(No Model.) 2 Sheets—Sheet 1.

H. P. BASSETT.

CAR BRAKE.

No. 505,381. Patented Sept. 19, 1893.

FIG. 1.

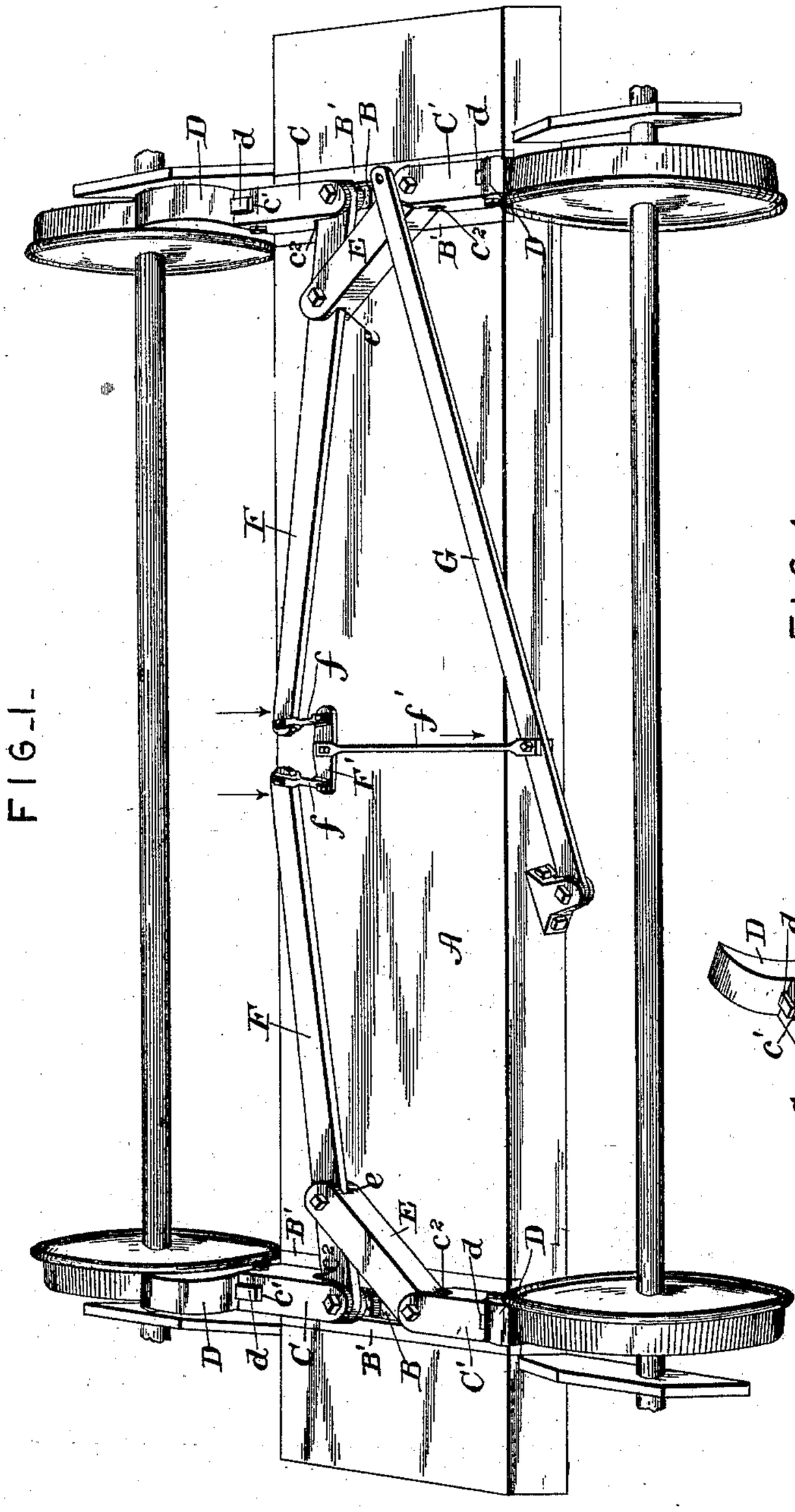
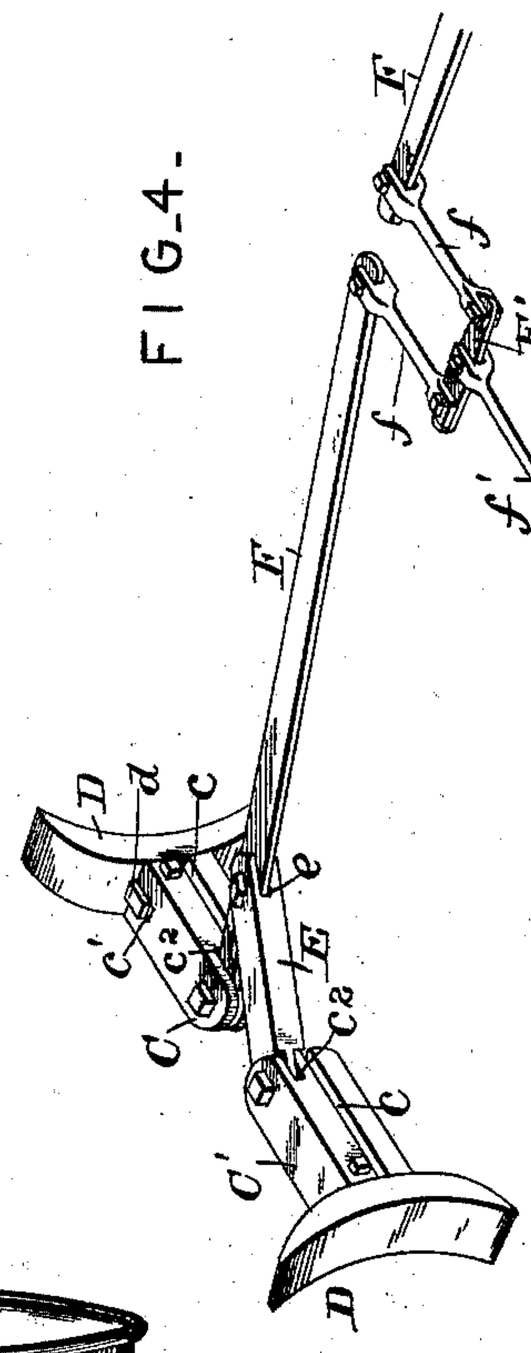


