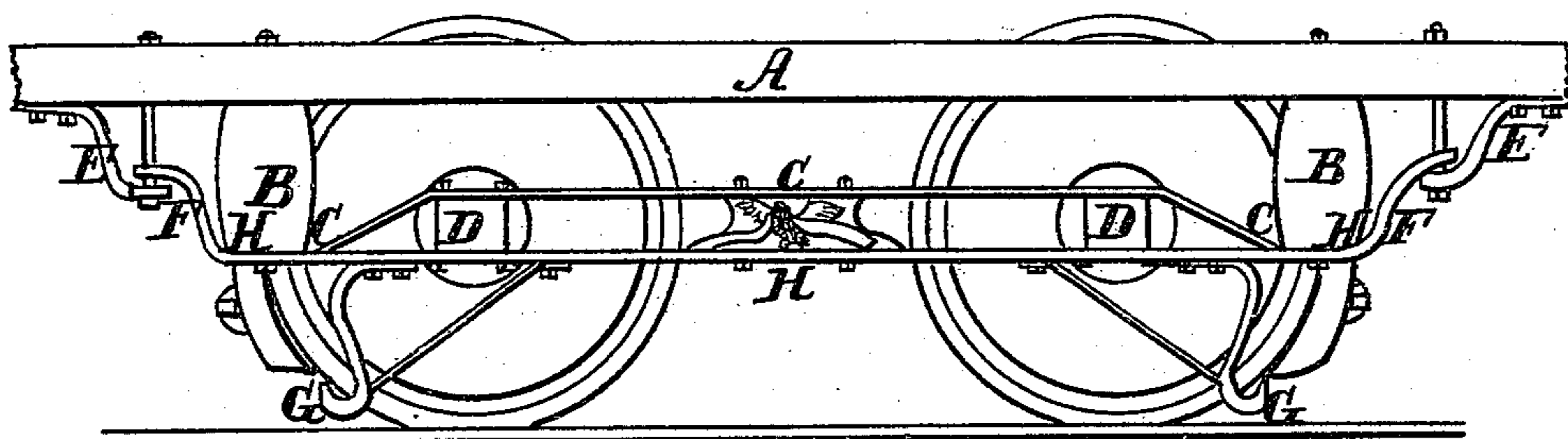


No. 93,945.

PATENTED AUG. 24, 1869.

J. ASHENFELDER.
TRUCK FOR STREET CARS.



Witnesses;

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JOSIAH ASHENFELDER, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 93,945, dated August 24, 1869.

IMPROVED TRUCK FOR STREET-CARS.

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

To all whom it may concern:

Be it known that I, JOSIAH ASHENFELDER, of the city of Philadelphia, in the county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in "Modes of Connecting Cars to Trucks;" and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which the figure is a side-elevation view of the truck, showing the device by means of which the car is suspended to said truck.

The nature of my invention consists in the combination of certain mechanical devices, by means of which an easy-riding car is obtained, and which, in the mean time, will prevent it from bending down at the end, as is generally the case with cars and trucks of the general construction now commonly in use.

A represents the bottom of the car, resting on springs B B.

C is the truss-band or piece.

H, the bearing-rail or piece, made of wood or metal, at will.

At both ends the truss C C is curved up and prolonged, as shown in F F.

E E are draught-irons or pieces, curving down, and lower than ends F F of the truss C, and so that vertical bolts I I may connect the bottom A of the car with the pieces E E and F F.

The holes in E E and F F, through which bolts I I pass, must be large enough to allow ends F F to slide freely up and down bolts I and I, and also to allow free play to said bolts in pieces E E.

D D are the car-boxes, made in the usual shape, but held firmly in a permanent position, not only by means of side-bolts, but also by being caught between the bearing-piece H and the truss C C.

B B are the usual India-rubber springs. They are made in the usual shape, though longer than when placed on top of the car-boxes, and they are set outside of said car-boxes, their lower ends resting on piece H, and their upper ends supporting the weight of the car.

The object and advantages of this mode of construction are obvious.

As in the usual mode of construction, the car rests on the same India-rubber springs B B, but which, instead of being set on top of the car-boxes, are placed outside, thus placing the resting-points of the weight of the car as much further from the centre of said car as may be desired, and the nearer the ends the resting or bearing-points will thus be, and the less the car will bend at its ends, as is the case with the common construction in use.

Again, the mode of placing the India-rubber springs outside of the boxes, and of rendering the said car-

boxes permanent, will allow, in the construction of the truck, to have the axles of the wheels much nearer than ever before, which will permit to run them on curves of a smaller radius, a great desideratum on some sharp turnings and narrow streets.

Dispensing with pedestal, and setting the boxes D D permanent, as above mentioned, will also be a great economy in metal and wearing out, and the boxes will last much longer.

In their permanent positions, the boxes will also form truss with the truss-band C C, and help toward the compactness of the whole device and construction.

The way of setting India-rubber springs B B, and holding them in proper place, may be by means of rings or thimbles, respectively fastened to pieces H and A, and into which both lower and upper ends of springs B B would be countersunk, or by simply running in a small bolt or pin, vertically through the centres of said springs; in fact, all that is necessary being to maintain them in the vertical position, as they have no draught or lateral vibratory motion to bear or fear.

The other parts of my drawings not described in this specification, such as wheel, axle, brakes, &c., are devices generally used on trucks and cars, and on which I consequently lay no claim.

I do not claim a new mode of suspending cars from the truck by means of the combination of springs, chains, &c., as already known or patented; nor do I lay claim, separately, on any novelty in the sundry parts of my machinery and combination.

I simply claim an improvement on the usual mode of connecting cars to trucks, and the usual construction of trucks; and as I am not aware that the springs D D, made of the material and shape commonly used on car-trucks, have ever been displaced from the top of the car-boxes D D to any desired distance outside of said boxes, without their being combined with elaborate reversed pedestals, chains, joints, and spring-joints, plate-springs, &c., as in the mean time my combination of the boxes, truss, bearing-rail, and draught-pieces, is the very expression of simplicity of construction, and obviously answer every purpose heretofore proposed or looked for in giving an easy-riding car, which can ride on shorter radii curves, and bend no longer at the ends.

Having thus described my invention, and shown its purpose and many advantages,

What I claim, and desire to secure by Letters Patent of the United States, is—

1. The peculiar combination of truss-band or piece C C F with draught-pieces E E and bolts I I, when constructed in the manner and for the purpose above set forth and described.

2. The combination of pieces E E, truss-band C O F, bolts I I, with bearing-piece H, and its permanent car-boxes D D, and springs B B, when the whole is combined, constructed, and operated in the manner and for the purpose above set forth and described.

3. The combination of bottom A of car with springs B B, truss-piece C, and bearing H, draught-pieces E

E, and their bolts I I, car-boxes D D, &c., when the whole is constructed and arranged in the manner and for the purpose above set forth and described.

JOSIAH ASHENFELDER.

Witnesses:

SAML. B. YUKER,

LUTHER B. MASON.