

No. 882,236.

PATENTED MAR. 17, 1908.

T. H. CURTIS.
CAR TRUCK.

APPLICATION FILED JULY 12, 1907.

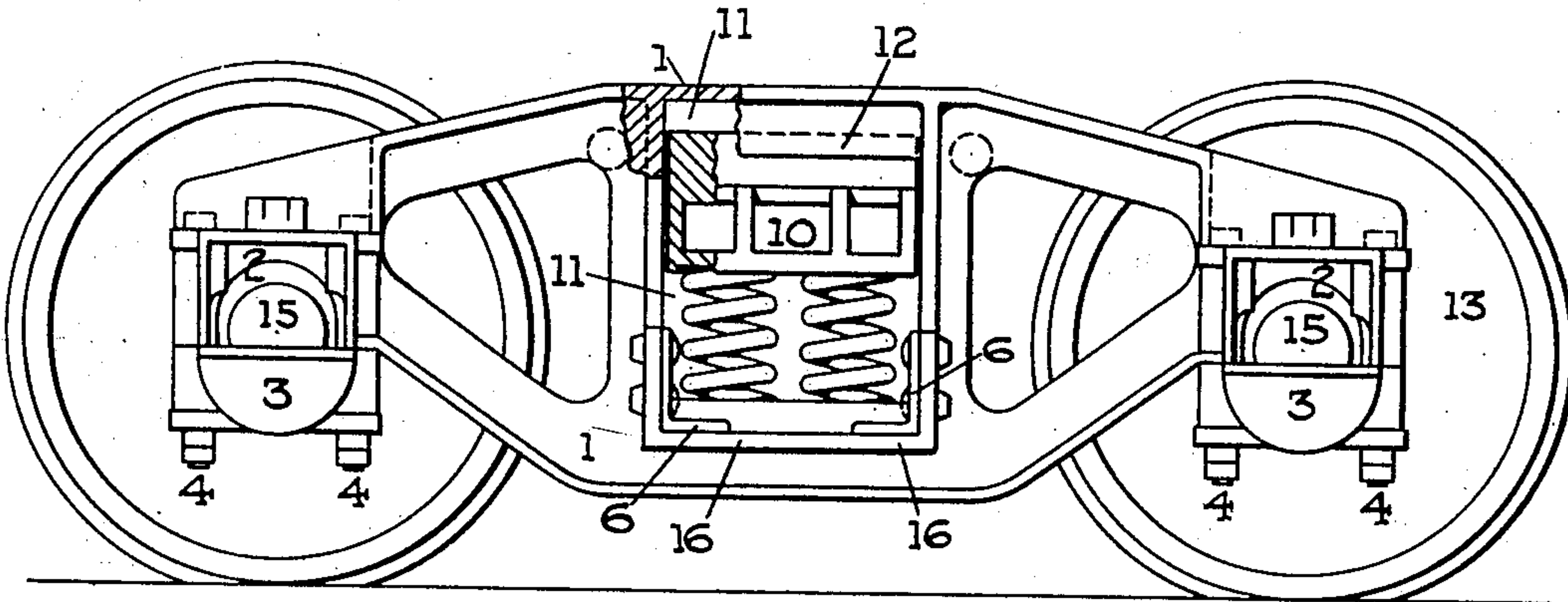


FIG. I

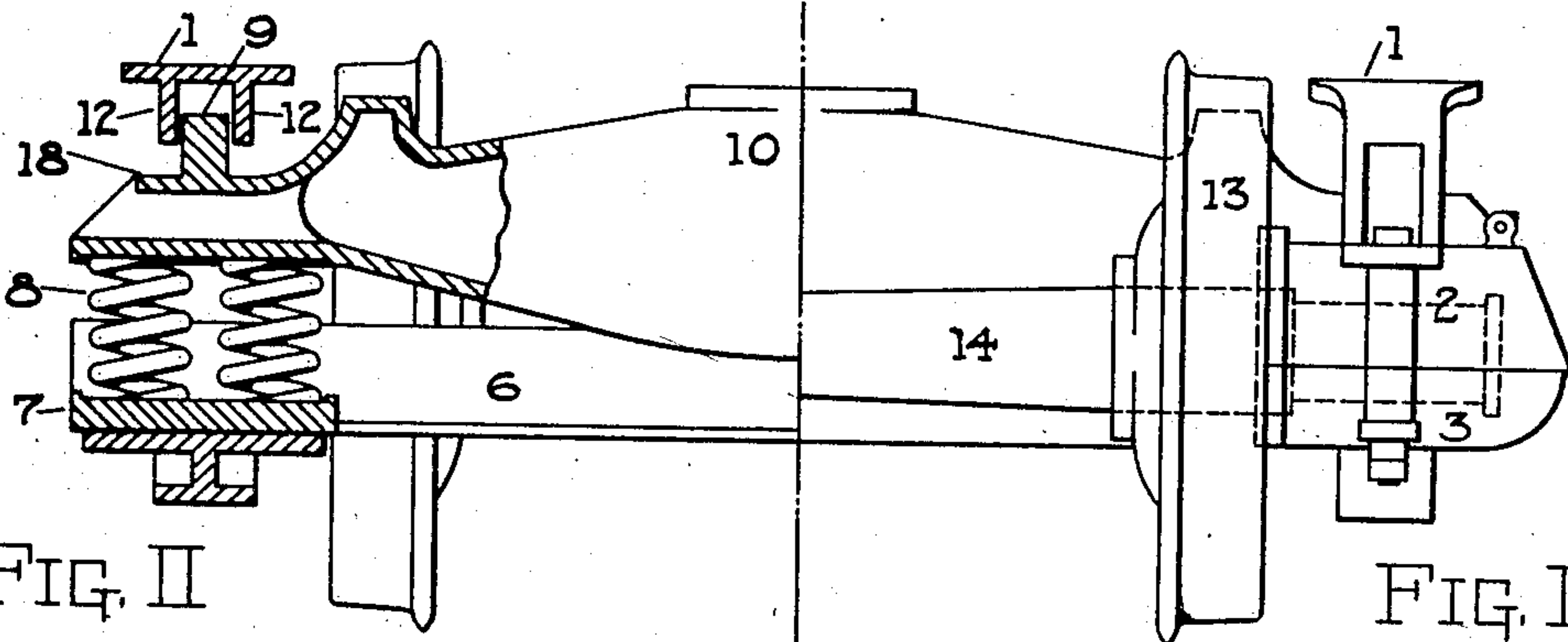


FIG. II

FIG. III

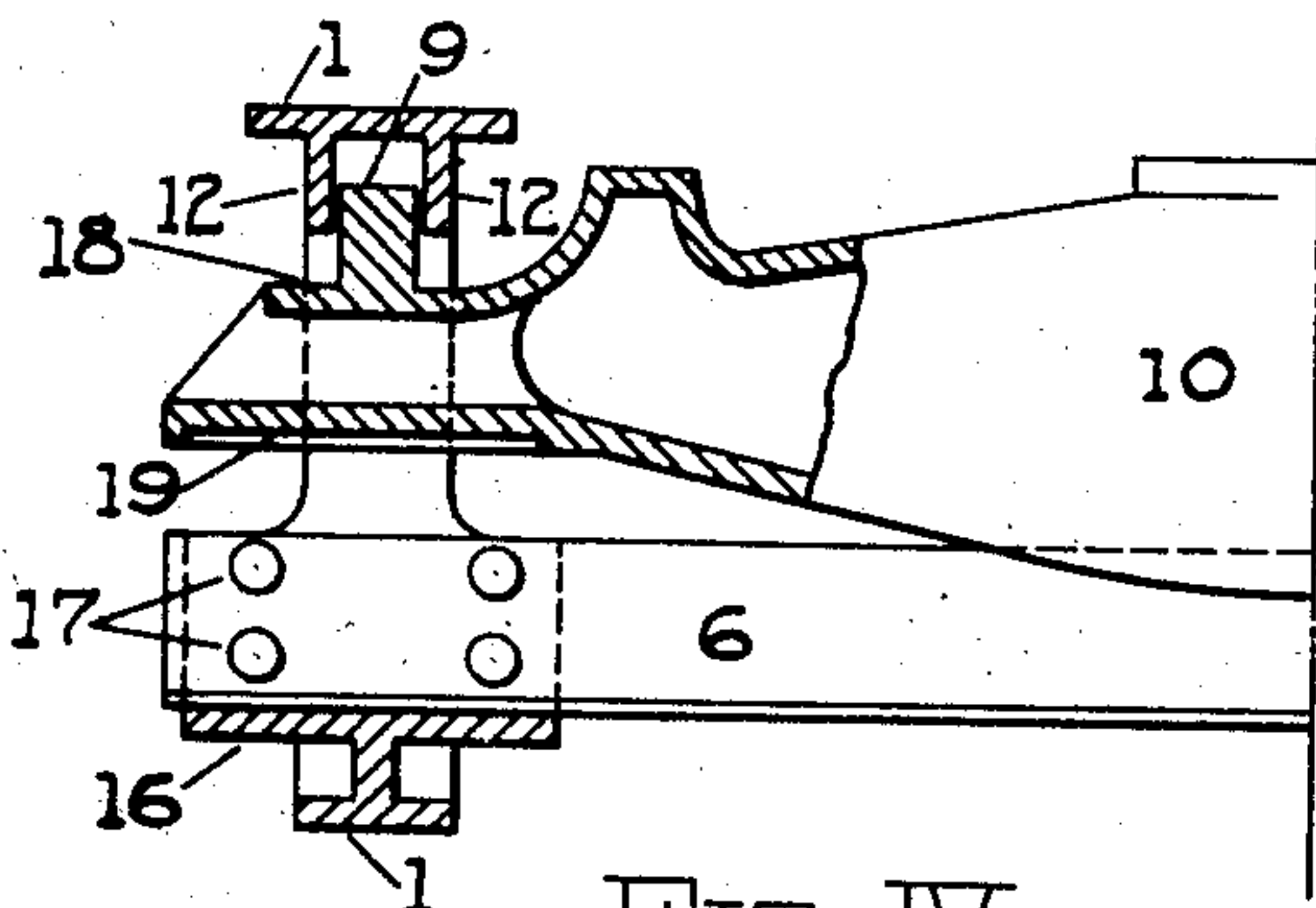


FIG. IV

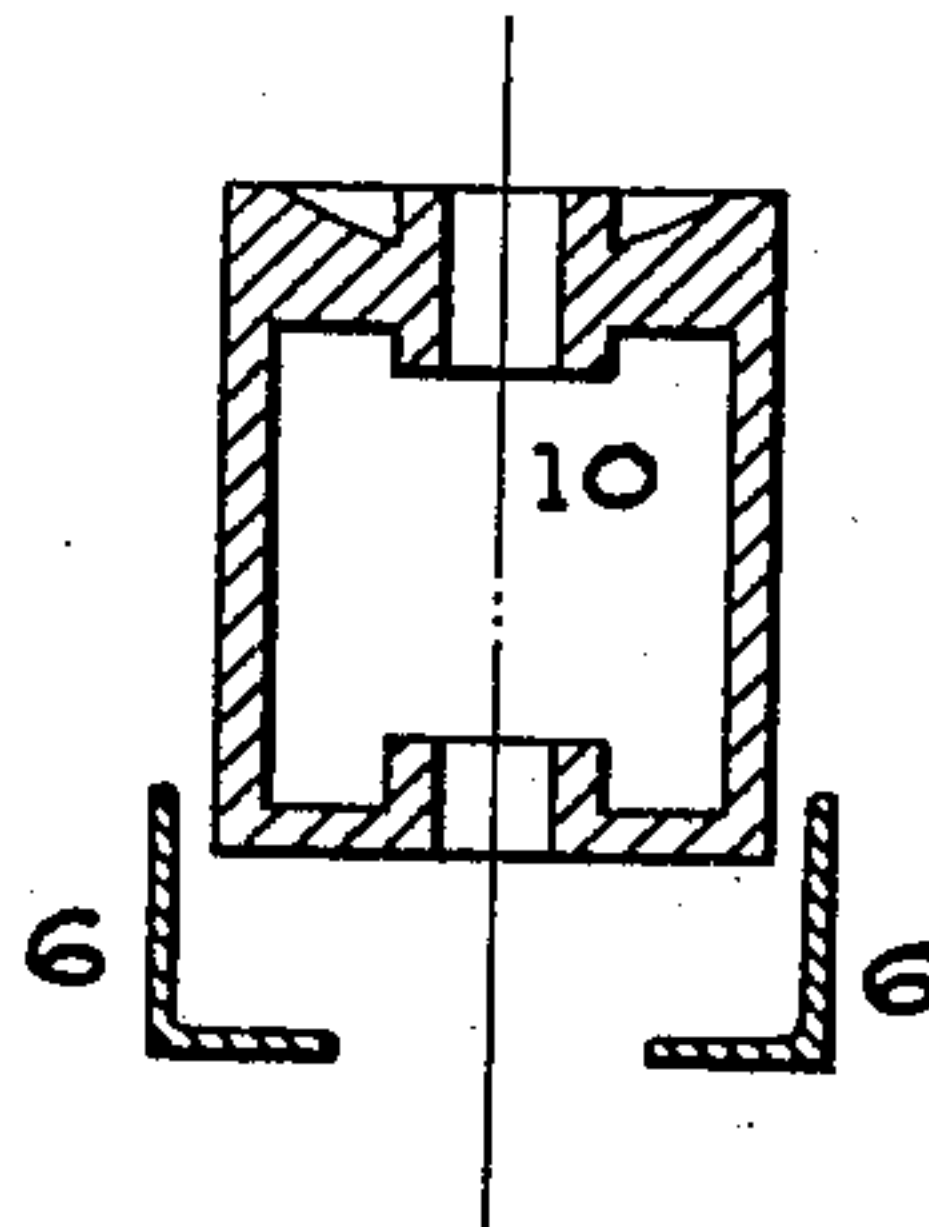


FIG. V

WITNESSES,
Edwin H. Hedges
Nomer C. McAllen

INVENTOR,
Theodore H. Curtis.

UNITED STATES PATENT OFFICE.

THEODORE H. CURTIS, OF LOUISVILLE, KENTUCKY.

CAR-TRUCK.

No. 892,236.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed July 12, 1907. Serial No. 383,462.

To all whom it may concern:

Be it known that I, THEODORE H. CURTIS, a citizen of the United States, and a resident of the city of Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Car-Trucks, of which the following is a full, clear, and exact description.

