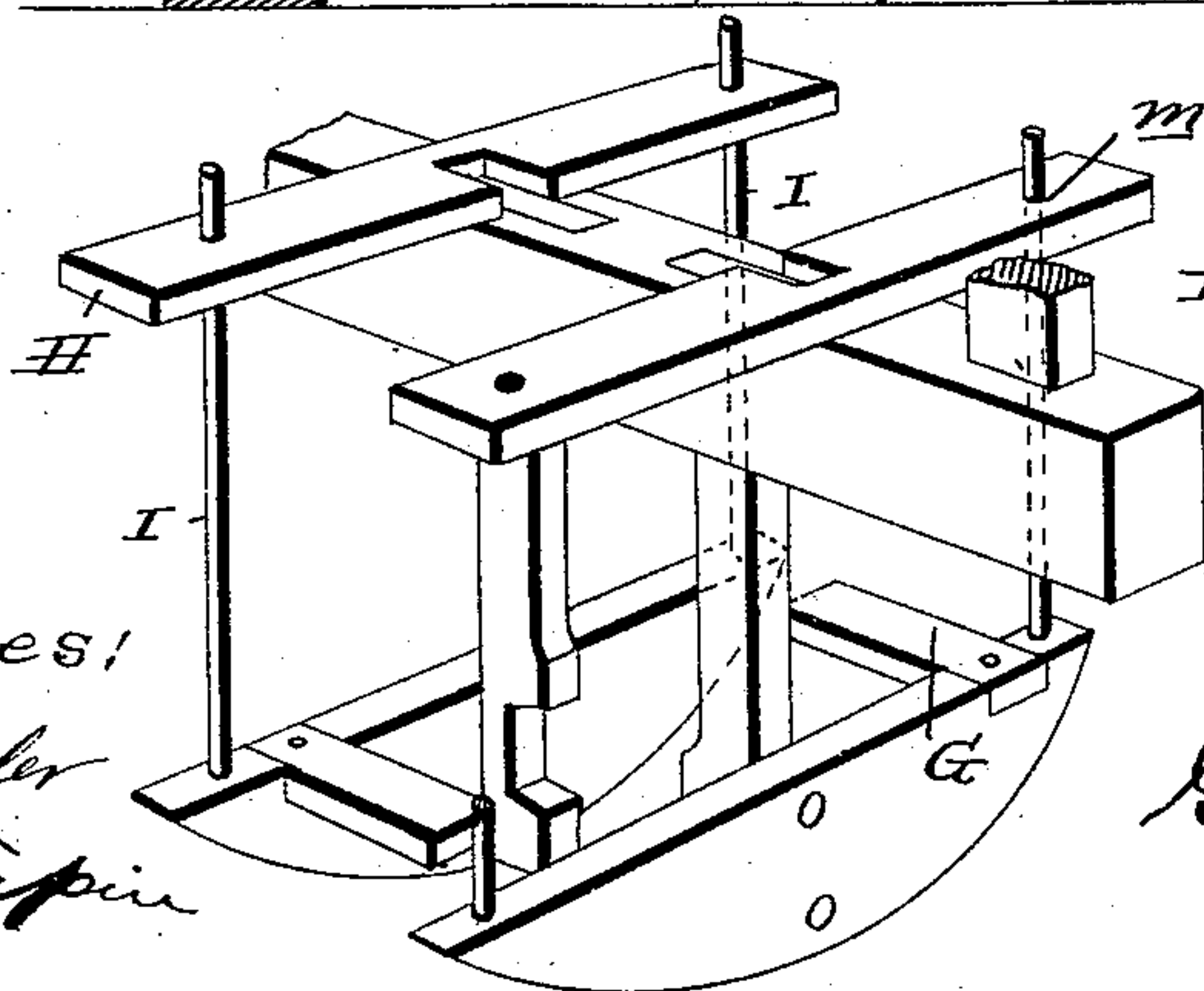
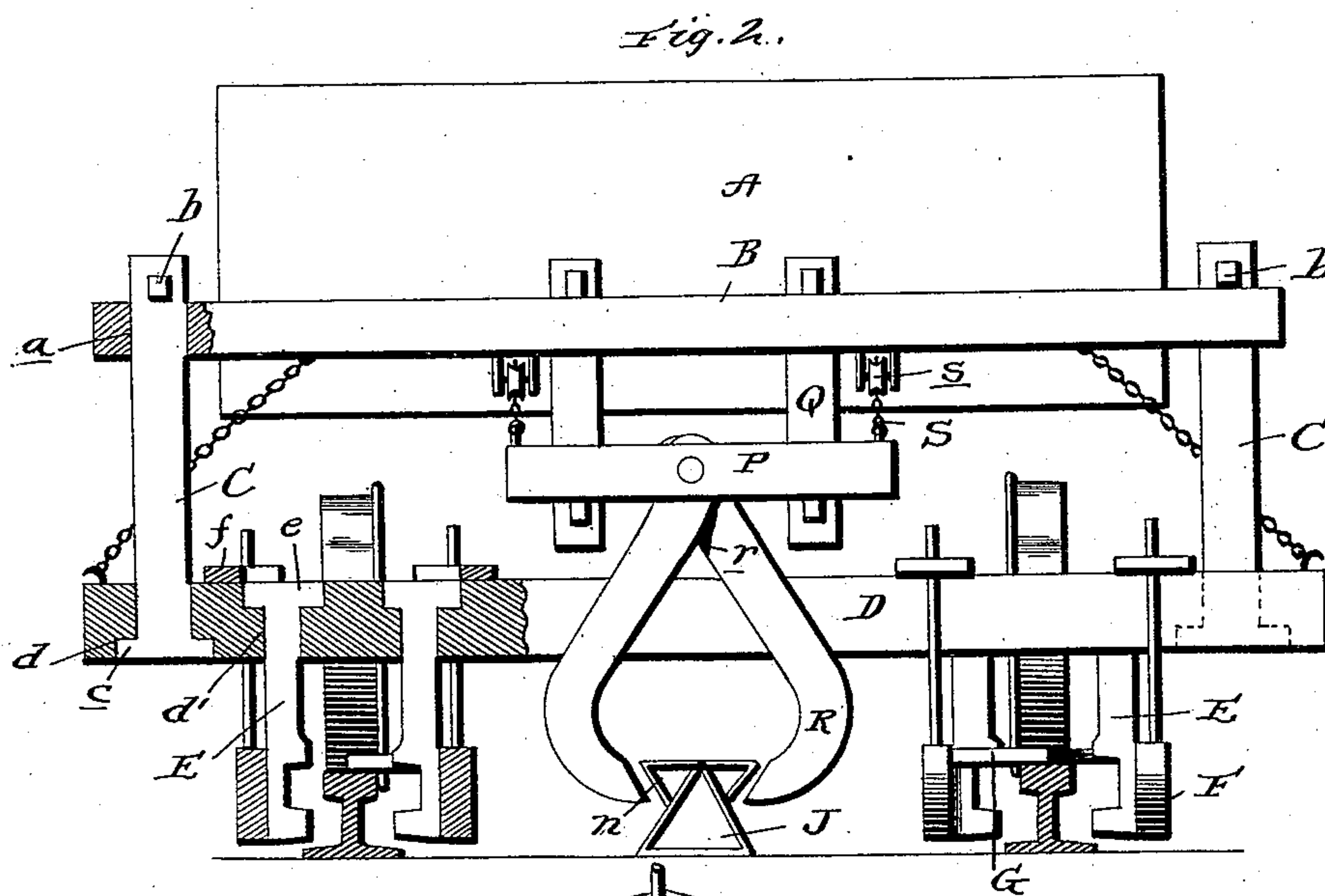
