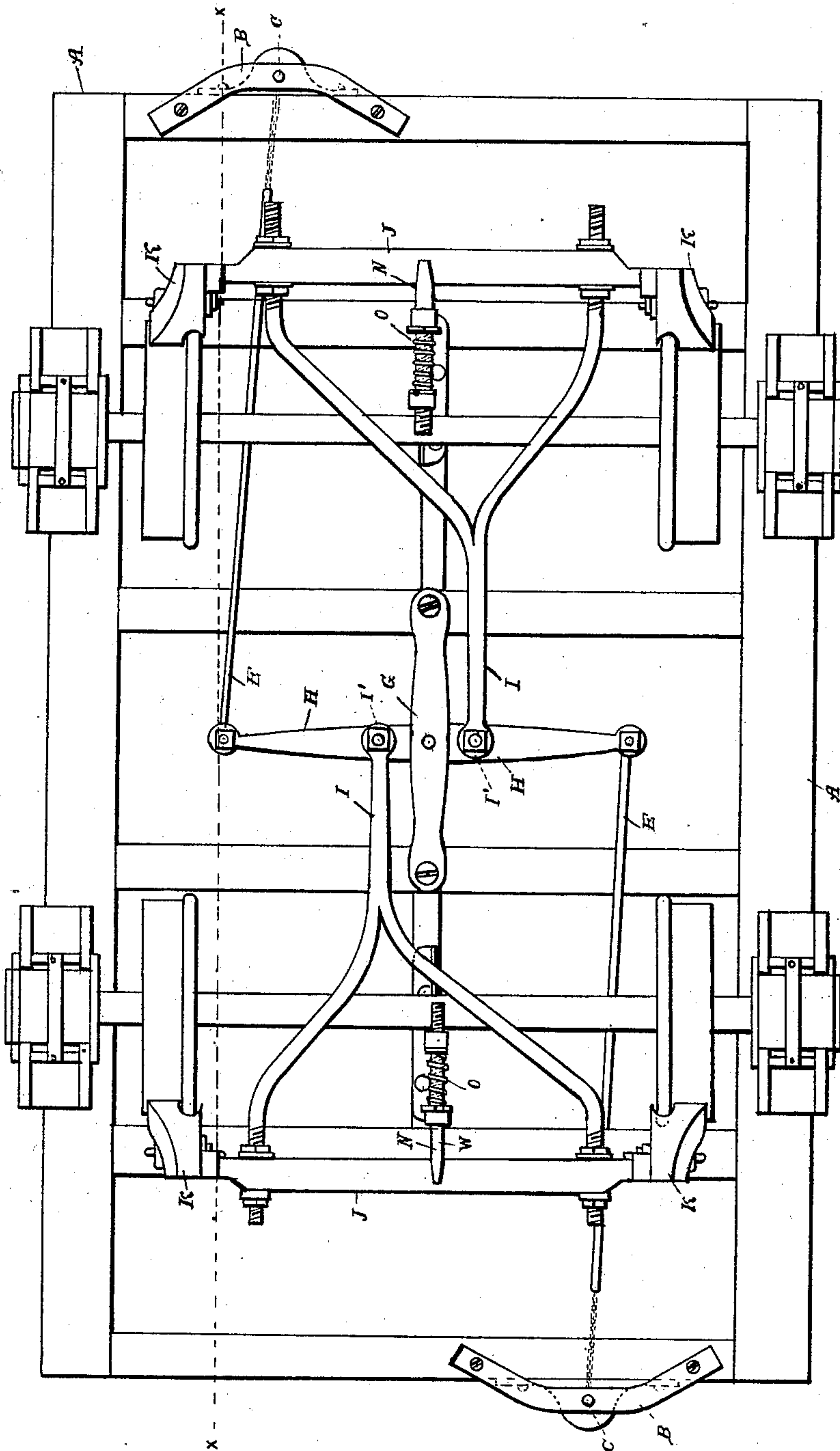
J. STROECKER, Jr.

CAR BRAKE.

No. 297,192.

Patented Apr. 22, 1884.

Fig. 1.



WITNESSES

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(No Model.)

