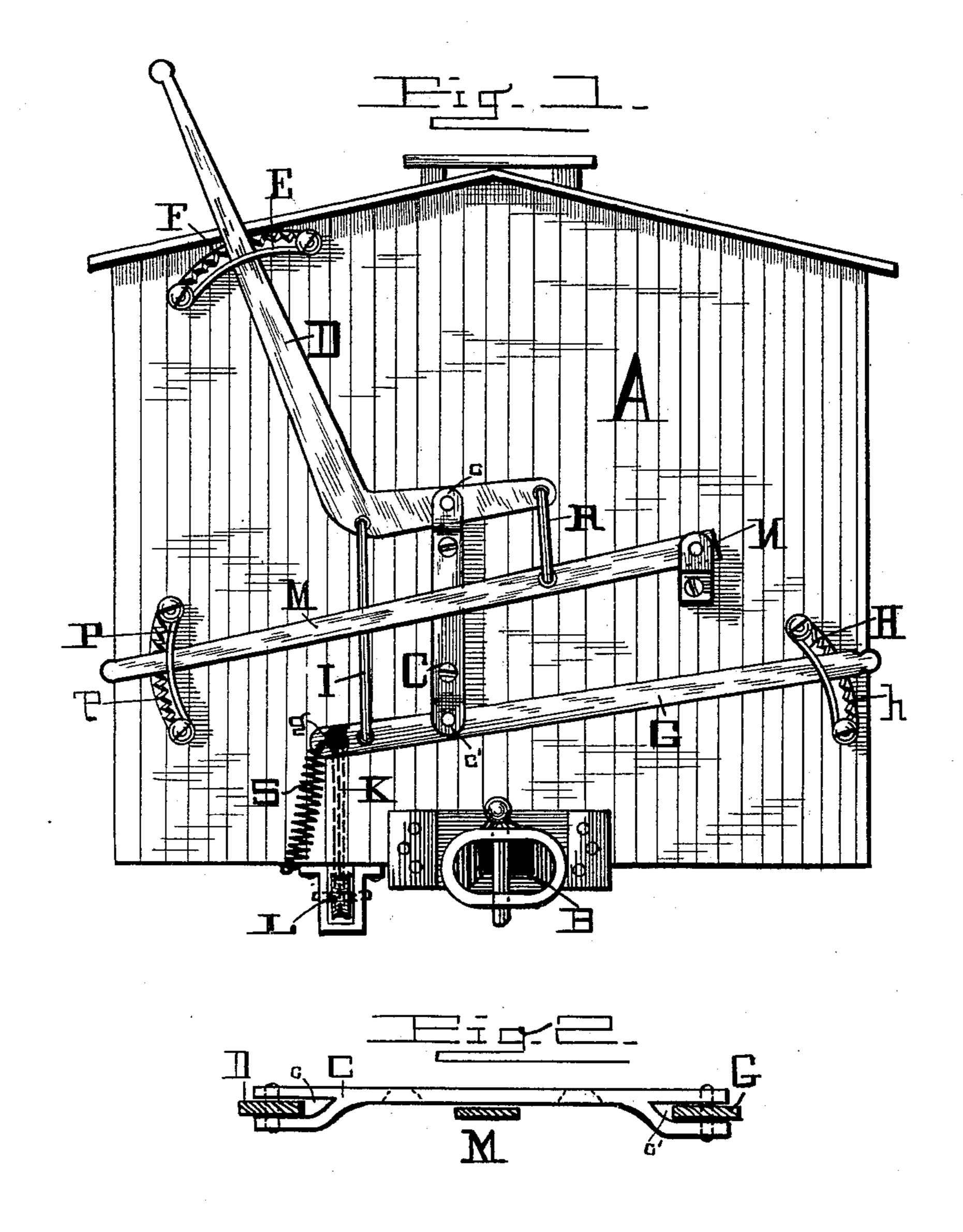
(No Model.)

H. C. FLETEMEYER.

CAR BRAKE.

No. 391,308.

Patented Oct. 16, 1888.



Witnesses. RESouvell. P.L. Brooks.

H. C. Sleteneger.

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United States Patent Office.

HENRY C. FLETEMEYER, OF LAFAYETTE, INDIANA.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 391,308, dated October 16, 1888.

Application filed July 2, 1888. Serial No. 278,836. (No model.)

