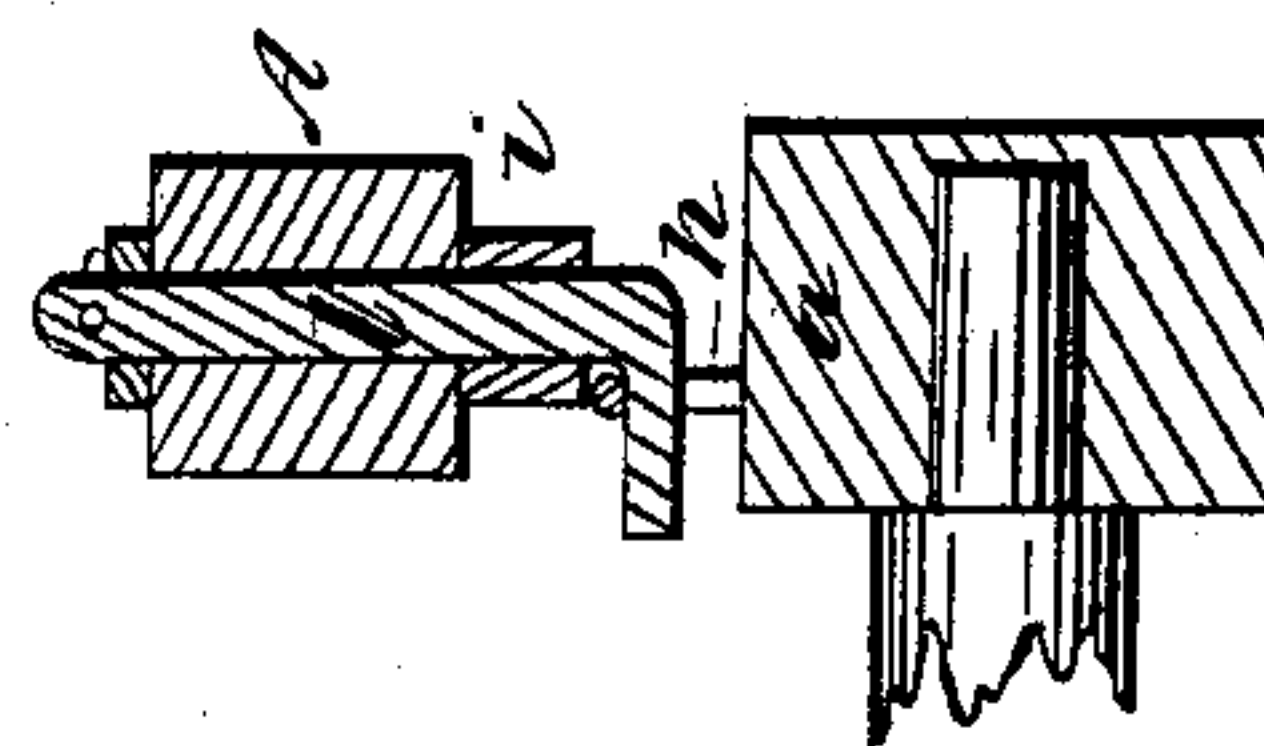
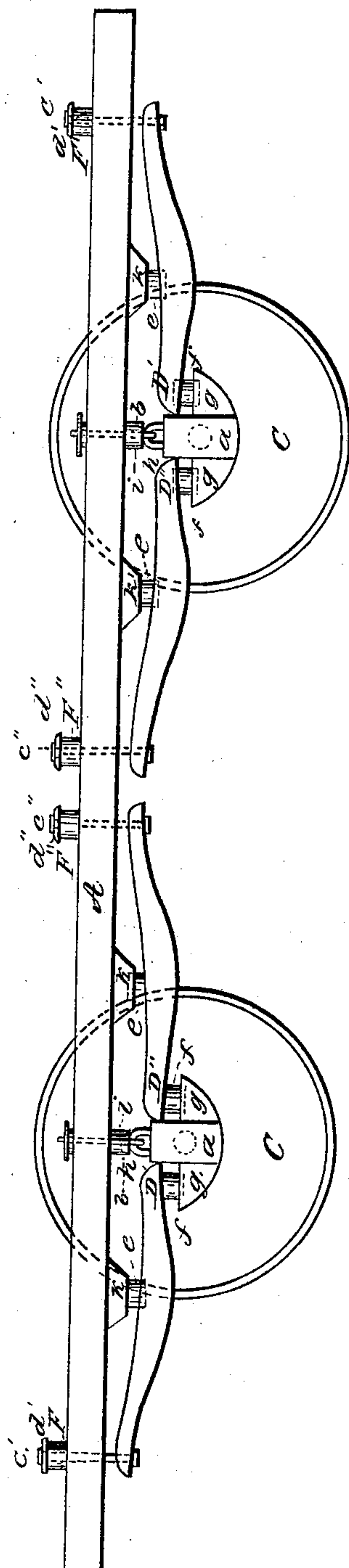


L. H. WEST.
Car Truck.

No. 63,190.

