

No. 804,205.

PATENTED NOV. 14, 1905.

J. G. BROWNFIELD.  
RAILWAY CAR.

APPLICATION FILED FEB. 24, 1904.

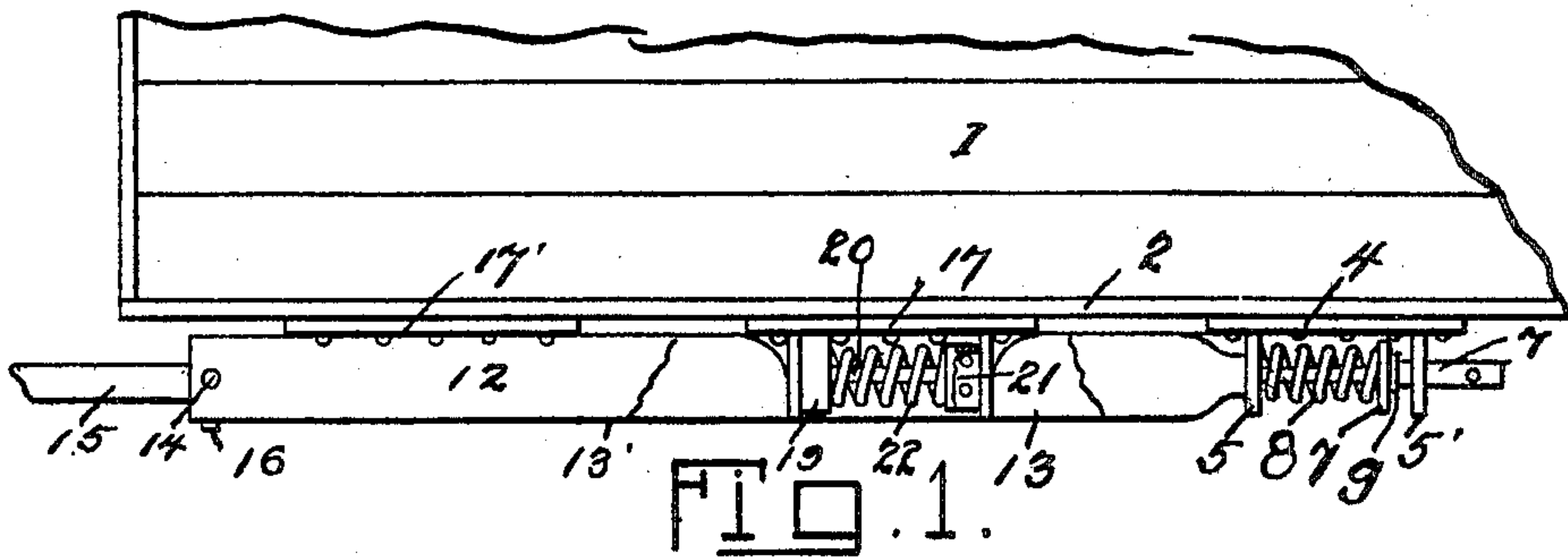


FIG. 1.