2 Sheets—Sheet 2.

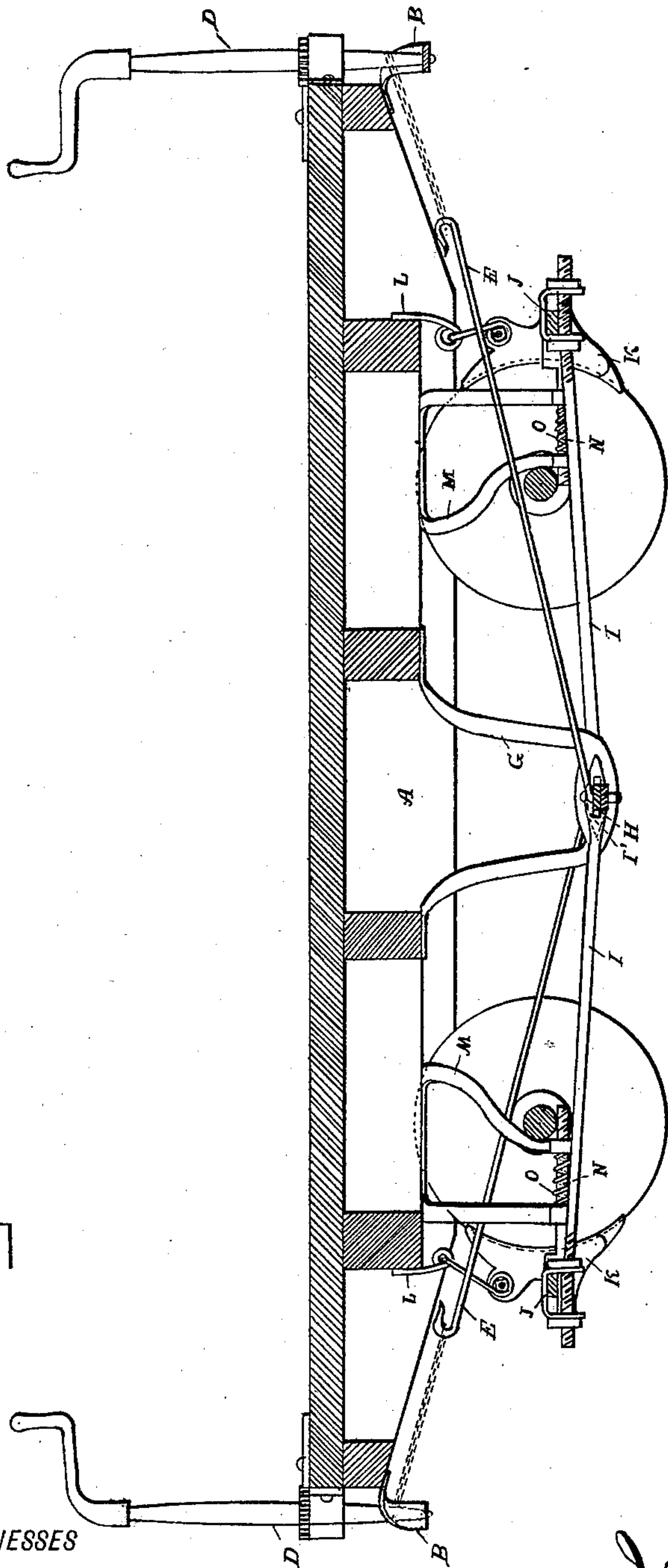
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Fig. 2-



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UNITED STATES PATENT OFFICE.

JOHN STROECKER, JR., OF MOBILE, ALABAMA.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 297,192, dated April 22, 1884.

Application filed January 17, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN STROECKER, Jr., a citizen of the United States, residing at Mobile, in the county of Mobile and State of Alabama, have invented certain new and useful Improvements in Car-Brake Mechanism, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in brake mechanism for cars; and it has for its objects, first, to provide means whereby an equality of pressure of the brake-shoes is exerted upon the peripheries of the wheels of the car; and, second, to provide means whereby the brake-shoes may be adjusted so as to bear equally upon the peripheries of the wheels should they become unequally worn; and with these ends in view my invention consists, essentially, in connecting the center bar with the brake-bar at a point near the shoes, and of providing a brake-bar with a guide.

