

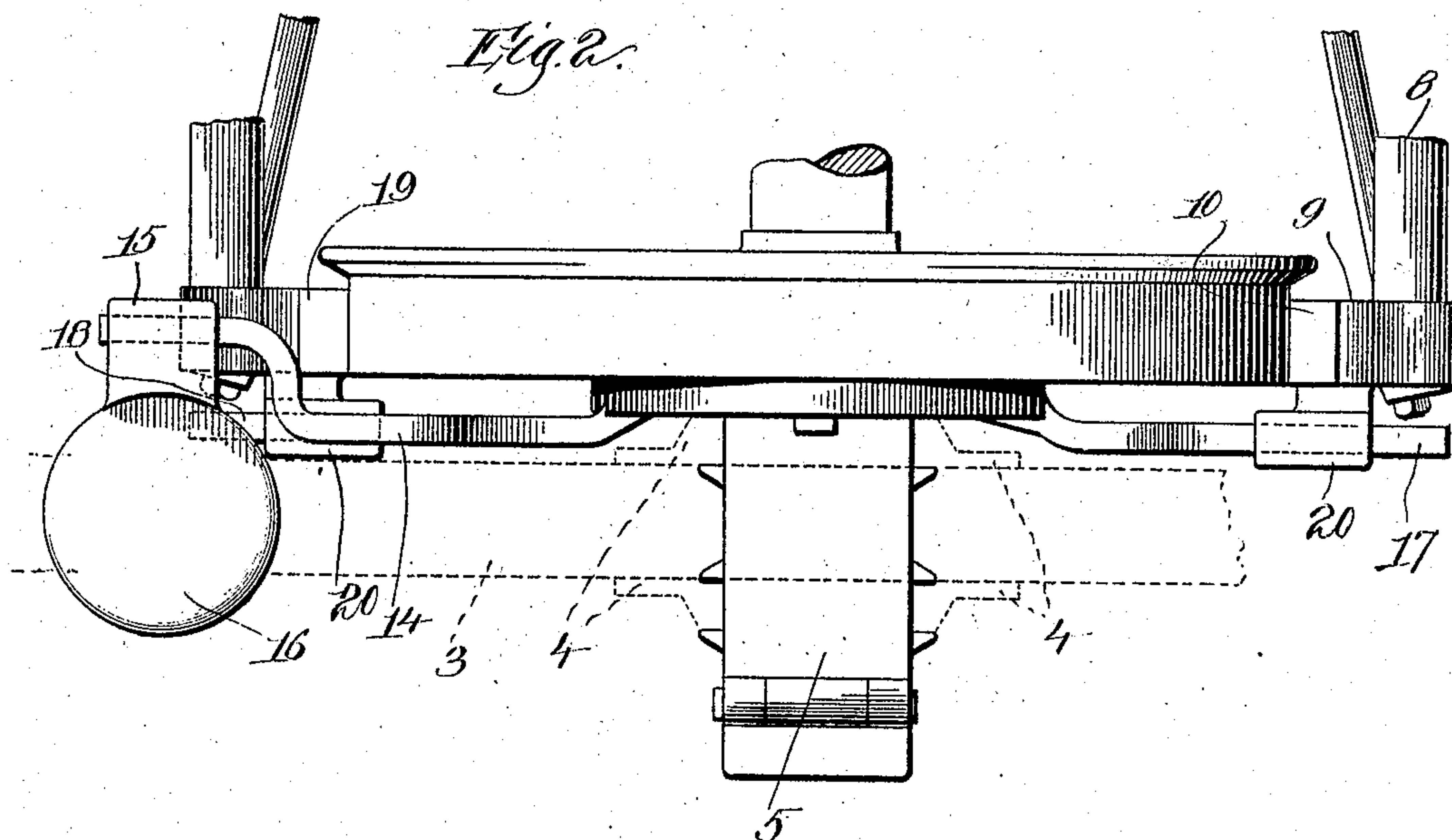
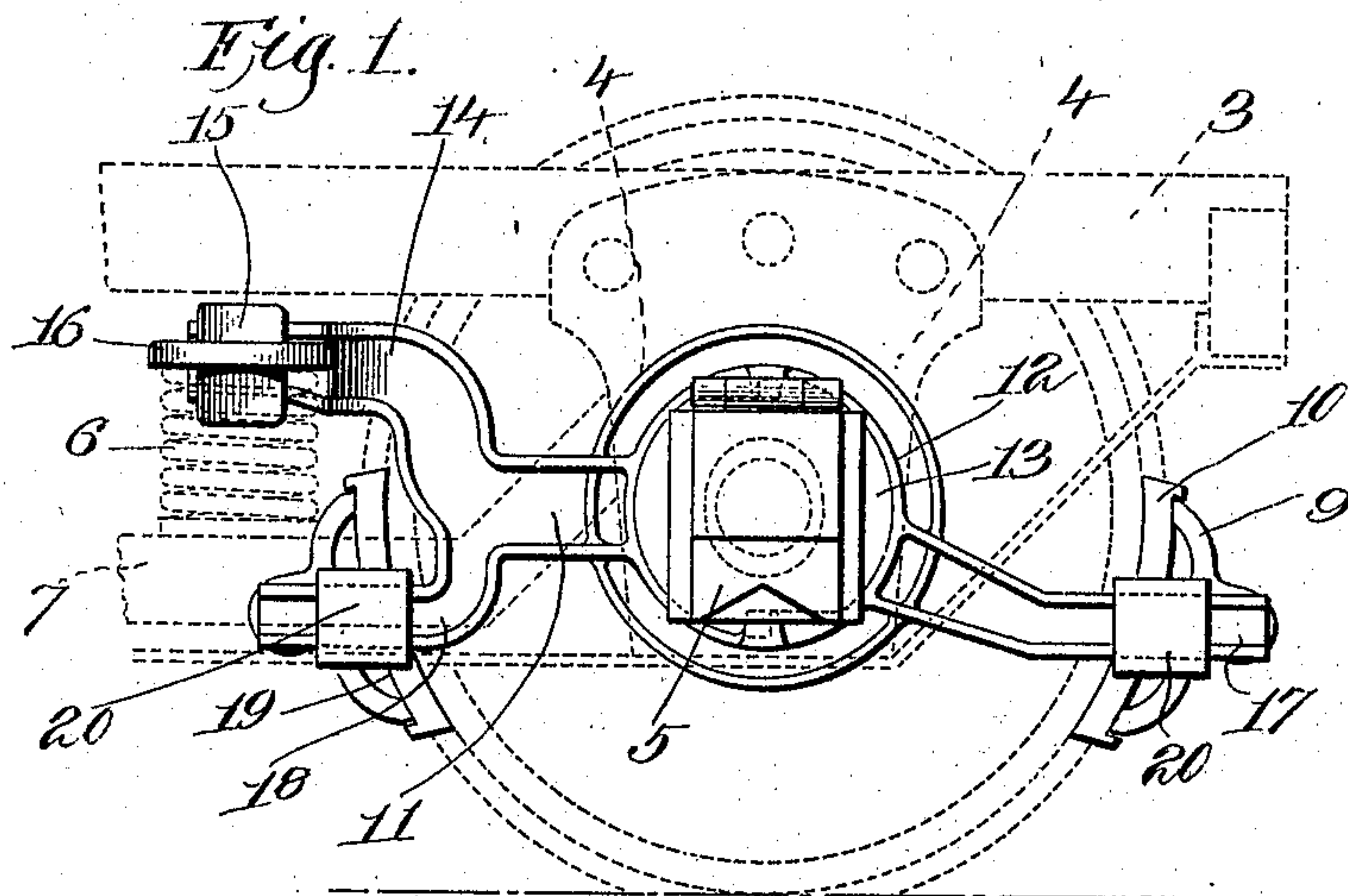
No. 815,768.