My invention relates to car-trucks, and especially to cast integral or built-up side-frames and the truck-bolster, and has for its principal objects the following: The integral side-frame with provisions for inserting the integral truck-bolster and the upstanding thrust-lug, cooperating with the thrust-lug-guides, the rigidly securing of the side-frames together by the spring-beam which holds the side-frames in proper alinement, the removable oil-cellars to permit the removal of the car-wheels and axles from the side-frames without removing any part except the oil-cellars, the construction of a car-truck embodying the integral side-frames and integral truck-bolster, thereby eliminating the use of bolts except those securing the oil-cellars, and also the providing of means for keeping the side-frames substantially in alinement and rigidly held together and still permitting of quick removal of the car-wheels and axles or the truck bolster, which is accomplished by means hereinafter described and particularly pointed out in the claims.

In the accompanying drawings, forming a part of this specification and wherein like symbols refer to like parts wherever they occur, Figure I is a full side view of the car-truck showing a small section at the corner of the truck bolster. Fig. II is a sectional view through the center of the car-truck, and Fig. III is a full end view of the car-truck. Fig. IV is a sectional view through the center of the truck-bolster and side-frame showing spring-beam with the bolster springs and spring seat removed. Fig. V is a sectional view through the center of the truck-bolster and spring-beam showing the respective clearance of same.

The side-frame, 1, with the bolster-opening, 11, therein, is made with the journal-box-saddles, 2, cast integral with the side-frame and the oil-cellars, 3, attached by the bolts, 4. If desired the oil-cellars can be attached to the side-frames when same extend over the journal-box-saddles, 2. The journal-box-saddles, 2, and the oil-cellars, 3, are pref-

erably formed with the well known Master Car Builders' standard dimensions, and to receive the Master Car Builders' contained parts, such as the journal bearing and the journal-bearing-key and axle dust guard, also the journal-box-lid. The side-frames, 1, are held rigidly together by the spring-beam, 6, with rivets, 17, securing the spring-beam to the extended flanges, 16, of the side-frames.

The truck-bolster, 10, is made with spring-seats, 19, and upstanding thrust-lugs, 9, one near each end of the truck-bolster, and each thrust-lug is located to cooperate with two thrust-leg-guides, 12, 12, over the bolster-openings in each side-frame. The two thrust-leg-guides form between them a pair of guides in each side-frame, that each side-frame may prevent the endwise shifting of the truck-bolster in either direction.