In the accompanying drawings, forming a part of this specification, and on which like letters of reference indicate corresponding features, Figure 1 represents a plan view of the bottom of a car, showing my invention applied thereto; and Fig. 2, a side elevation of the same, showing the body of the car in longitudinal section and the brake-rods at either end, taken on the line *xx* of Fig. 1.

The letter A refers to the car-frame, which may be of the usual or any approved construction, and to the extremity of the frame and to the bottom thereof is secured the bracket B, in the center of which is an aperture, C, adapted to receive the lower end of the brake-rod D.

Attached to the car, about midway of the same, and in a longitudinal direction, is a bracket, G, the lower end of which is slotted laterally to receive the transverse lever H, which is fulcrumed thereto, and to the ends of said lever are fastened the draw-bars E.

A short distance from the bracket, on either side thereof, is the center bar, I, one end of which ends in jaws I', for the reception of the transverse lever H, to which it is pivotally connected, and the other end thereof terminates in bifurcated extensions, each extremity of which is screw-threaded, and adjustably but

firmly secured to the brake-bars J at a point nearly adjacent to the brake-shoes K by means of nuts and a clip, which extends under and around the sides of said bar.

Pendent from the transverse beams, near the ends of the car-frame, are straps L, from which straps extend U-shaped links, to the end of which are pivoted, in any suitable or convenient manner, the shoe K, which is of the usual construction.

Near the brake-bars—in the present instance between them and the adjacent axles—depend brackets or hangers M, whose lower extensions form the guide-rods N. One end of each of said rods is pivotally connected with the brake-bar J. The rod N is screw-threaded for the greater portion of its length, and between the ends of the bracket and surrounding the rod is a spiral spring, O, the function of which spring is to normally hold the brake-bar and the brake-shoes attached thereto in a distended position, so as to clear the wheels when not in use.

The guide-rod N is provided with a nut interposed between the spiral spring O and one arm of the bracket, the function of which is to adjust the tension of said spring, so that when the shoes become worn the nut can be screwed forward, thereby compressing the spring and bringing the brake-shoes nearer the wheel. Thus when, through use, the brake-shoes become too far separated from the wheels, they may be brought to their proper position. The bracket M thus serves a twofold purpose, first, that of supporting the guide-rod N, and, secondly, that of supporting the brake-bar J and the center bar, I, through the medium of the rod N. In this way greater stability is given to the whole mechanism, and any pressure that may be exerted upon the brake-shoes is rendered more positive and certain.

It will be observed that by reason of the adjustable connection between the center bars and the brake-bars either of the shoes may be advanced toward the wheels or set back from the wheels by turning the nuts. This is very important, as I find by actual trial that when one of the brake-shoes becomes worn more than its mate it may be properly set so as to bear with equal pressure upon its wheel as the mate upon its wheel. The flexible connection be-

tween the guide-rod N and the brake-bar J allows of its adjustment, while at the same time the lateral rigidity of the guide-rod serves to informally guide the brake-shoes to the peripheries of the wheels.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-brake, the combination, with the center bar connected with a lever at one end and adapted to be actuated by the draw-bar, and terminating at the other in bifurcated extensions, of the brake-bar adjustably secured to said extensions, and the movable guide-rod flexibly connected thereto and fitted in guides, and the spring and adjusting-nut, whereby the shoes are guided to the wheels and their normal position relatively to the wheels governed.

2. In a car-brake, the combination, with the brake-bar, of the guide-bar connected thereto,

provided with a spring and an adjusting-nut, and mounted in fixed guides, whereby the normal position of the brake-shoes relatively to the wheels is governed.

3. In a car-brake, the combination, with the brake-bars flexibly connected to the framework, and the guide-rods flexibly connected thereto, provided with springs and adjusting-nuts, and mounted in guides depending from the frame, of the bifurcated center bars adjustably connected to the brake-bars near the ends of the latter and to the lever mounted in a depending bracket, and the draw-bars, chains, and brake-rods.

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

JOHN STROECKER, JR.

Witnesses:

S. G. STONE,

P. W. TOMPKINS.