

No. 709,981.

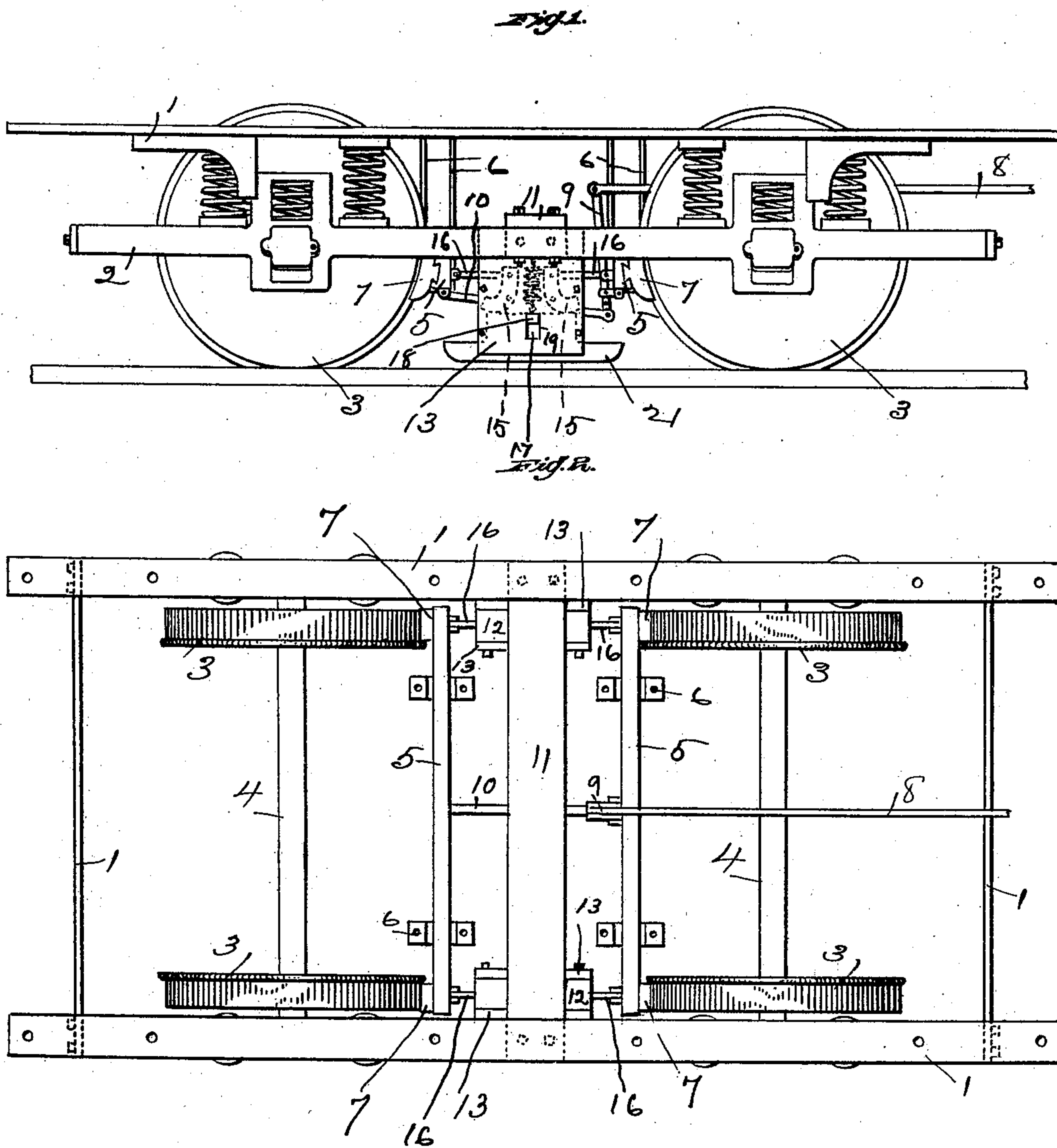
Patented Sept. 30, 1902.

G. M. GRIGGS.
CAR BRAKE.

(Application filed Sept. 3, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:
J. P. Jeffman,
M. Hunter

G. M. Griggs Inventor
C. A. Lewis By
JEFF.

No. 709,981.

Patented Sept. 30, 1902.

