

(No Model.)

J. P. LEVAN.

DRAFT RIGGING FOR RAILWAY CARS.

No. 360,705.

Patented Apr. 5, 1887.

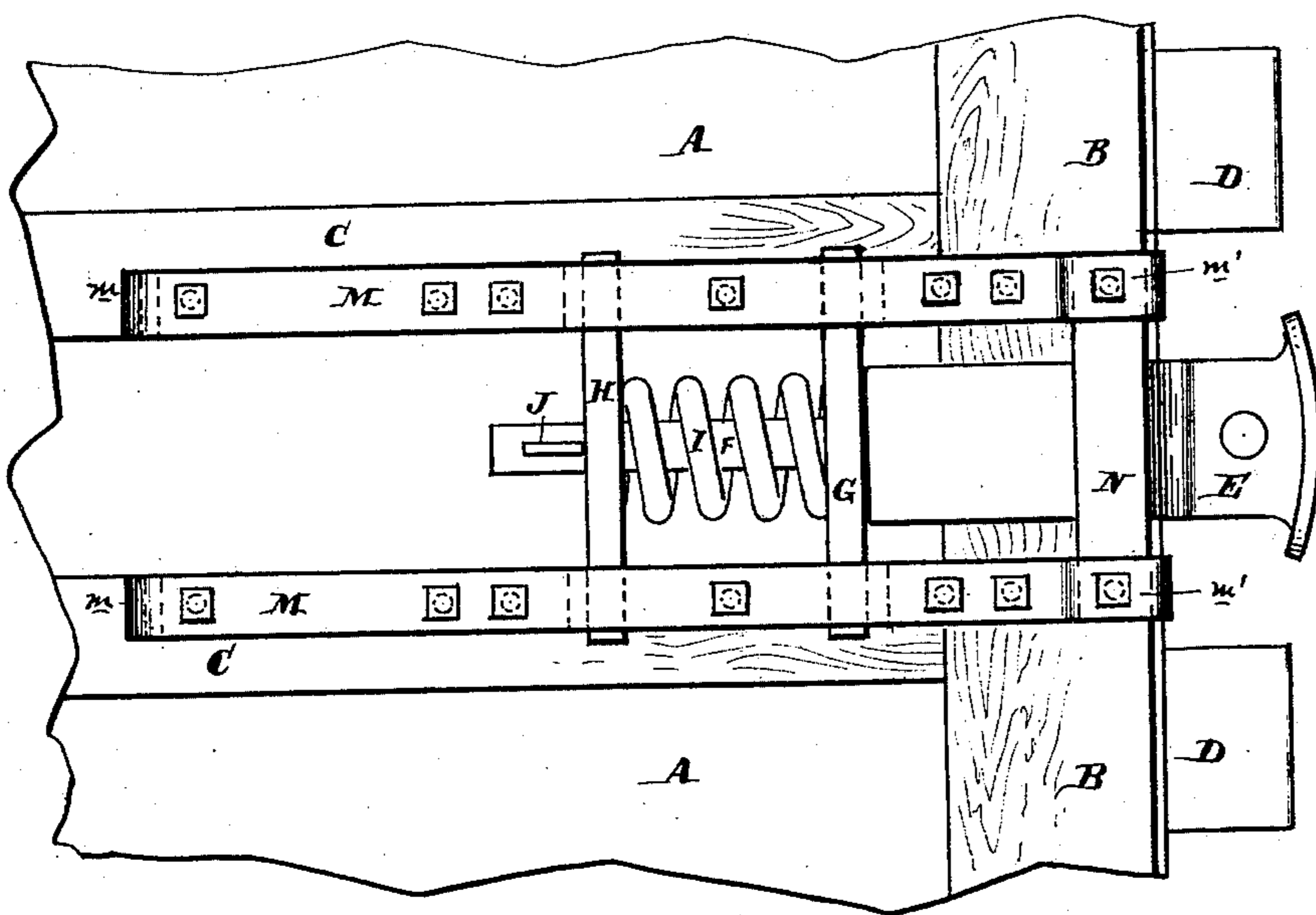
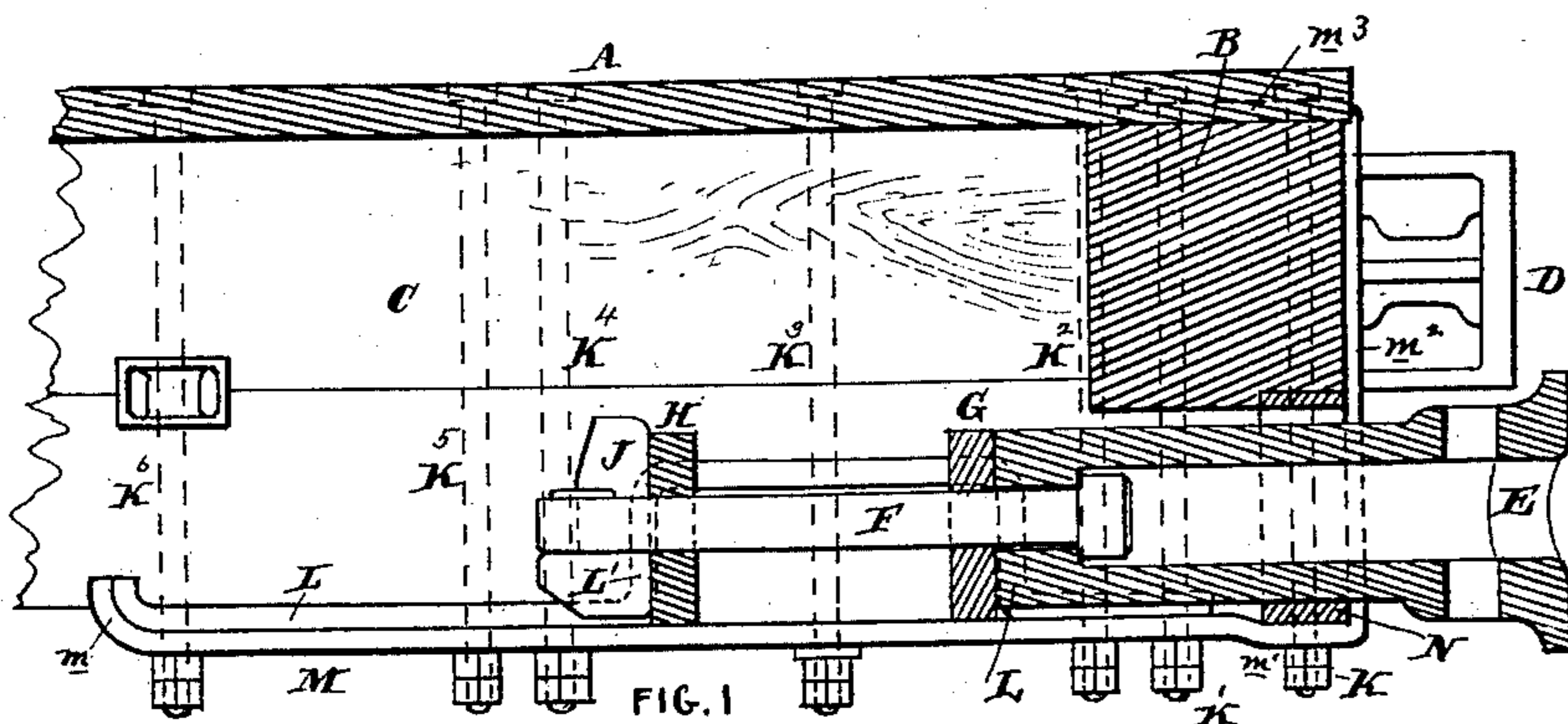


