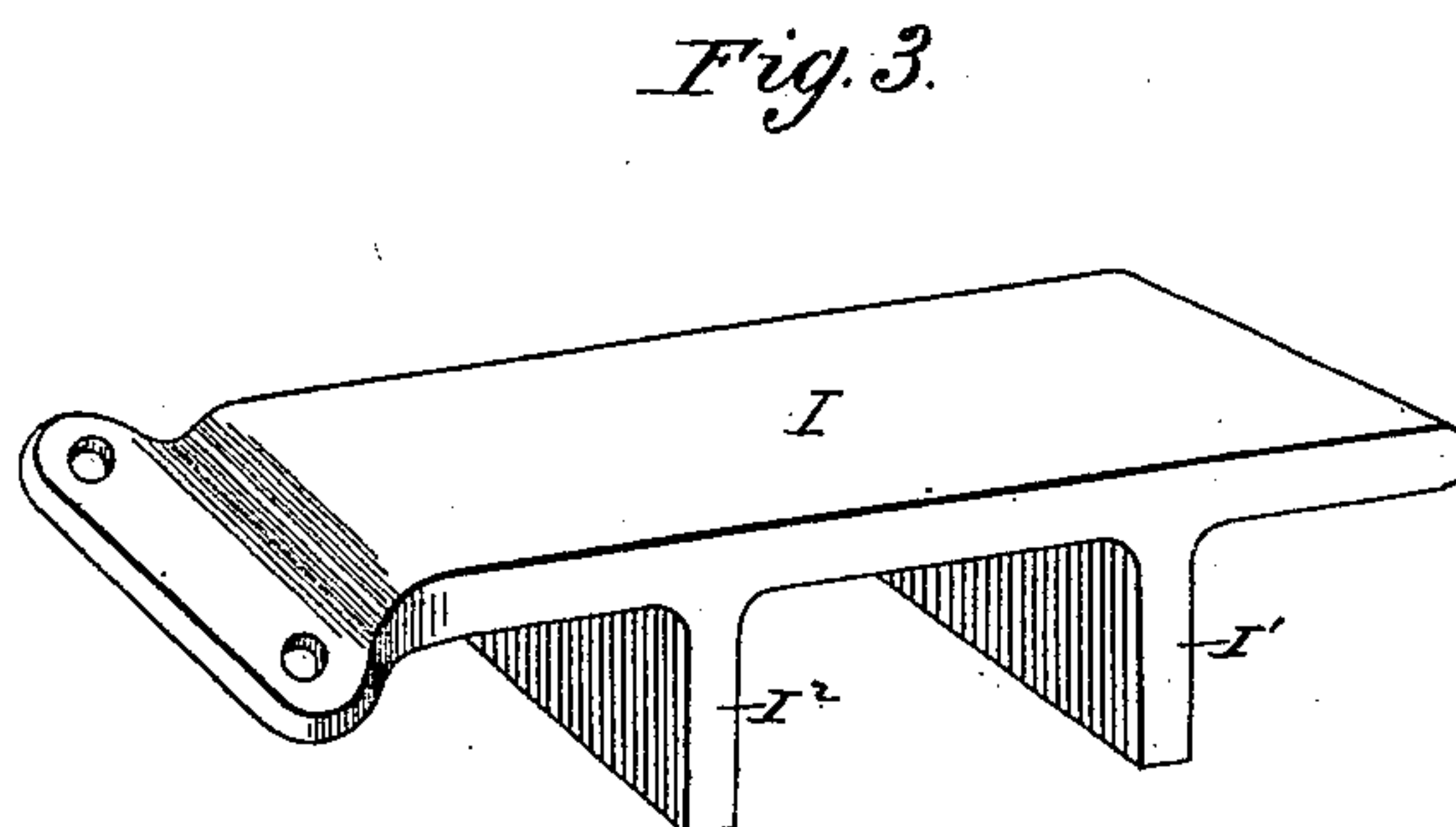
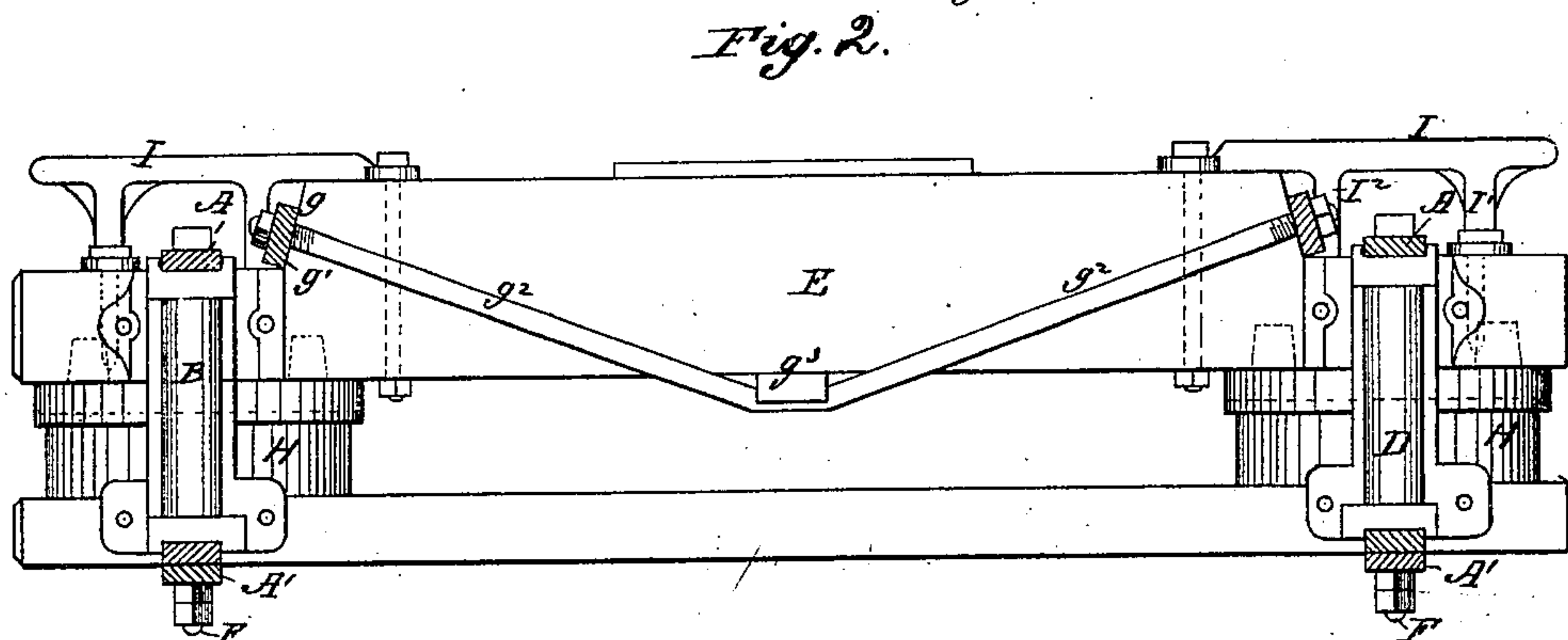