To all whom it may concern:

Beit known that I, Henry C. Fletemeyer, of Lafayette, in the county of Tippecanoe and State of Indiana, have invented certain new and useful Improvements in Car-Brakes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

This invention relates to certain improvements in the car-brake for which Letters Patent No. 343,502 were granted to John W. Stark the 8th day of June, 1886; and it has for its objects to provide a system of connected and co-operating levers in connection with the brake-chain and brakes, whereby the brakes may be applied or released quickly and with great facility from either side of the car or from the top thereof, as more fully hereinafter set forth. These objects I accomplish by the means illustrated in the accompanying drawings, in which is represented, in—

Figure 1, a view of one end of a car, showing my brake mechanism applied thereto, while

Fig. 2 is a detail.

Referring to said drawings, the letter A indicates the car, and B the draw-head thereof, which are of the usual construction.

The letter C indicates a hanger, which is secured to the end of the car about midway between its sides, and which is bifurcated at its upper and lower ends, as indicated by the letters c c'. In the upper bifurcated end of said hanger is fulcrumed the short arm of a bell-crank lever, D, the long arm of which extends upward above the top of the car, where it terminates in a suitable handle. The said long arm of said lever extends above the car, where it is provided with a suitable handle, and it is guided in its movements by a guard, E, which is provided with a rack, F, for holding it in a fixed position when required.

The letter G indicates a bar-lever, which is fulcrumed near its lower end in the lower bifurcated end of the hanger C, its outer end extending through a guide-guard, H, provided with a rack, h, the said outer end projecting beyond the side of the car, where it terminates in a suitable handle. The said bar-lever, near its inner end, is connected with the bell-crank lever D at its angle by means of a link, I, so

that the two levers will move together when either is operated. At its inner end the lever G is provided with a hook, g, to which one end 55 of the brake-chain K is attached, the said chain passing under a pulley, L, secured to the lower part of the car in the usual manner.

The letter M indicates a bar-lever located between the levers G and D, and fulcrumed at 60 its inner end to a short bifurcated hanger, N, secured to the end of the car near one side. The said lever extends toward the opposite side of the car, its free end passing through a guide-guard, P, secured to the car and pro- 65 vided with a rack, p, the projecting end of the lever being provided with a suitable handle, as shown. The extremity of the short arm of the bell-crank lever D is connected to the barlever M by means of a link, R, so that the two 70 levers will co-operate when either is operated. The levers are held in normal position by means of a spring, S, connected to the bar G and the lower portion of the car. As constructed, it will be seen that the connected le- 75 vers form a single compound lever, and that all of the levers of said compound lever, by reason of their connections, necessarily co-operate to apply or release the brakes, so that said brakes may be operated from the top or 80 either side of the car, as may prove convenient.

I do not claim in this application the combination of devices shown in my application Serial No. 282,821, filed August 15, 1888; but,

Having described my invention, what I 85 claim, and desire to secure by Letters Patent, is—

1. The combination, with the bar-lever fulcrumed to a hanger near its inner end and connected at said inner end with the brake-chain 90 and the spring controlling said bar-lever, of the bell-crank lever having its short arm fulcrumed in the upper end of the hanger, and connected at its angle with the inner end of the bar-lever by means of a suitable link, 95 substantially as and for the purpose specified.

2. The combination of the bell-crank lever fulcrumed by its short arm on a hanger at the end of the car and a rack engaging the long arm of said lever with a lever pivoted at one 100 end on a hanger on the end and near one side of the car and below the bell-crank lever, the rack engaging the same, the link connecting said lever with the extremity of the short arm

of the bell-crank lever, and the connections between the angle of the bell-crank lever and the brake-chain, all substantially as specified.

3. The combination, with the bell-crank lever having its short arm fulcrumed in the upper end of a hanger secured to the end of the car, of the bar-lever fulcrumed in hangers secured to the end of the car, and the links whereby said levers are connected, respectively, with the angle and the short arm of the said bell-crank lever, whereby the said levers are made to cooperate in applying or releasing the brakes, substantially as specified.

4. The combination, with the bar-lever fulcrumed between its ends to the lower end of a hanger secured to the car and connected with the brake-chain thereof, of the bell-crank lever

having its short arm fulcrumed to the upper end of said hanger, the bar-lever fulcrumed at its inner end to a hanger secured to the end of 25 the car near one side thereof, the link connecting the said lever with the short arm of the bell-crank lever, and the guide-guards and ratchets located, respectively, at the opposite sides and top of the car, whereby the levers 25 may be held in a fixed position when the brakes are applied, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two

witnesses.

H. C. FLETEMEYER.

Witnesses:

T. H. Brum,
Andrews Schmidt.