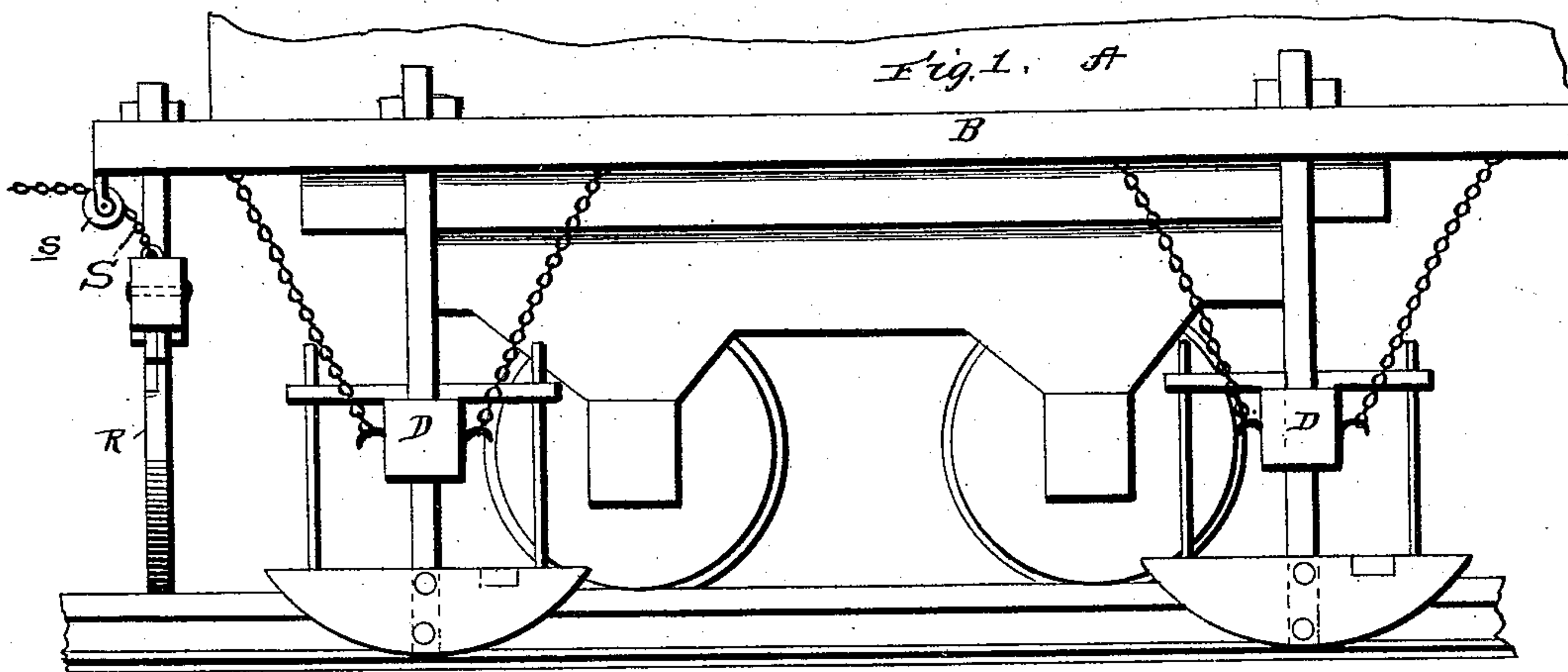