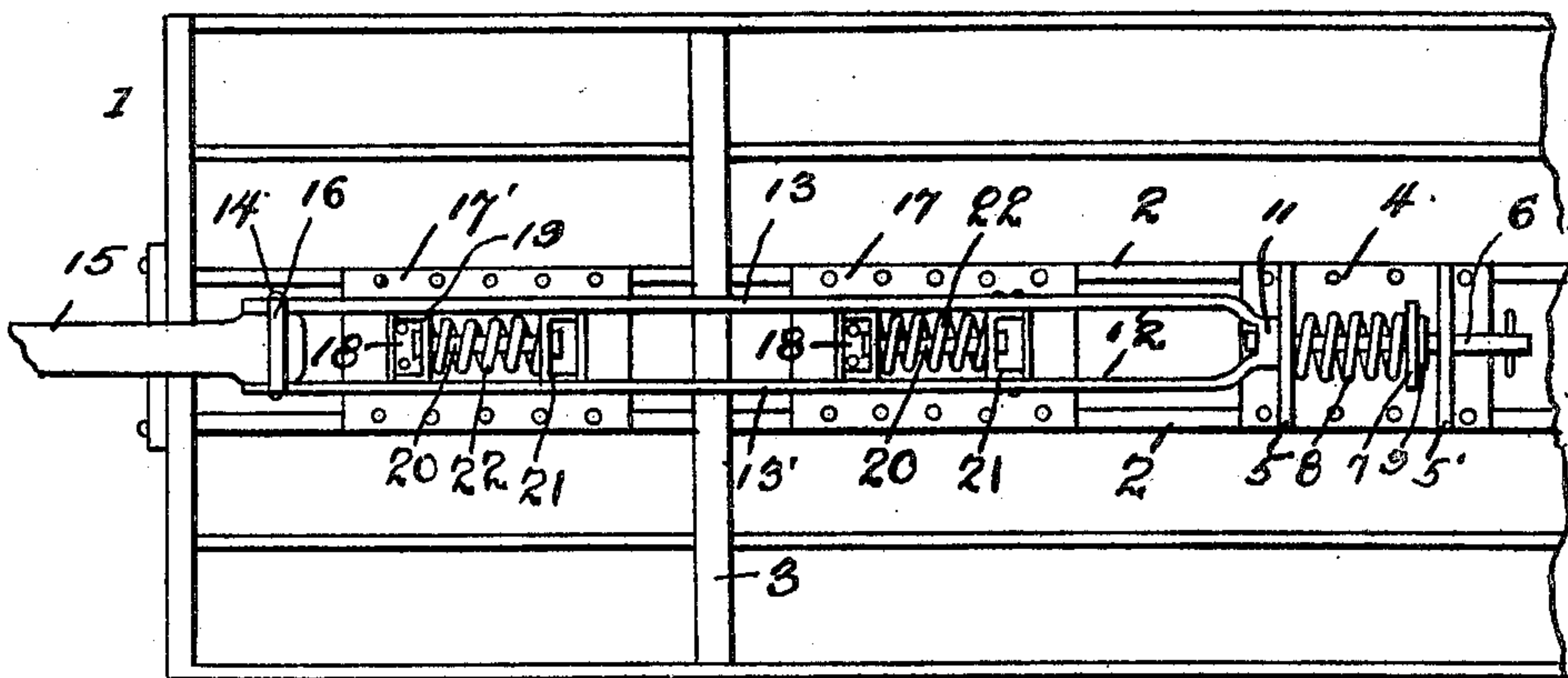


FIG. 2.