FIG. 2

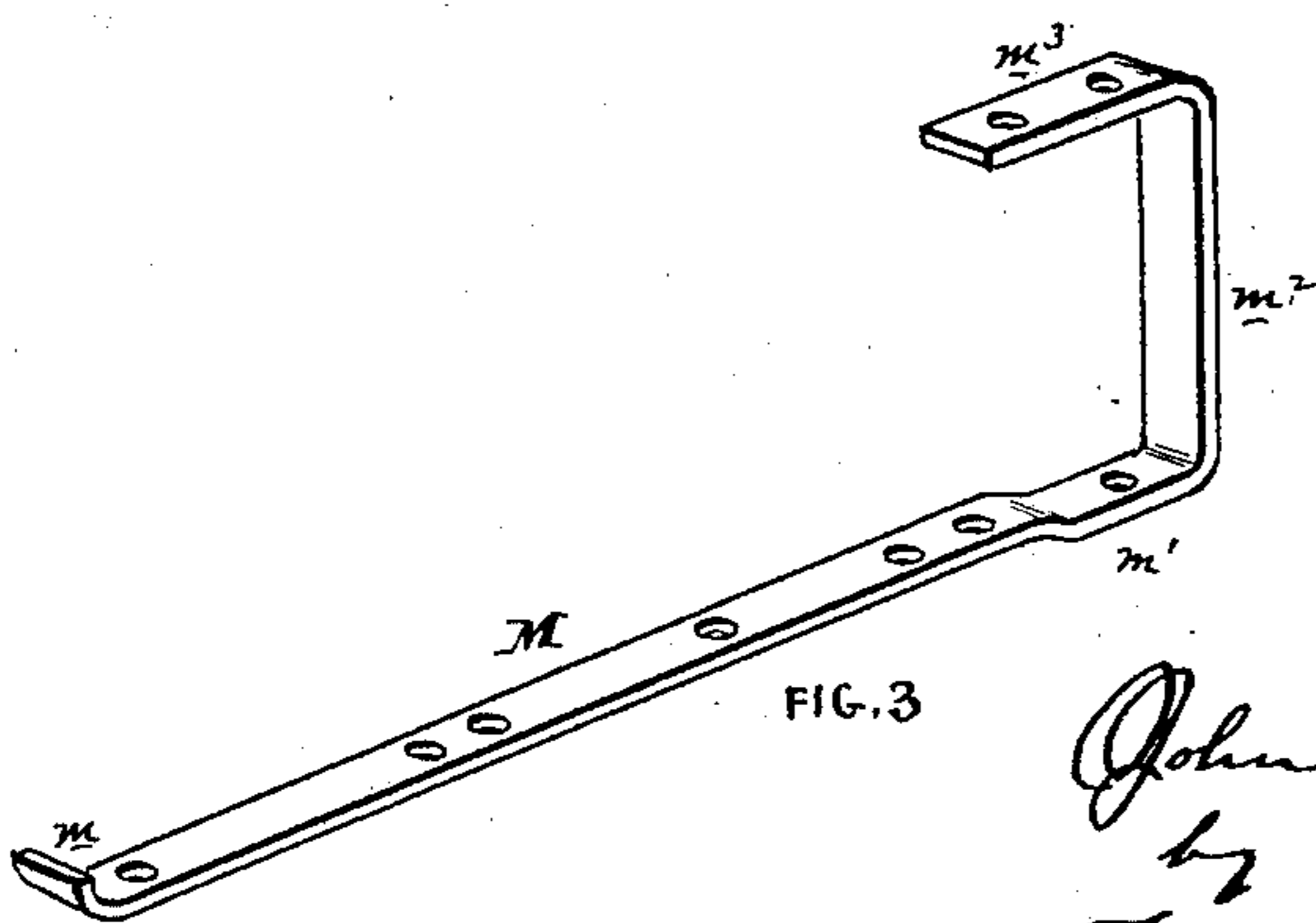


FIG. 3

Attest

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JOHN P. LEVAN, OF ALTOONA, PENNSYLVANIA.

DRAFT-RIGGING FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 360,705, dated April 5, 1887.