FIG. 4.



Witnesses

Jas. K. McCathran

Chas. S. Hyer

Inventor

Horace P. Bassett

By his Attorneys,

Church & Co.

(No Model.)

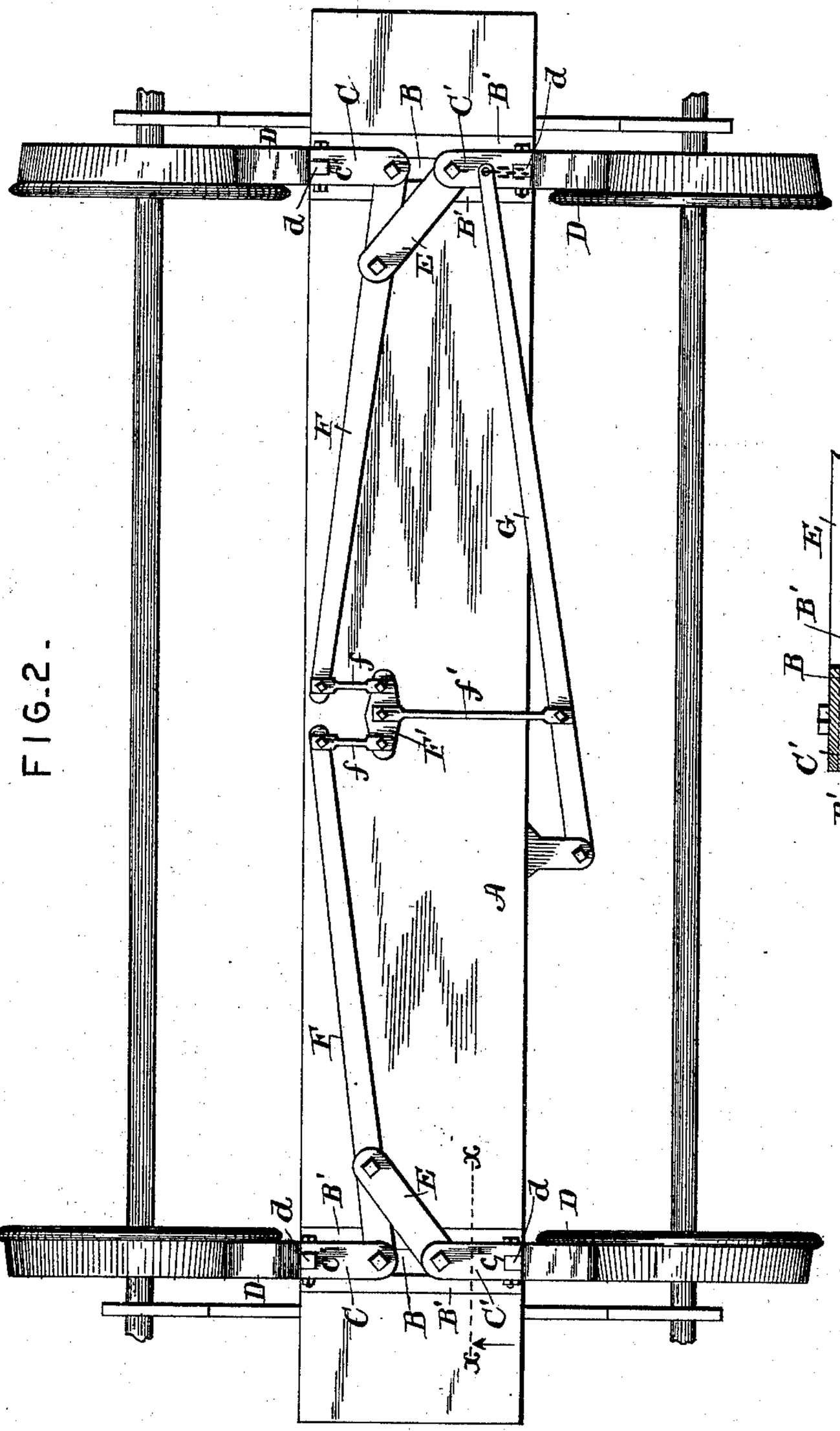
2 Sheets—Sheet 2.

H. P. BASSETT.

CAR BRAKE.

No. 505,381. Patented Sept. 19, 1893.

FIG. 2.



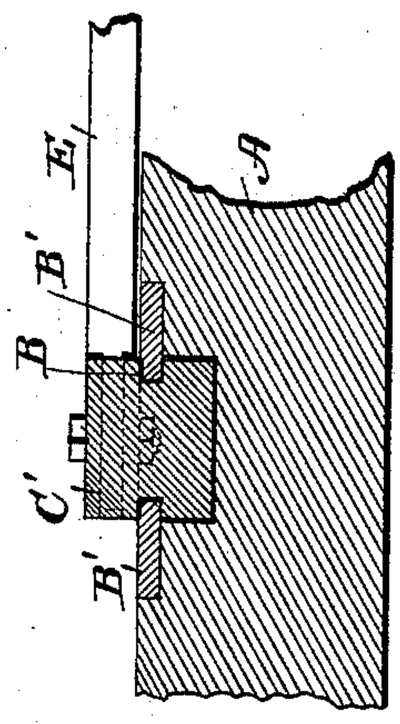


FIG. 3.

Witnesses

Jas. K. McCathran

Chas. S. Hyer

Inventor

Horace P. Bassett

By his Attorneys,

Church & Co.

UNITED STATES PATENT OFFICE.

HORACE P. BASSETT, OF WARREN, OHIO.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 505,381, dated September 19, 1893.

Application filed April 15, 1892. Renewed February 21, 1893. Serial No. 463,262. (No model.)

To all whom it may concern:

Be it known that I, HORACE P. BASSETT, a citizen of the United States, residing at Warren, in the county of Trumbull and State of Ohio, have invented a new and useful Car-Brake, of which the following is a specification.

This invention relates to certain new and useful improvements in car-brakes, and has reference to an improvement on my application filed May 22, 1891, Serial No. 393,746, and allowed October 30, 1891, and consists of the details of construction and arrangement combined as will be more fully hereinafter described and claimed.

The object of the present invention is to simplify the construction and operation of the several parts, as will be more fully hereinafter referred to.

In the drawings—Figure 1 is a perspective view of a car truck, showing my improved construction applied thereto. Fig. 2 is a top plan view of the same. Fig. 3 is a section on the line *x—x*, Fig. 2. Fig. 4 is a detail perspective view of the parts of the brake, together with the shoes removed from the truck.