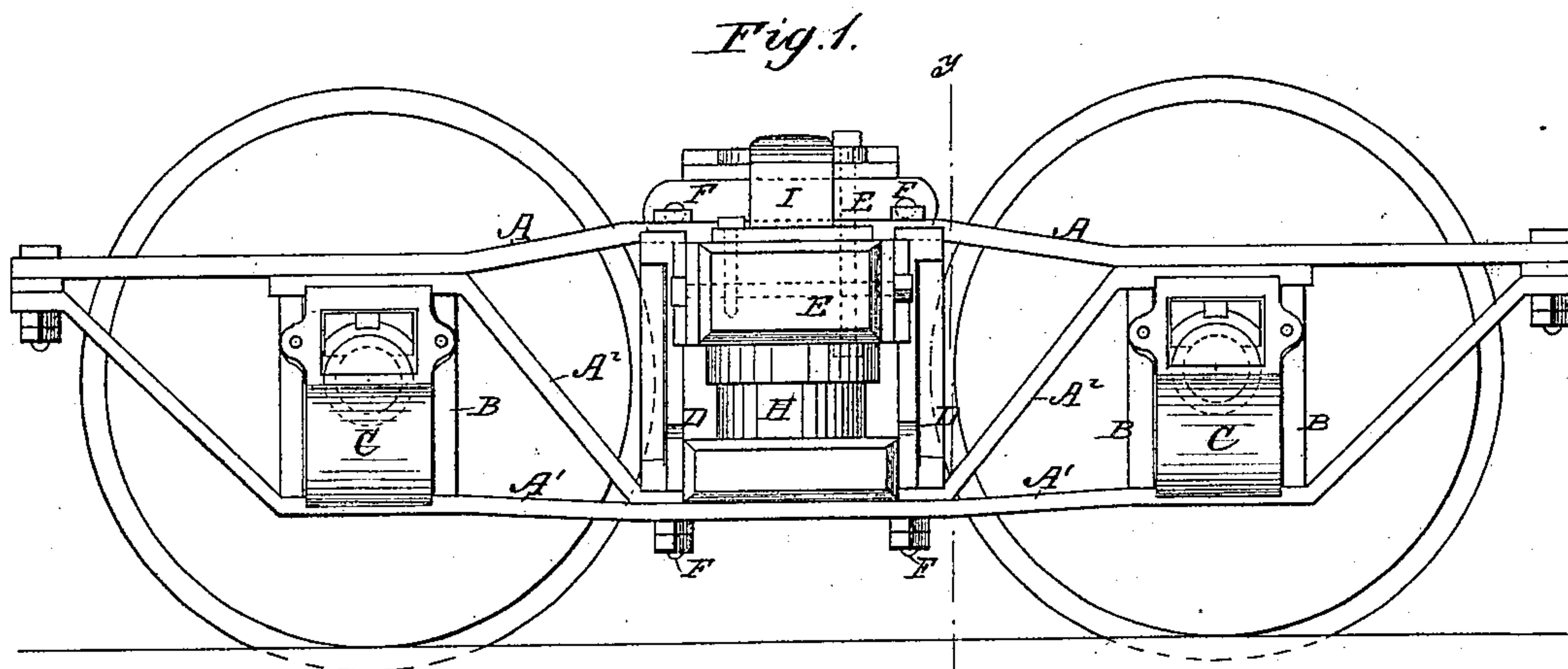


