

C. T. JEFFRIES.

CAR-TRUCK.

No. 174,533.

Patented March 7, 1876.

Fig. 1.

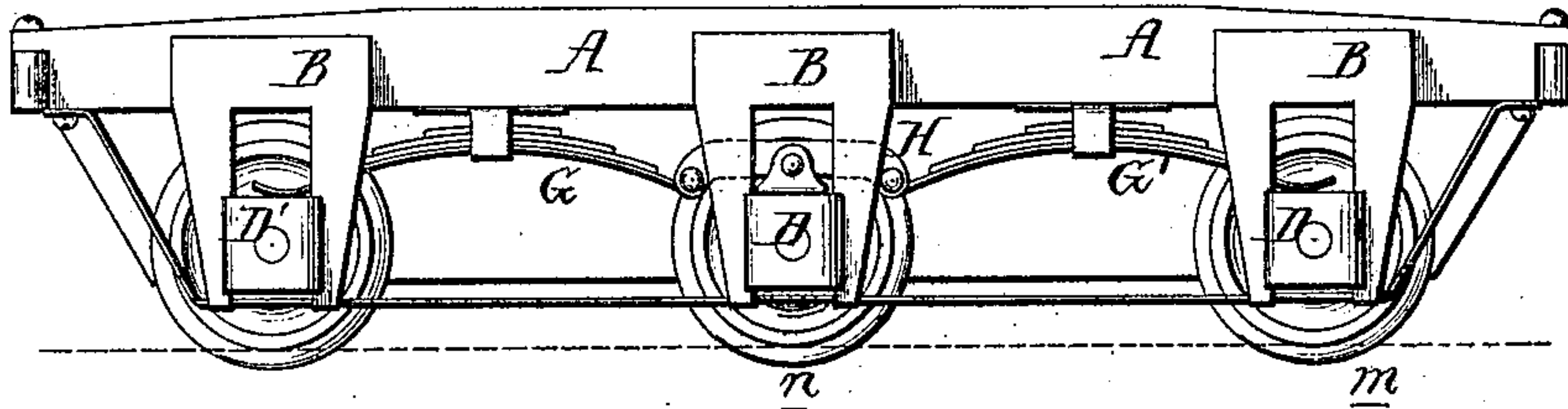


Fig. 2.

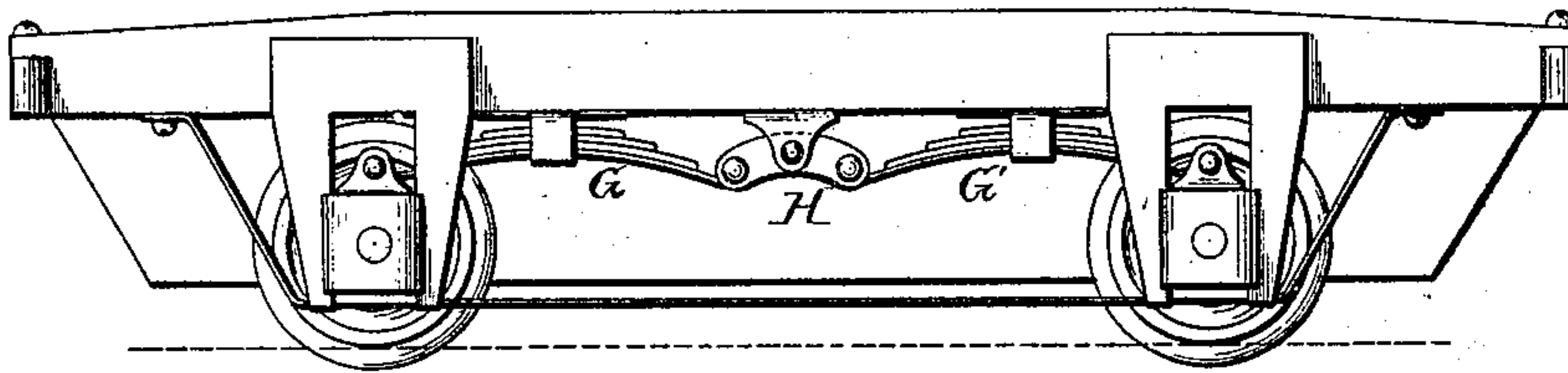
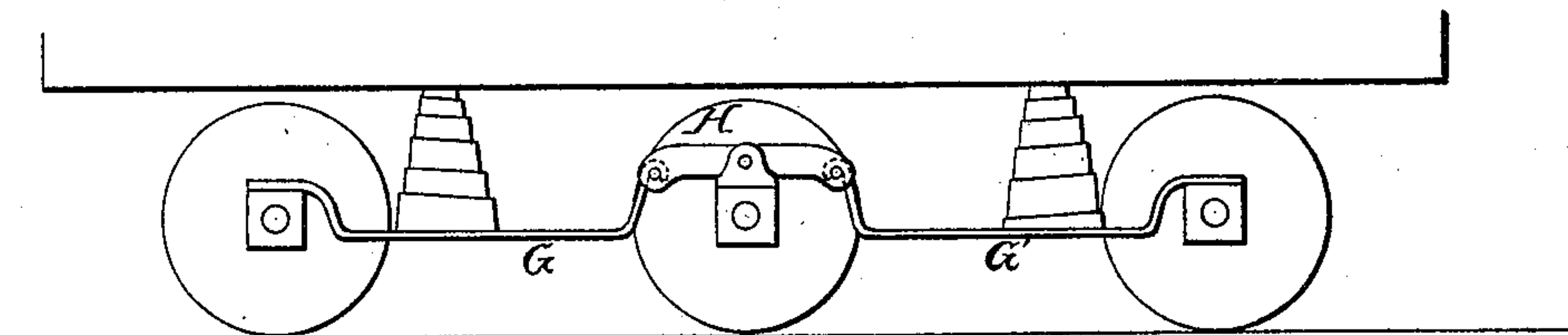