(No Model.)

G. W. MOORE.  
SAFETY TRUCK FOR CARS.

No. 486,833.

Patented Nov. 22, 1892.



Witnesses:  
C. Raeder  
T. E. Turpin

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George Wash. Moore.  
By James Sheehy  
Attorney



# UNITED STATES PATENT OFFICE.

GEORGE WASH. MOORE, OF BURNET, TEXAS, ASSIGNOR OF ONE-FOURTH TO  
EALY J. MOSES, OF SAME PLACE.

## SAFETY-TRUCK FOR CARS.

SPECIFICATION forming part of Letters Patent No. 486,833, dated November 22, 1892.

Application filed May 17, 1892. Serial No. 433,347. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE WASH. MOORE, a citizen of the United States, residing at Burnet, in the county of Burnet and State of Texas, have invented certain new and useful Improvements in Devices for Preventing Derailment of Trains; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to improvements in devices for preventing the derailment of railway-trains; and it consists in the peculiar construction, certain novel combinations, and the adaptation of parts hereinafter described, and particularly pointed out in the claims appended.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a railway-car embodying my invention in position upon a track. Fig. 2 is a front elevation of the same, and Fig. 3 is an enlarged detail perspective view illustrating the manner of connecting the vertically-movable shoes to the transverse hanger-beams.

In the said drawings similar letters designate corresponding parts throughout the several views, referring to which—

A indicates a railway-car, which in general may be of the ordinary or any approved construction, and B indicates the platform of the same, to which the wheel-truck may be connected in any approved manner. Formed in the platform B, adjacent to the longitudinal edges thereof and at a suitable distance apart, are the vertically-disposed apertures *a*, through which take the hanger-arms C of the transverse beams D, which arms C are provided with the keeper-pins *b*, whereby it will be seen that while they are free to move vertically they will be prevented from falling down and out of the apertures *a*. These hanger-arms C, which take entirely through the beams D, as shown, so as to allow a free upward movement of the same, are provided at their lower ends with heads, as *c*, which normally rest in recesses *d* in the lower side of the said beams and serve to support the same.