(No Model.)

D. E. SMALL.
Rub Iron for Car Trucks.

No. 234,621.

Patented Nov. 16, 1880.



WITNESSES:

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UNITED STATES PATENT OFFICE.

DAVID E. SMALL, OF YORK, PENNSYLVANIA.

RUB-IRON FOR CAR-TRUCKS.

SPECIFICATION forming part of Letters Patent No. 234,621, dated November 16, 1880.

Application filed September 30, 1880. (No model.)

To all whom it may concern:

Be it known that I, DAVID E. SMALL, of York, in the county of York and State of Pennsylvania, have invented a new and Improved Rub-Iron for Railway-Car Trucks; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of my invention is to provide an ordinary car-truck with an improved rub-iron which will adapt the truck to carry either wide or narrow car-bodies, or such bodies as are used upon broad or narrow gage roads, in order that the car-body, with its cargo, may be transferred from the truck of a wide-gage to the truck of a narrow-gage road, by which means the cargo need not be unloaded and reloaded in changing from one track to another.

In the accompanying drawings, Figure 1 is a side elevation of a truck of well-known construction to which my improved rub-iron is attached; Fig. 2, a transverse section of the same in the line *y y* of Fig. 1; and Fig. 3, a perspective view of the rub-iron detached.

The truck herein described to which my improved rub-iron is attached is constructed with side frames formed of bar-iron upper pieces, A, and lower pieces, A', both of which extend the entire length of the truck and receive between them the pedestals B of the axle-boxes C and the guide-plates D for the bolster E. The frame has an additional bar-iron piece, A², that serves as a brace between the upper and lower pieces, A A', and passes beneath a cross-timber, E, that extends across the truck from one side frame to the other. The ends of the frame-brace A² pass diagonally to the upper frame-piece, A, and are secured between it and the pedestals B of the axle-boxes. To the side frames are attached the guide-plates D, with straight-edged inner faces and tubular backs, through which bolts F pass, said bolts also passing through the frame-pieces and holding the parts forming the middle portion of the side frame together. A bolster passes entirely across the truck, and is sup-

ported upon spring-boxes H, interposed between it and the cross-timber E. The ends of the bolster are reduced so that its middle portion will extend some distance above the side frames and its ends will pass between the upper and lower pieces of the frame and fit snugly between the guide-plates D, so that it will only be allowed vertical movement. The reduced end portions will provide a shoulder, *g*, against which the bearing-plates *g'* of a truss-brace, *g*², that pass across the bolster and below the plate *g*³, may be firmly held.

In order that the entire length of the bolster may be employed to give the utmost outer bearing-surface for the rub-iron, the rub-iron I is constructed so that its inner end may be bolted directly to the bolster and the outer end will be firmly held to the proper height above the reduced end of the bolster by a pedestal, I', bolted to the outer or reduced end of the bolster. An inner supplemental standard-plate, I², will rest upon the reduced portion of the bolster, near the shoulder *g*, by which means ample support is given to the rub-iron; and a clear space may be provided between the standards I' I², in which the upper piece, A, of the side frames may move without obstruction to allow the bolster to move upon its springs.

I do not confine myself to the employment of my improved rub-iron upon the above-described truck solely, as it may be applied to other forms of trucks by slight changes in shape or proportion.

What I claim as new is—

A rub-iron for railway-car trucks consisting, essentially, of an extended horizontal bearing-plate and one or more standards or pedestals to support its outer ends and adapted to be used upon a car-bolster, in the manner and for the purpose substantially as described.

DAVID E. SMALL.

Witnesses:

WM. BEITZEL,
GEO. S. BILLMEYER.