PATENTED MAR. 20, 1906.

W. S. WASHBURN & E. S. NILES.

CAR BRAKE.

APPLICATION FILED JAN. 16, 1905.



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UNITED STATES PATENT OFFICE.

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CAR-BRAKE.

No. 815,768.

Specification of Letters Patent.

Patented March 20, 1906.

Application filed January 16, 1905. Serial No. 241,249.

To all whom it may concern:

Be it known that we, WILLIAM S. WASHBURN, a resident of Brockton, county of Plymouth, and EDWARD S. NILES, a resident of Boston, county of Suffolk, State of Massachusetts, citizens of the United States, have invented an Improvement in Car-Brakes, of which the following description, in connection with the accompanying drawings, is a specification, like numerals on the drawings representing like parts.

This invention relates to car-brakes of that class in which the brake is suspended from or supported by a brake-supporting lever which is fulcrumed on the axle-box or car-axle.

In Patent No. 758,177, dated April 26, 1904, a car-brake is shown in which the brake-supporting lever is fulcrumed on the axle-box and carries at its outer end the brake and has its inner end secured to the truck-frame in some suitable way. In this device, however, only one brake is used for each car-wheel.

In some types of car-trucks it is customary to have two brakes for each car-wheel; and the object of the present invention is to provide the brake-supporting lever of a car-brake, such as shown in said patent or application, with means for supporting two brakes one operating on each side of the wheel.