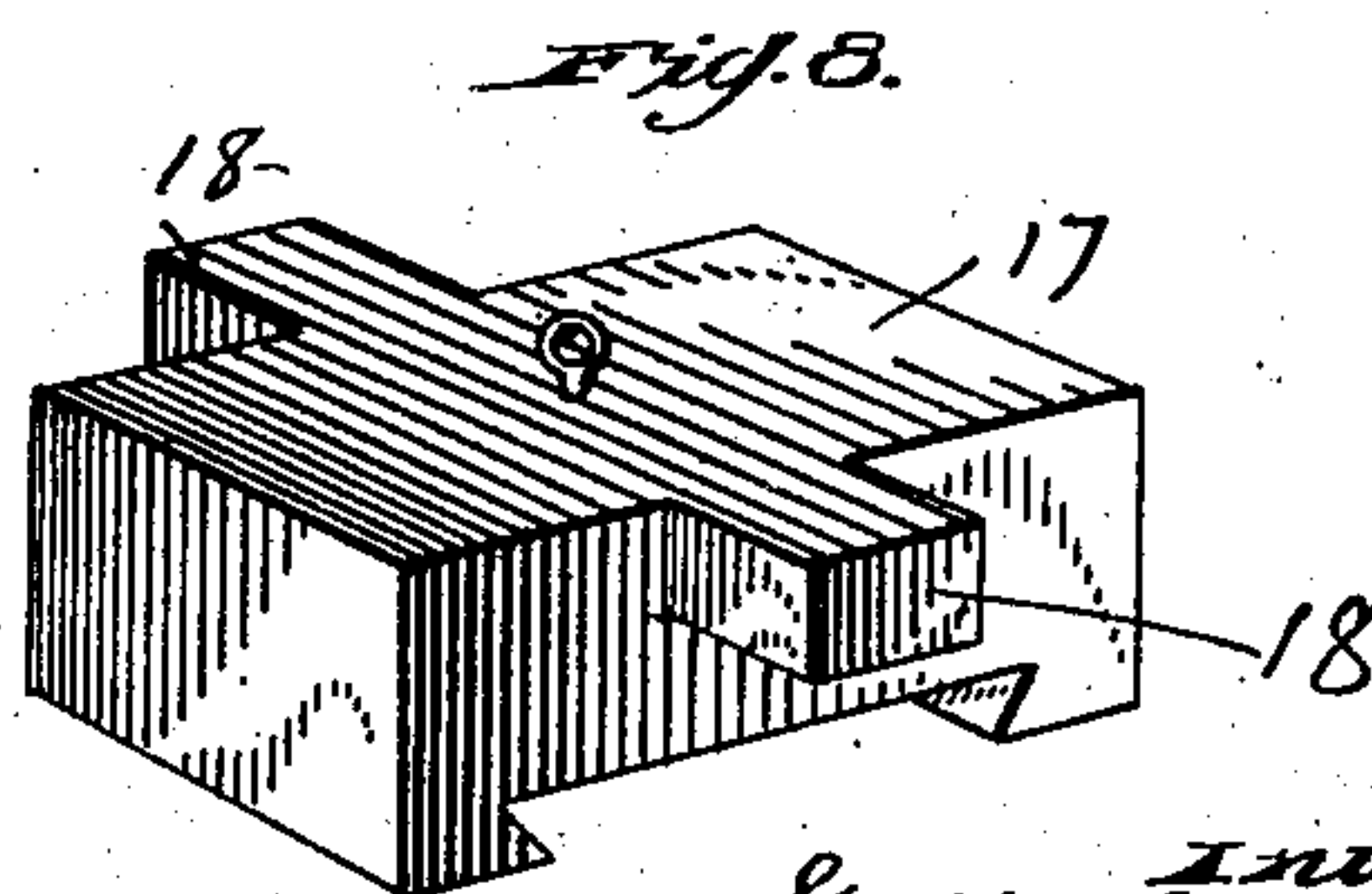