Application filed November 29, 1886. Serial No. 220,150. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. LEVAN, of Altoona, county of Blair, State of Pennsylvania, have invented a new and useful Improvement in Draft-Rigging for Railway-Cars, of which the following is a true and exact description, due reference being had to the accompanying drawings, which form a part hereof.

The object of my invention is to strengthen the draft-rigging of railway-cars, and especially to strengthen it against the shocks experienced in buffing.

My invention consists in the devices hereinafter described, by which the draft appliances are strengthened and the shock of buffing conveyed to that part of the under framing of the car best adapted to sustain it without injury.

Reference being had to the drawings, Figure 1 is a side view of my draft appliance on a vertical section through the center of the draw-bar; Fig. 2, a view of the bottom of the cars having my improvement, and Fig. 3 a perspective view of my improved draft-iron.

A is the car-flooring; B, the end sill; C C, longitudinal framing timbers.

D D are buffers.

E is the coupling-head and draw-bar, having the usual continuation, F.

G and H are plates of the usual kind for holding between them the draw-spring I.

J is the key which retains the plate H upon the draw-bar F against the pressure of the spring.

K K', &c., are bolts which secure the draft-rigging to the framing of the car.

L L' are the supports which sustain directly the pulls and thrusts of the draw-bar.

N is the end cross beam or bar upon which the coupler-head rests.

All of the above parts are of the usual construction, and as they form no part of my invention need not be particularly described.

M M are the draft-irons, which run along each side of the coupler and upon which the draft-rigging is secured. They are turned up at their inner ends, m , to aid in resisting sharp pulling strains, and from this point they run forward in straight lines until they reach the cross-brace N. They then curve downward, to furnish a bearing or socket, m' , for the cross-brace to rest in, and after passing under it they

turn upward at right angles and run along the face of the end sill, B, as shown at m^3 . At the top of the end sill they are bent again at right angles and run backward along the top of the end sill, as shown at m^3 , the part m^3 being immediately over the parts m' and preferably running back beyond the same, as shown. As is shown in the drawings, the forward bolt, K, passes through the draft-iron M both at top and bottom, and also through the cross-brace N. The bolt K' also passes through the draft-iron at top and bottom, and, if desired, one or more additional bolts may be made to do the same.

It is of course evident that by causing the draft-iron to pass in front of and above the end sill and making the bolts passing through the end sill pass through said draft-iron both at top and bottom the draft-rigging is greatly stronger, especially against buffing-shocks, than in those older constructions where the draft-iron terminated at m' and did not pass around the end sill. My construction, indeed, has been found to prevent the bending of the long vertical bolts K K', &c., which secure the draft-rigging to the car, and to greatly diminish the danger of splitting and wrenching the timbers of the car-framing.

I have shown my improved draft-irons in combination with the usual draft-rigging; but it may of course be used with other forms, which, like that shown, are supported upon longitudinal iron straps bolted to the car-framing.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the end sill of a railway-car, draft-irons M M, adapted to sustain the draft-rigging and continued up the front and over the top of the end sill, substantially as specified, so as to transmit the buffing strains directly to said end sill.

2. In combination with the end sill of a railway-car, draft-irons M M, continued around the face and over the top of the end sill, two or more vertical bolts passing through the end sill and secured at top and bottom to the draft-irons, and draft-rigging supported upon said draft-irons, substantially as specified.

3. In combination with draft-rigging, substantially as shown and described, draft-irons

M M, bent at m' to receive the cross-brace N, and adapted to pass in front and along the top of the end sill, and bolts K K', clamping the draft-irons to the end sill at top and bottom, 5 substantially as shown and described.

4. In a draft-rigging for a railway-car, substantially as shown and described, the combi-

nation of the end sill, B, end brace, N, and supporting-guides L L' with the draft-irons M M, all as and for the purpose specified.

JOHN P. LEVAN.

Witnesses:

L. B. REIFSNEIDER,
GEO. PIPER.