The width and height of the truck-bolster is less than the width and height of the bolster-openings, 11, in the side-frames, thereby permitting the inserting of the truck-bolster in the bolster-openings, 11, and when inserted the truck-bolster is raised and the thrust lugs, 9, cooperate with the thrust-lug-guides, 12, of the side-frames, 1. When the bolster-springs, 8, are applied under the spring-seats, 19, and when resting on the lower spring-seats, 7, the truck-bolster will be held in position and secured to resist endwise shifting by the thrust lugs, 9, cooperating with the thrust-lug-guides, 12, of the side-frames, 1, and to resist sidewise shifting by the sides of the truck-bolster cooperating with the vertical sides of the bolster openings, 11, in the side-frames. The truck-bolster can then be removed at any time by raising same until the frame seats, 18, strike the bottom of the thrust-lug-guides, 12, of the side frames, which will relieve all weight on the bolster-springs and permit their removal. When the bolster-springs are removed the truck bolster can be lowered until the thrust lugs, 9, disengage the thrust-lug-guides, 12, of the side-frames and the truck-bolster can be taken out of the side-frames endwise.

The lower spring-seats, 7, rest upon the extended flanges, 16, of the side-frames and also upon the spring-beam, 6. The car-wheels, 13, are mounted on axles, 14. The journals, 15, revolve under the journal-box-saddles, 2.

Obviously the construction of this car-

truck admits of modifications within the scope of my invention and, therefore, I do not wish to be limited to the specific construction of my invention: For example, although a cast metal side-frame is shown in the drawing the invention is equally applicable to a built-up side-frame when the journal-box saddles are permanently secured to the side-frame, or the truck-bolster can be made of the built-up design and be substituted for the truck-bolster cast integral.

What I claim as my invention, and desire to secure by Letters Patent, is:

1. In a railway car-truck, the combination of the side-frames having bolster-openings to receive the ends of the truck-bolster, that portion of each side-frame over each bolster-opening being provided with a pair of thrust-lug-guides, and a truck-bolster having upstanding thrust-lugs to cooperate with said pair of thrust-lug-guides in each side frame, the pair of thrust-lug-guides in each side-frame and said cooperating thrust-lugs constituting the means for preventing endwise shifting of the truck-bolster, substantially as described.

2. In a railway car-truck, the combination of side-frames having bolster-openings to receive the ends of the truck bolster, that portion of said side-frames over said bolster-openings being provided with thrust-lug-guides and a truck-bolster having upstanding thrust-lugs to cooperate with said thrust-lug-guides, the latter and said thrust-lugs constituting the means for preventing endwise shifting of the truck-bolster and journal-box saddles at ends of each side-frame and removable oil cellars attached to the journal-box saddles, substantially as described.

3. In a railway car-truck, the combination of side-frames having bolster-openings to receive the ends of the truck-bolster, that portion of said side-frames over said bolster-openings being provided with thrust-lug-guides, and a truck-bolster having upstanding thrust-lugs to cooperate with said thrust-lug-guides, the latter and said thrust-lugs constituting the means for preventing endwise shifting of the truck-bolster and journal-box-saddles at ends of each side-frame and

cast integral with the side-frame and removable oil-cellars attached to the journal-box-saddles, substantially as described.

4. In a railway car-truck, the combination of side-frames having bolster-openings to receive the ends of the truck-bolster, that portion of said side-frames over said bolster-openings being provided with thrust-lug-guides and a truck-bolster having upstanding thrust-lugs to cooperate with said thrust-lug-guides, the latter and said thrust-lugs constituting the means for preventing endwise shifting of the truck-bolster and journal-box-saddles at ends of each side-frame and permanently secured to the side-frames and removable oil-cellars attached to the journal-box-saddles, substantially as described.

5. In a railway car-truck, the combination of side-frames having bolster-openings to receive the ends of truck-bolsters, that portion of said side-frames over said bolster-openings being provided with thrust-lug-guides, and a truck-bolster having upstanding thrust-lugs to cooperate with said thrust-lug-guides, the latter and said thrust-lugs constituting the means for preventing endwise shifting of the truck-bolster and journal-box-saddles at ends of each side-frame and removable oil-cellars attached to the side-frames, substantially as described.

6. In a railway car-truck, the combination of side-frames having bolster-openings to receive the ends of the truck-bolster, that portion of said side-frames over said bolster-openings being provided with thrust-lug-guides, and a truck-bolster having upstanding thrust-lugs to cooperate with said thrust-lug-guides, the latter and said thrust-lugs constituting the means for preventing endwise shifting of the truck-bolster and journal-box-saddles at ends of each side-frame and removable oil-cellars and a spring-beam connecting said side-frames and attached thereto, substantially as described.

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

THEODORE H. CURTIS.

Witnesses:

EDWIN S. HIGGCOCK,
HOMER C. McLELLAN.