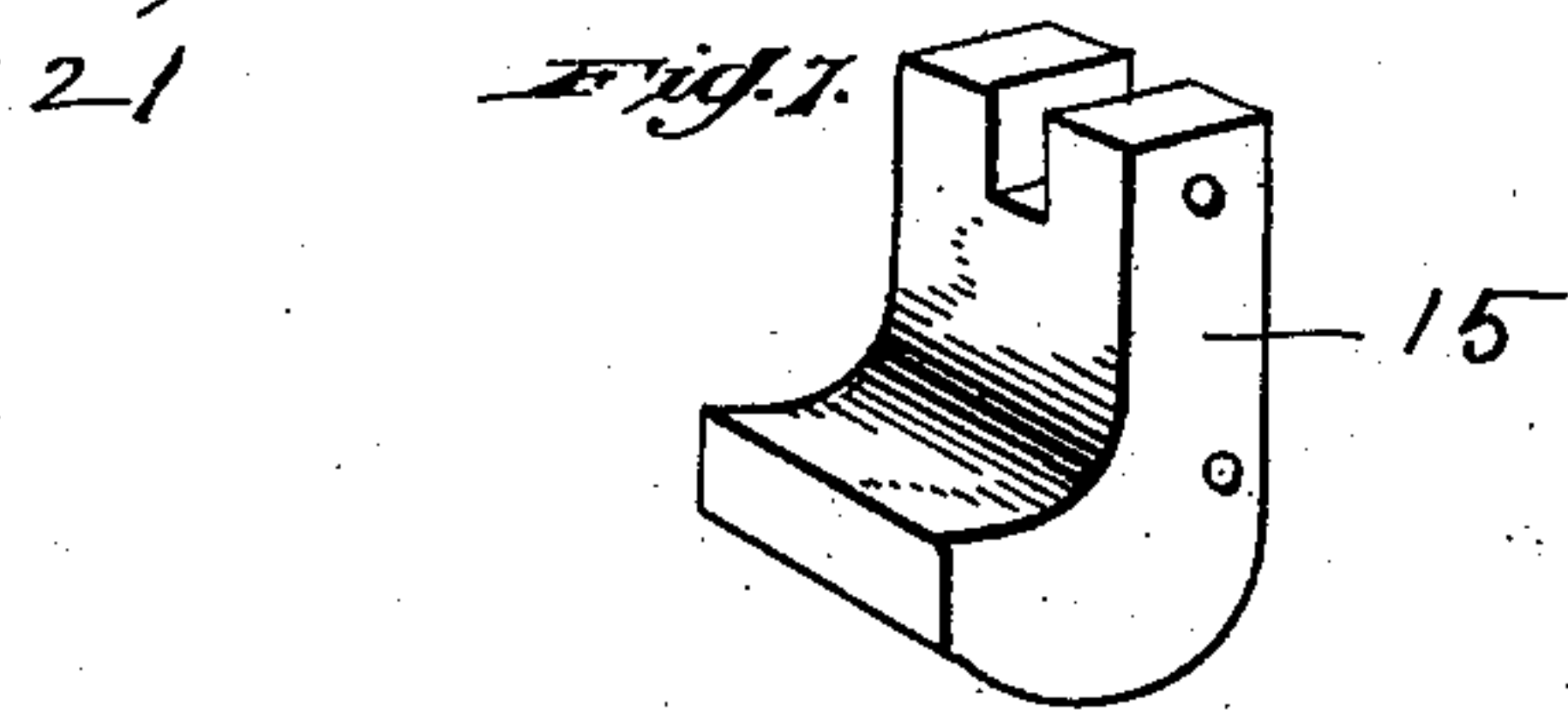
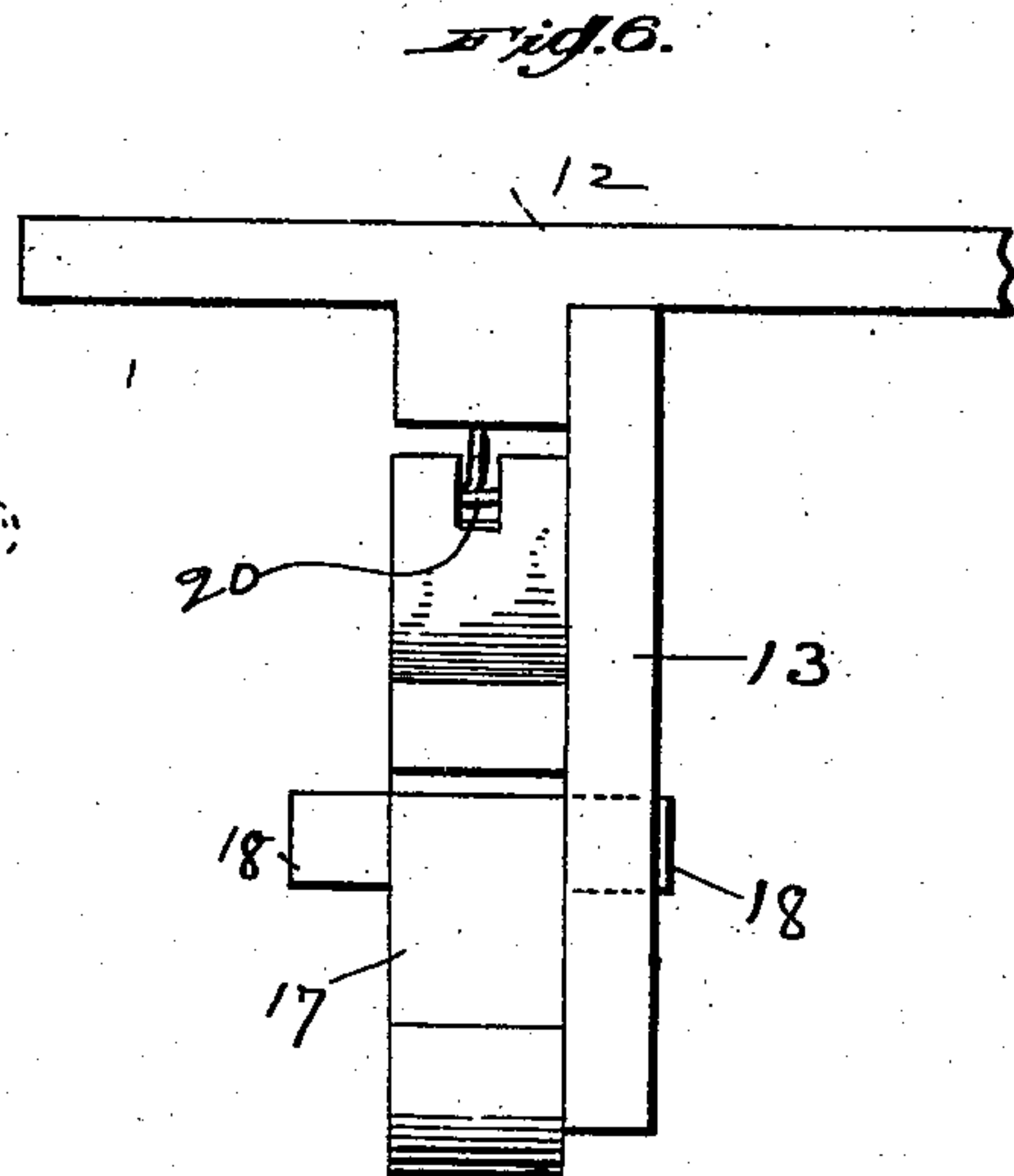