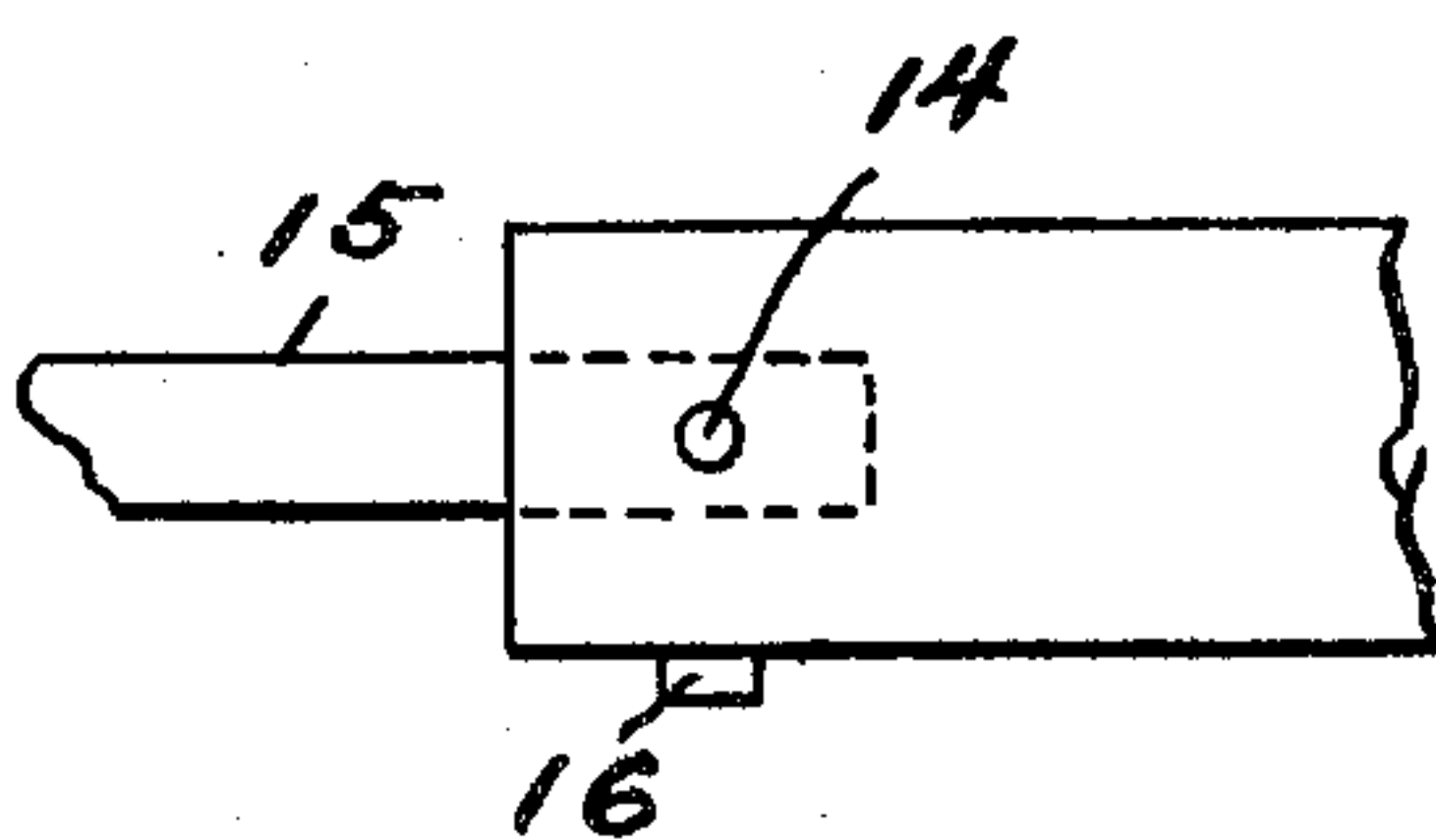


FIG. 3.