Patented Mar. 26, 1867.



Witnesses:

Geo. W. Andrews
J. P. Hale Jr.

Inventor,

Levi H. West
by his attorney,
R. H. Eddy,

United States Patent Office.

LEVI H. WEST, OF CAMBRIDGE, MASSACHUSETTS.

Letters Patent No. 63,190, dated March 26, 1867.

IMPROVEMENT IN CAR TRUCKS AND SPRINGS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL PERSONS TO WHOM THESE PRESENTS SHALL COME:

Be it known that I, LEVI H. WEST, of Cambridge, of the county of Middlesex, and State of Massachusetts, have made a new and useful invention having reference to Railway Cars or Carriages; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side elevation of a carriage truck or platform frame as provided with such invention, which has special reference to that for which Letters Patent No. 49,942 were granted to me on the 12th day of September, A. D. 1865.

Figure 2 is a section of the axle-box hanger and its spring extending from the platform.

In carrying out my present invention I dispense with the truck frame for connecting and supporting the bearings of the boxes of the two axles of the railway carriage, and in lieu thereof I employ two levers and certain springs like such as represented on and in my patented invention as applied to the platform and truck frame of a carriage. In so doing I obtain the advantages of the truck frame with the additional ones of the elasticity appertaining to such springs and levers; also a better distribution of springs, together with other useful effects or results.

In fig. 1 of the drawings, A denotes the platform or frame on which the body of the carriage usually rests. C C are the wheels, and *a a* the axle-boxes on one side of the platform. Each axle-box I form with two brackets *g g* extending from it in opposite directions to receive and support the shorter arms of two levers *D' D''*, or two springs *f f*, such springs being arranged on and with respect to the brackets in manner as represented. The fulcras of these levers are two springs *e e*, which are supported against abutments *k k* extended downward from the platform or car-body A. The longer arm of each lever rests on the head of a bolt, which passes up through such arm near its extremity and goes through the platform and a spring resting thereon, and is connected with a metallic cap or head to rest on the spring, such bolts, springs, and caps being exhibited at *e' F' d'*, *e'' F'' d''* in fig. 1. Each axle-box *a* is suspended from the platform frame by means of a hook or hanger, *l*, which goes through an eye, *h*, projecting upward from the axle-box. The hook or hanger is fastened to or on the platform, and carries a spring, *i*, which is arranged between the staple and the platform, and serves as an elastic support for the platform. The hook and eye are to prevent the wheel-boxes from dropping away from the platform, or to keep them in their due relations when the platform may be raised or forced upward. Each spring *f* may rest in sockets made in its bracket and lever, or the spring bracket and lever may be connected by a screw-bolt going down through them. From the above it will be seen that for the truck frame B represented and described in the specification of my aforementioned patent, I have substituted a set of two levers *D' D''*, springs *F' F''*, rods *e' e''*, and their caps *d' d''*. It will also be observed that the several levers *D' D''* have their shorter arms and fulcras supported by springs, and that the wheel-boxes are supported by hangers which carry additional springs for the support of the platform frame.

I do not herein intend to claim the combination or the arrangement of levers *D' D'* and the spring *F'*, of each with the platform and truck frame, the same being as represented and claimed in my aforesaid patent. Nor do I herein claim the combination and arrangement of elastic fulcras with the levers *D' D'*, the platform and truck frames, and the springs *F' F'*, such being the subject of a Patent No. 55,603 granted to me on the 5th day of June, A. D. 1866.

What I herein intend to claim as of my present invention is as follows:

I claim the combination as well as the arrangement of the additional levers *D'' D''*, their springs *F'' F''*, and supporting rods *e'' e''*, with the platform A, the wheel-boxes *a a*, and the levers *D' D'*, rods *e' e'*, and springs *F' F'*.

I also claim the combination as well as the arrangement of the springs *f e F'*, and the suspension rod *e'*, with the lever *D'*, the wheel-box *a*, and the platform A.

I also claim the combination as well as the arrangement of the hanger *l*, and the staple *h*, with the platform A, the wheel-box *a*, and the supporting levers *D' or D' D''*, applied to such box and platform.

I also claim the combination as well as the arrangement of the springs *i*, with the hanger *l*, the box *a*, the platform A, and the supporting levers applied to such platform and the wheel-box or boxes, the whole being substantially as hereinbefore specified.

LEVI H. WEST.

Witnesses:

R. H. EDDY,

SAMUEL N. PIPER.