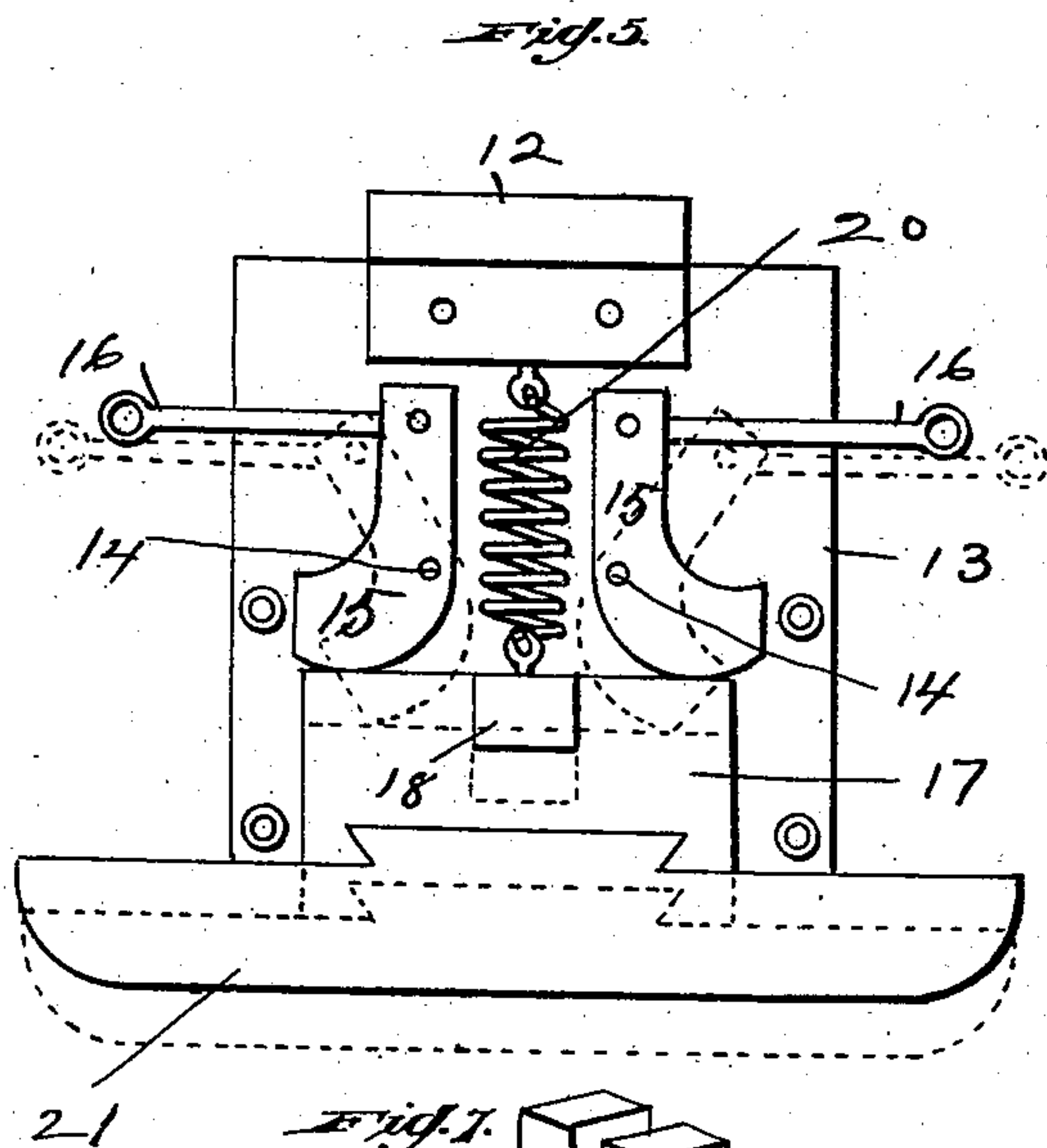