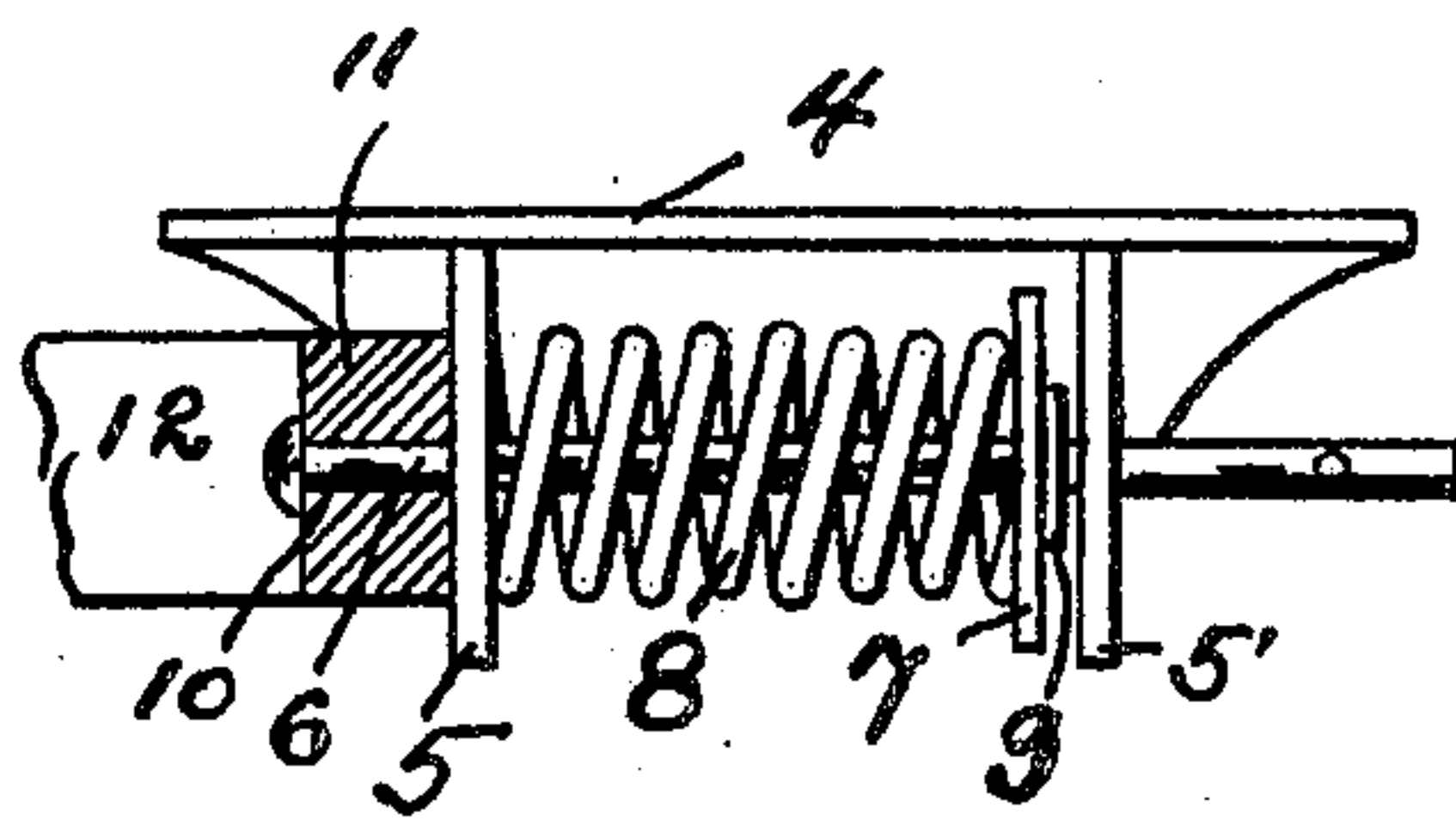


FIG. 4.

Witnesses  
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# UNITED STATES PATENT OFFICE.

JAMES GARRETT BROWNFIELD, OF FORT WORTH, TEXAS.

## RAILWAY-CAR.

No. 804,205.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed February 24, 1904. Serial No. 195,020.

*To all whom it may concern:*

Be it known that I, JAMES GARRETT BROWNFIELD, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented certain new and useful Improvements in Railway-Cars, of which the following is a specification.

My present invention relates to improvements in railway-cars; and the main object is the provision of a new and novel construction of draft appliance therefor by which the force of the pull is exerted centrally upon the body of the car, the sudden jerk occasioned by the starting of the load being carried upon a series of springs, a draft-bar being so constructed as to be connected to one of the springs of the intermediate frames of the car or to straddle the cushioned springs.

To attain these objects, the invention consists of a draft appliance for railway-cars embodying novel features of construction and combination of parts, substantially as disclosed herein.

In the accompanying drawings, Figure 1 is a side elevation of a portion of the body of the car with my improved invention secured thereto, a portion of the draft-bar being cut away to show the intermediate springs. Fig. 2 is a bottom plan view of a car with my improvement in position thereon. Fig. 3 is an enlarged detail view of one section of the draft appliance with the coupling-bar attached thereto. Fig. 4 is an enlarged detail view of the central casting carrying its spring and the end of the draft-bar.

Referring to the drawings, the numeral 1 designates the car-body, which is provided longitudinally of its length upon the bottom thereof with the draft-sills 2 and the bolsters 3. Secured upon the two central draft-sills is a plate or casting 4, which is provided with the depending plates or flanges 5 and 5', through which is adapted to pass the tail-pin or rod 6. This tail-pin or rod is slidingly mounted in the opening of said plate and carries within the two plates the abutting disk or stock 7, upon which is mounted the coiled spring 8, this coil-spring exerting a tension normally rearward, so as to hold the plate or disk 7 toward the rear plate 5', the forward end of the spring abutting against the forward plate 5. The stock or disk 7 is held rigidly on the tail-pin by means of the nut or stock 9. The forward end of the tail-pin passes through the opening 10, provided in the rear end 11 of the draft-bar 12, the said

draft-bar consisting of two parallel sides 13 and 13', which extend forward below the sills 2 and are connected, by means of the pin 14, to the coupling-head 15, an additional strap 16 being employed to hold the ends in parallel.