Fig. 3.



Witnesses,
Harry Howson Jr
Harry Smith

Charles T Jeffries
by his Attorneys
Howson and Son

UNITED STATES PATENT OFFICE.

CHARLES T. JEFFRIES, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN CAR-TRUCKS.

Specification forming part of Letters Patent No. **174,533**, dated March 7, 1876; application filed February 3, 1876.

To all whom it may concern :

Be it known that I, CHARLES T. JEFFRIES, of Philadelphia, Pennsylvania, have invented a certain Improvement in Railroad-Cars, of which the following is a specification :

The object of my invention is to cause the springs of railroad-cars and car-trucks to more effectually absorb the shocks due to obstructions and irregularities on the track than the springs as they are usually arranged, and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a side view of a six-wheeled truck, and Fig. 2 of a four-wheeled truck, in both of which my invention is embodied.

The frames of the trucks are constructed in the usual manner, having the opposite side beams A, hangers B, and axle-boxes D, adapted to the said hangers.

In Fig. 1 there are two springs, G and G', on each side of the truck, these springs being secured in the middle to one of the side beams A of the frame. The inner ends of two springs are connected together by a rocking-bar, H, which is pivoted midway between its opposite ends to lugs on the top of the axle-box of the central hanger D, and the outer end of each spring bears upon or is connected to a box of one of the outer hangers. No matter which of the three wheels on one side of the truck passes over an obstruction or irregularity on the rail, both springs must contribute to the absorption of the resultant shock—for instance, if the end wheel *m*, Fig. 1, passes over an obstruction, the movement of the axle-box D' will be transmitted to the spring G', which partly absorbs the shock, the latter being further absorbed by the spring G, owing to the rocking-bar H, by which the two springs

are connected together. In like manner, if the central wheel *n* passes over an obstruction, the two springs must contribute to the absorption of the shock, and the result must be the relief of the frame of the truck and body of the car from the deteriorating effects of the severe shocks to which they are usually subjected.

In the two-wheeled truck shown in Fig. 2 there is the same arrangement of springs, with the same results, but, in this case, the rocking-bar H is pivoted to a hanger on the under side of the truck-frame.

It is immaterial whether the outer ends of the springs simply bear on the axle-boxes, as shown in Fig. 1, or are connected to lugs on the same, as shown in Fig. 2.

The rocking-bar H may be applied to the ordinary spring-yokes, as shown in Fig. 3, instead of being connected directly to the springs, the result in either case being the same.

It will be evident that my invention may be applied with good results to freight cars and tenders as well as to passenger-cars.

I claim as my invention—

The combination, in a car-truck or car, of springs G G', hung at the center to said truck or car, and each bearing at one end upon the axle-boxes of the end wheels, and connected at the opposite end to a rocking bar, H, hung to the frame or to the axle-box of the central wheel, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHAS. T. JEFFRIES.

Witnesses:

HARRY HOWSON, Jr.,
HARRY SMITH.