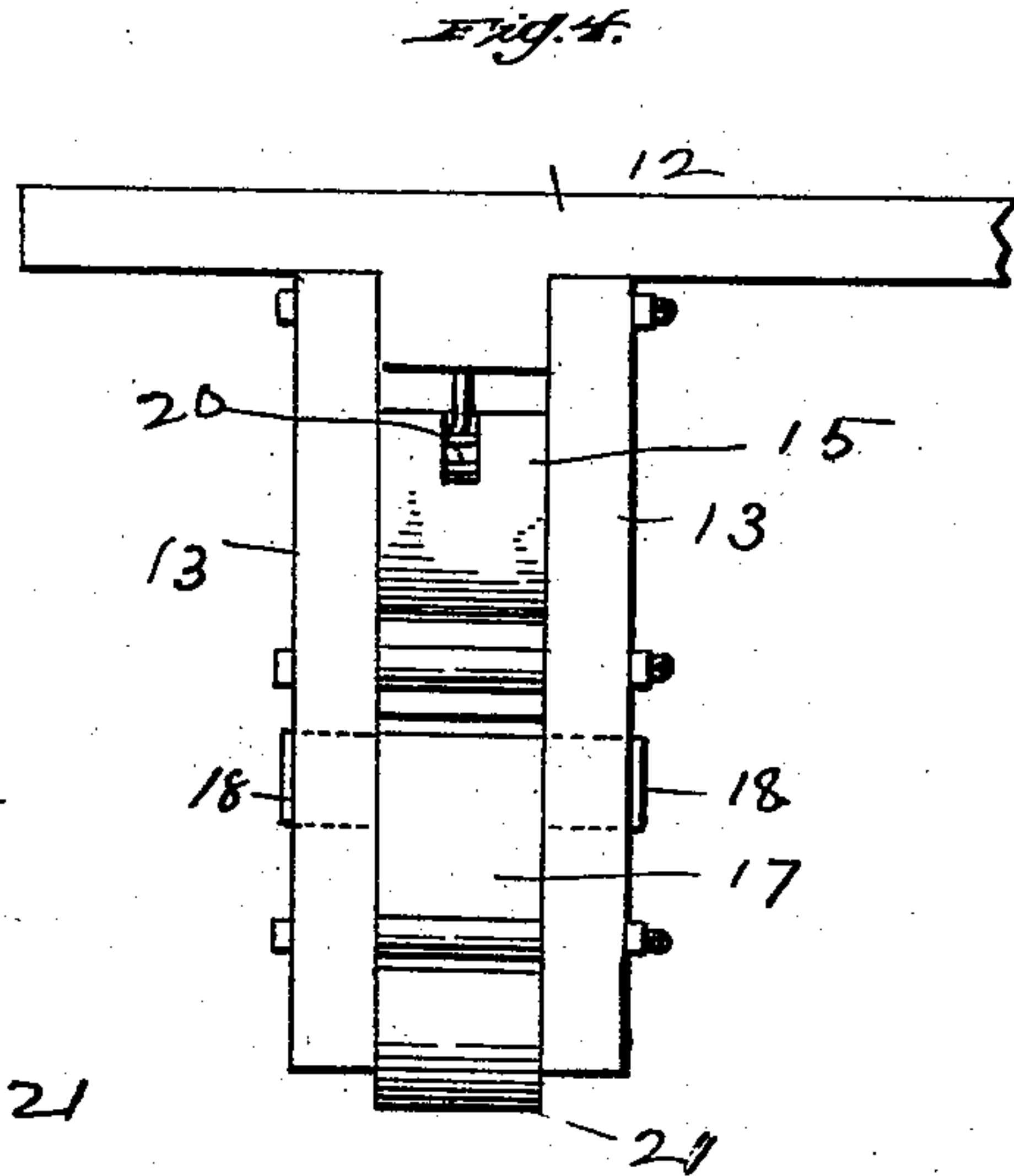