Formed in the beams D, at a suitable dis-

tance apart and adjacent to the ends thereof, are the vertically-disposed apertures *d'*, through which take the hanger-arms E of the shoes F. These hanger-arms E are provided at their upper ends with heads, as *e*, which normally rest in the recesses *f* at the upper ends of the apertures *d'* and suspend the shoes and at the same time allow an upward movement of the same, and the said arms E, which rest upon opposite sides of the rails, as shown, are also provided at or adjacent to their lower ends with the inwardly-directed hooks *g*, adapted to engage the rails and prevent a lateral movement of the wheels off the same. The shoes F, which have their lower edges beveled or curved, as illustrated, so that they will ride over any object they encounter, are provided with the inwardly-directed lateral arms G, which are designed to rest and move upon the track-rails so as to hold the said shoes F in a proper position to engage switch-rails, frogs, and other obstructions in the path of the arms E and raise the said arms so that they will not engage the obstructions.

Suitably connected to the transverse beams D and extending at right angles thereto are the bars H, which are provided adjacent to their ends with the vertically-disposed apertures *m*, through which loosely take the guide-rods I of the shoes F, by reason of which it will be seen that the shoes will be guided in their upward movement and will be raised bodily.

From the construction thus far described it will be perceived that the arms E will normally rest on opposite sides of the track-rails ready to engage the same and prevent a derailment of the train, and it will be further perceived that the shoes F will engage all obstructions and raise the arms E, so that said arms will not engage the obstructions and be broken or damaged thereby.

J indicates an auxiliary safety-rail, which is placed midway between the track-rails, and is provided with the downwardly and inwardly beveled sides *n*, as shown, for the purpose presently to be described.

P indicates a transverse horizontal beam, which is provided with suitable vertically-disposed apertures for the loose passage of the hanger-arms Q, which depend from the



platform B and are provided at their lower ends with pins, as *q*, whereby it will be seen that the beam P is free to move upwardly. Pivottally connected to the beam P at about the middle thereof is a pair of tongs R, one of which is provided with a shoulder *r*, so as to prevent their free ends from coming together when they are disengaged from the rail J. These tongs R, which are designed and adapted to be placed in engagement with the rail J to serve as an auxiliary to the arms E and to prevent a derailment of the train when the said arms are raised by the shoes F, have their free ends curved and beveled, as shown, whereby they will automatically spread when lowered and will engage the rail J and will spread and be disengaged from said rail when raised. Connected to the beam P, as shown, are chains or cables S, which take over suitable friction-pulleys *s*, and are designed to run to the locomotive-cab, so as to place the tongs R under the control of the engineer.

Immediately in front and rear of the hanger-arms C let strong iron hooks be inserted into the transverse beams D. Into these hooks let chains be attached reaching upward at an angle of about thirty degrees from a perpendicular and fasten to platform or saw-bolster above. These chains will prevent the hanger-arms from being bent by any force that might come against them. To the ends of these transverse beams let like chains be attached reaching upward and fastened as already described. This will prevent the transverse beams from moving laterally. The extreme ends of the engaging hooks should be beveled from the edge outwardly, so as to cause the said hooks to slide around any obstruction that might be in the groove of the iron rail.

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

1. In a device for preventing the derailment of railway-trains, substantially as described, the combination, with a car and a transverse beam hung from the car, of the hanger-arms loosely mounted in the beam and adapted to move upwardly when subjected to pressure from below, and the longitudinally-disposed shoes connected to the hanger-arms and having their lower edges curved or beveled, substantially as and for the purpose set forth.

2. In a device for preventing the derailment of railway-trains, substantially as described, the combination, with a car and the hanger-arms C, depending therefrom and having the heads *c* at their lower ends, of the transverse beam loosely mounted upon the arms C and adapted to move upwardly when subjected to pressure from below, the hanger-arms E, loosely mounted in and depending from the beam and having the heads *e* at their upper ends, the said hanger-arms E resting upon opposite sides of each rail and carrying shoes at their lower ends, substantially as and for the purpose specified.

3. In a device for preventing the derailment of railway-trains, substantially as described, the combination, with a car having the hanger-arms Q, of the beam P, loosely mounted on said arms so as to be vertically movable thereon, a suitable means for raising and lowering said beam, the tongs R, having their lower ends curved or beveled and adapted to engage a safety-rail between the track-rails, and the shoulder *r*, provided on one of the said tongs R, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE WASH. MOORE.

Witnesses:

A C. HAHN,  
J. A. CREWS.