In the accompanying drawings, Figure 1 is a side view of a portion of a car-truck having our improved brake applied thereto, the brake-supporting lever and brake being shown in full lines and the car-truck in dotted lines; and Fig. 2 is a plan view, on an enlarged scale, of the brake mechanism shown in Fig. 1.

3 designates the wheel-pieces of an ordinary car-truck; 4, the pedestal-jaws between which the axle-box 5 is received; 6, an equalizer-spring; 7, the equalizer-bar; 8, the brake-beam; 9, the brake-head, and 10 the brake-shoe. These parts are or may be of any suitable or usual construction.

The brake-supporting lever by which the brake is carried is designated by 11, and it is arranged to be fulcrumed on the axle-box in some suitable way. As herein shown, this is accomplished by providing said lever with a central ring-like bearing portion 12, which encircles and has its bearing on a circular flange 13, formed about the usual oil-box, all

as shown and described in a copending application filed by William S. Washburn, Serial No. 241,248. This, however, is only one of various ways in which the brake-supporting lever could be fulcrumed on the axle-box, and the present invention is not limited to the particular way of accomplishing this result. The inner end 14 of said lever is secured to the truck-frame in some suitable way, preferably by extending said end through an eye 15 on the usual cap 16 of the equalizer-spring. The outer end 17 of said lever carries a brake, all as shown in said copending application. In order that said lever may support another brake to act on the opposite side of the wheel from the above-mentioned brake, said lever is formed with an additional arm or projection 18, on which a second brake 19 is supported, said brake acting oppositely to the brake 9, supported by the outer end of the lever. These two oppositely-acting brakes may be secured to the brake-supporting lever in any suitable way. They are herein shown as slidably mounted on the end 17 and arm 18, respectively, of the brake-supporting lever, said end and arm each loosely passing through an eye 20, carried by the brake-head or the brake-shoe or some other suitable part of the corresponding brake.

It will be understood, of course, that there will be one lever 11 fulcrumed on the axle-box at each end of the car-axle and that the brake-lever 8, for instance, will connect the two brake-heads supported by the ends 17 of the two levers, and also that the two brake-heads supported by the arms 18 of the two levers may be connected by a suitable brake-beam.

The manner herein illustrated of fulcruming each brake-supporting lever is not essential to the invention, nor is the manner of supporting the brakes from said lever. Neither is it essential that the two brake-supporting levers at the opposite ends of any car-axle be independent from each other, as our invention would not be departed from if they were connected in some other way. We believe, however, that we are the first to provide a pivotally-mounted brake-supporting lever with means for supporting two brakes, and therefore we desire to claim this broadly. It

will be obvious, therefore, that many changes in the manner of fulcruming each brake-supporting lever or of securing the brakes to the lever may be made without departing from the invention.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a car-brake, a brake-supporting lever pivotally mounted on an axle-box, and a plurality of brakes sustained by said lever.

2. In a car-brake, a pivotally-mounted brake-supporting lever, and a plurality of brakes sustained by said lever, said brakes being arranged to act on the same car-wheel.

3. In a car-brake, an axle-box having an annular bearing-surface, a brake-supporting lever provided intermediate its ends with a circular bearing to engage the bearing-surface of the axle-box, and a plurality of brakes sustained by said lever.

4. In a car-brake, an axle-box having an annular bearing-surface, a brake-supporting lever provided intermediate its ends with a circular bearing to engage the bearing-surface of the axle-box, and a plurality of brakes sustained by said lever, said brakes being adapted to act on the same car-wheel.

5. In a car-brake, an axle-box having an annular bearing-surface, a brake-supporting lever provided intermediate its ends with a circular bearing or fulcrum portion to engage the bearing-surface of the axle-box and a plurality of brake-supporting arms extending from said bearing or fulcrum portion in oppo-

site directions, and a brake supported by each arm.

6. A brake-supporting lever for a car-brake provided intermediate of its ends with a circular bearing adapted to engage an annular bearing-flange on the axle-box, said lever having a plurality of brake-supporting arms projecting from said circular bearing.

7. A brake-supporting lever for a car-brake provided intermediate of its ends with a circular bearing adapted to engage an annular bearing-flange on the axle-box, said lever having a plurality of brake-supporting arms projecting from said circular bearing on opposite sides thereof.

8. A brake-supporting lever for a car-brake shaped to present intermediate of its ends a curved bearing to engage and turn about a bearing on an axle-box and provided with a plurality of brake-supporting arms.

9. A brake-supporting lever for a car-brake shaped to present intermediate its ends a curved bearing to engage and turn about a bearing on an axle-box and provided with a plurality of oppositely-extending brake-supporting arms.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

WILLIAM S. WASHBURN.
EDWARD S. NILES.

Witnesses:

LOUIS C. SMITH,
BERTHA F. HENSER.