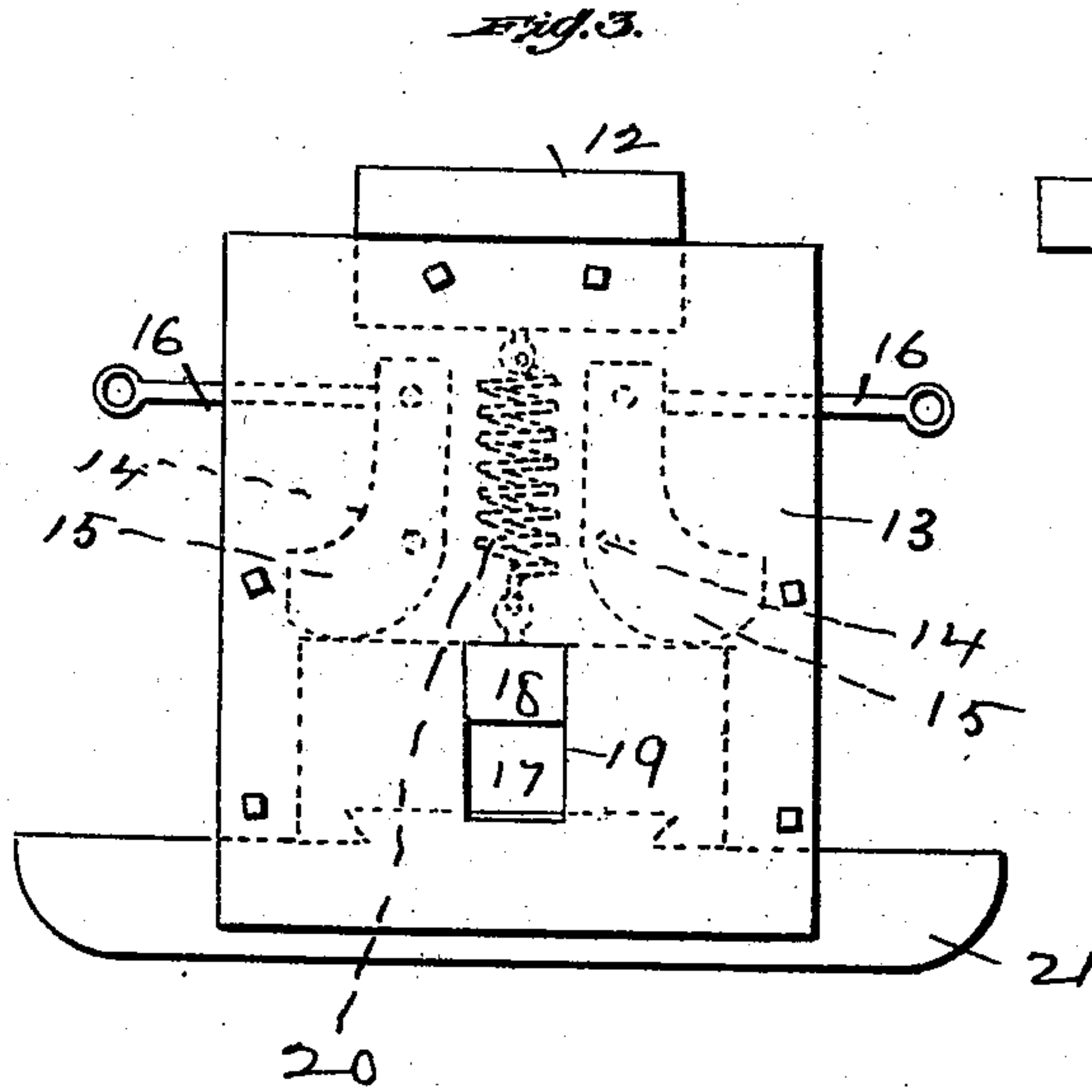
G. M. GRIGGS.