Referring to the drawings, A represents a beam or bolster of a truck, having transverse grooves B near the ends thereof. Said grooves are preferably formed or provided with binding or wear strips B′, which receive sliding plungers C and C′ arranged in pairs in connection with said grooves B, the said plungers having grooves *c* in the sides thereof, which bear on said binding or wear strips B′, forming tracks or guides for the movement thereof. The outer end of each of said plungers is vertically slotted, as at *c′*, to receive a lug or ear *d* of the brake-shoes D. The said lugs or ears *d* of said brake-shoes D are pivotally mounted in said slots *c′* so as to have free movement as is usual in devices of this character. The inner ends of said plungers C and C′ are each horizontally slotted or bifurcated, as at c^2, and a space is left between the inner opposing ends of said plungers, which is accomplished by making the plungers of proper and proportionate length, whereby they may be moved inward toward each other or repelled as the brake-shoes are withdrawn or forced outward, the said plungers at all times sliding or moving in true lines in the grooves B aforesaid. Within the bifurcation c^2 of each of the plungers C′ is pivotally connected a link E, whose opposite end is formed with a horizontal slot or bifurcation *e*. Two supplemental levers F are provided and have their inner ends secured by links *f* to an equalizer F′, to the center of which is secured another link *f′* attached to a primary or operating lever G, having its end pivotally connected to the beam or bolster A, and the opposite end connected to a brake-chain or operating rod running to the brake-mechanism. The outer ends of the supplemental levers F are pivotally connected in the bifurcations C^2 of the plungers C, and adjacent to said outer ends of said levers F the bifurcations *e* of the links E embrace said levers and are movably connected therewith.

The operation is as follows: In applying the brake, the lever G is operated by suitable brake mechanism, the force thereof exerted through the link *f′* to the equalizer F′, and thence to the levers F, drawing the inner ends thereof in the direction of the arrows shown in Fig. 1, which will force the plungers C and shoes D in connection therewith outward through the direct connection with said levers F, and the plungers C′ will be operated in a similar manner through the links C as will be readily understood. It will be seen that the pressure is direct acting, and the shoes D are firmly and squarely presented to the rims of the car-wheels through the medium of the guides formed by the grooves B, which prevent the plungers C and C′ from having lateral play. It will be understood that springs may be employed to release the parts when the operating brake-mechanism releases the lever G when a brake-chain or other flexible connection is secured to said lever G, but when a brake-rod is employed it will be sufficient of itself to force the lever G backward and release the shoes D from the rims of the wheels. By means of the equalizer, arranged centrally as shown, the same amount of pressure can be applied upon one brake as upon the other, and this feature is especially valuable when one brake-shoe or the mechanism on one side becomes broken or disarranged, when it will be seen that the

other brake-shoe and mechanism can be equally well operated with efficiency and advantage.

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

1. In a car-brake, the combination of a lever connected at one end with operating mechanism, a pair of supplemental levers, an equalizer connected to the supplemental levers and the first-named lever, plungers connected to the outer ends of said supplemental levers, shoes attached to said plungers, and a beam or bolster having grooves in the opposite ends thereof with plungers therein to which said shoes are attached substantially as described.

2. In a car-brake, the combination of an operating lever connected at one end with the operating mechanism, a pair of supplemental levers having plungers pivotally connected to the outer ends thereof, links connected to said supplemental levers and to other plungers, and shoes carried by said plungers, substantially as described.

3. In a car-brake, the combination of a beam or bolster having grooves in the opposite ends thereof, plungers mounted in said grooves and carrying brake-shoes, and operating levers connected to said plungers, substantially as described.

4. In a car-brake, the combination of a beam or bolster having grooves in the ends thereof, plungers movably mounted in said grooves and carrying shoes at their outer ends, supplemental levers connected to the inner ends of said shoes, and an operating lever connected to the inner opposing ends of said supplemental levers, substantially as described.

5. In a car-brake, the combination of a beam or bolster having grooves therein with inwardly-projecting flanges, grooved plungers mounted in said grooves of the beam or bolster and having shoes at their outer ends, and levers for operating the same, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HORACE P. BASSETT.

Witnesses:

FRANK KELLOGG,

CHAS. H. BASSETT.