Secured to the sills 2 intermediate of the end of the car and the plate 4 are two similar plates 17 and 17', which have secured thereto the castings 18, provided with the downwardly-projecting lugs or plates 19, to which are secured one end of the bolts 20, while the other end is adapted to be slidingly mounted in the plate 21, secured to and carried by the sides 13 and 13' of the draft-bar; thus the casting 18 will be rigidly secured, while the plate 21 will be carried by the draft-bar, so that the tension of the springs 22, mounted upon the bolts 20, may be so exerted upon as to allow the draft-bar to move freely, and consequently the plate 21 to slide upon the bolt 20, the said springs 22 being mounted upon the bolt between the plates 19 and 21, so as to exert a tension from the plate 19 to the plate 21.

From the foregoing description, taken in connection with the drawings, it is evident that I provide a draft appliance for railway-cars in which the first pull or strain exerted upon the draft-bar is taken up by a centrally-arranged spring, which is connected virtually to the end of the draft-bar, and two intermediate springs, which are connected intermediate of the length of the draft-bar, but between the central spring and the ends of the car.

What I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a car-body provided with draft-sills, of a draft appliance consisting of a frame secured to the draft-sills intermediate of the length of the car, a series of intermediate frames secured between the ends and the center of the car, and springs mounted in each of said frames, a draft-bar connected to said springs, and a coupling-head connected to the outer end of said draft-bar, said draft-bar being formed with two parallel sides which are adapted to straddle and be secured to the springs of the intermediate frames.

2. In combination with a car-body provided with draft-sills longitudinally of the bottom thereof, of a draft appliance secured to said sills, consisting of a frame arranged centrally of the body of the car, a series of intermediate frames secured between the center frame



and the ends of the car, springs mounted in each of said frames and a draft-bar having one end connected to the central frame's spring and having parallel sides extending upon opposite sides of the intermediate frame and connected to the springs.

3. In combination with a car-body provided with draft-sills longitudinally of the bottom thereof, of a draft appliance secured to said sills, consisting of a frame arranged centrally of the body of the car, a series of intermediate frames secured between the center frame and the ends of the car, springs mounted in each of said frames and a draft-bar having one end connected to the centrally-arranged frame's spring and having two parallel sides extending upon opposite sides of the intermediate frames and connected to the springs thereof.

4. In combination with a car-body provided with draft-sills longitudinally of the bottom thereof, of a draft appliance secured to said sills, consisting of a frame arranged centrally of the body of the car, a series of intermediate frames secured between the central frame and the ends of the car, springs mounted in each of said frames, a draft-bar having one end connected to the central frame's spring and having parallel sides extending upon opposite sides of the intermediate frames and connected to the springs and a coupling-head connected to the outer end of the draft-bar.

5. In combination with a car-body provided with draft-sills longitudinally of the bottom

thereof, of a draft appliance secured to said sills, consisting of a frame arranged centrally of the body of the car, a series of intermediate frames secured between the central frame and the ends of the car, springs connected to each of said frames, a draft-bar having one end connected to the central frame's spring and having parallel sides extending upon opposite sides of the intermediate frame and connected to the springs, and a coupling-head connected to the outer ends of the outer draft-bar.

6. In combination with a car-body provided with draft-sills longitudinally of the bottom thereof, of a draft appliance consisting of a series of frames, one located centrally of the car and the other intermediate of the ends of the car, said frames being secured to and depending from said draft-sills, a spring mounted in each one of the frames, a pin upon which the spring is supported mounted in the frame, a follower-plate mounted within the frames connected to the springs, a rod connected to the central frame connected to its spring, a draft-bar having one end connected to the rod and its sides connected to the follower-plates of the intermediate frames and a coupling-head connected to the outer end of the draft-bar.

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

JAMES GARRETT BROWNFIELD.

Witnesses:

GEORGE HOULINGE,  
KENT. V. KIBBIE.