CAR BRAKE.

(Application filed Sept. 3, 1901.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses:

J. P. Jeffeman,
M. Hunter

G. M. Griggs
by O. A. Lewis
att'y.

UNITED STATES PATENT OFFICE.

GEORGE M. GRIGGS, OF SCOTTDALE, PENNSYLVANIA.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 709,981, dated September 30, 1902.

Application filed September 3, 1901. Serial No. 74,100. (No model.)

To all whom it may concern:

Be it known that I, GEORGE M. GRIGGS, a citizen of the United States of America, residing at Scottdale, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Car-Brakes; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to improvements in hand-operated car-brakes.

The object of my invention is to provide means in connection with the ordinary hand-brake mechanism, whereby increase of braking power is attained.

In the accompanying drawings I have illustrated my improvements as operatingly connected with a hand-brake of a car-truck, in which—

Figure 1 is a side elevation of a car-truck having my improvements attached. Fig. 2 is a plan view of the same. Fig. 3 is an enlarged side view of one of the improved brake members removed from the truck. Fig. 4 is an end view of the same. Fig. 5 is a side view of the same with a portion thereof removed. Fig. 6 is an end view of the same with the portion removed. Fig. 7 is a perspective view of one of the cams employed in said mechanism to operate the brake-shoe. Fig. 8 is a perspective view of one of the blocks employed to hold the brake-shoe.

In the drawings at Figs. 1 and 2 I have shown a truck composed of a frame 1, truck-bars 2, wheels 3, and axles 4, to which is attached an ordinary hand-brake consisting of beams 5, suspended from the frame by rods 6, the ends of these beams being provided with shoes 7. A rod 8 extends from the end of the car and connects with the upper end of an upright bar 9, which is pivotally attached to one of the beams. A rod 10 connects the other beam with the lower end of the said upright rod 9. As these parts are not of my invention, the brief description thereto will suffice.

My improvements consist of a beam 11, ex-

tending across and connected to the truck-bars, to the ends of which are secured the plates 12. Attached to each of these plates by their upper ends is a pair of vertical plates 13, between which is pivoted upon bolts 14 the pair of cams 15. These cams are connected at their upper ends to the brake-beams by rods 16. Blocks 17, having outwardly-extending shoulders 18 to engage in the opening 19 of the said vertical plates, are suspended from the cross-beam by springs 20. These blocks are each provided at their under side with dovetailed grooves to engage the tongues of the brake-shoes 21.

The operation of my improved brake in conjunction with the hand-brake previously referred to is as follows: When the brake-handle is turned to force the beams 5 apart and set the brakes through the medium of the rods 8, 9, and 10, the movement of said beams at the same time operates the cams 15, through the medium of the rods 16, and forces the shoes 21 down, as shown at Fig. 5, to engage the rails, thereby giving increased braking power. When the hand-brake is released, the springs 20 elevate the shoes to their normal or inactive position.

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

The combination with the brake-beams having shoes at each end and adapted to engage the wheels, and means of forcing said shoe-carrying beams toward the wheels, of a frame arranged at each side of the truck between the wheels, a pair of cams pivoted in each of said frames, rods connecting said cams with said brake-beams, a block suspended in each frame by a spring to cause engagement with said cams, and a rail braking-shoe carried by each of said blocks, as shown and set forth.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

GEO. M. GRIGGS.

Witnesses:

HENRY DANDRIDGE,
H. C. HUBBS.