(No Model.)

T. J. MEGOWN.

CAR BRAKE.

No. 365,839. Patented July 5, 1887.

Fig. 1.

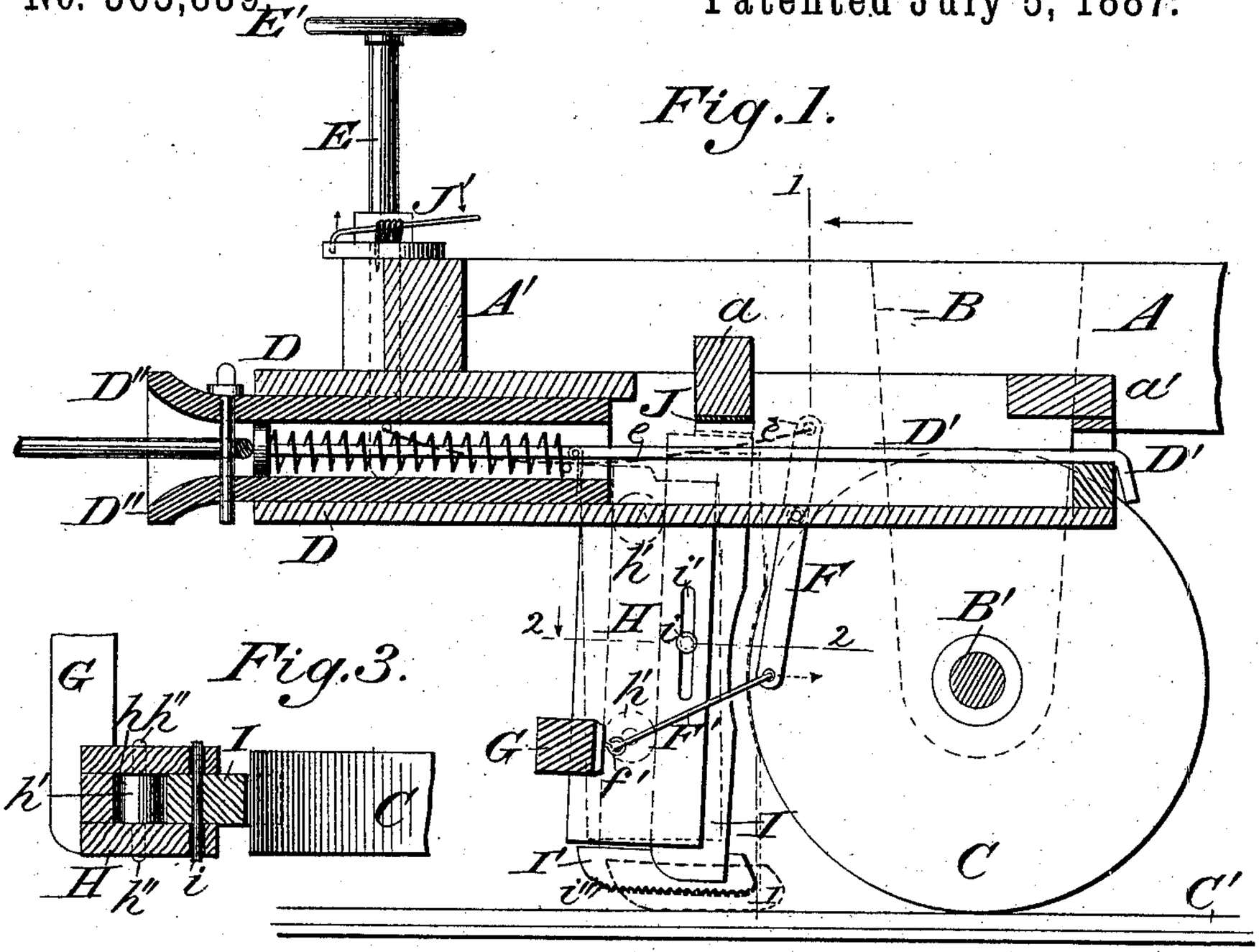
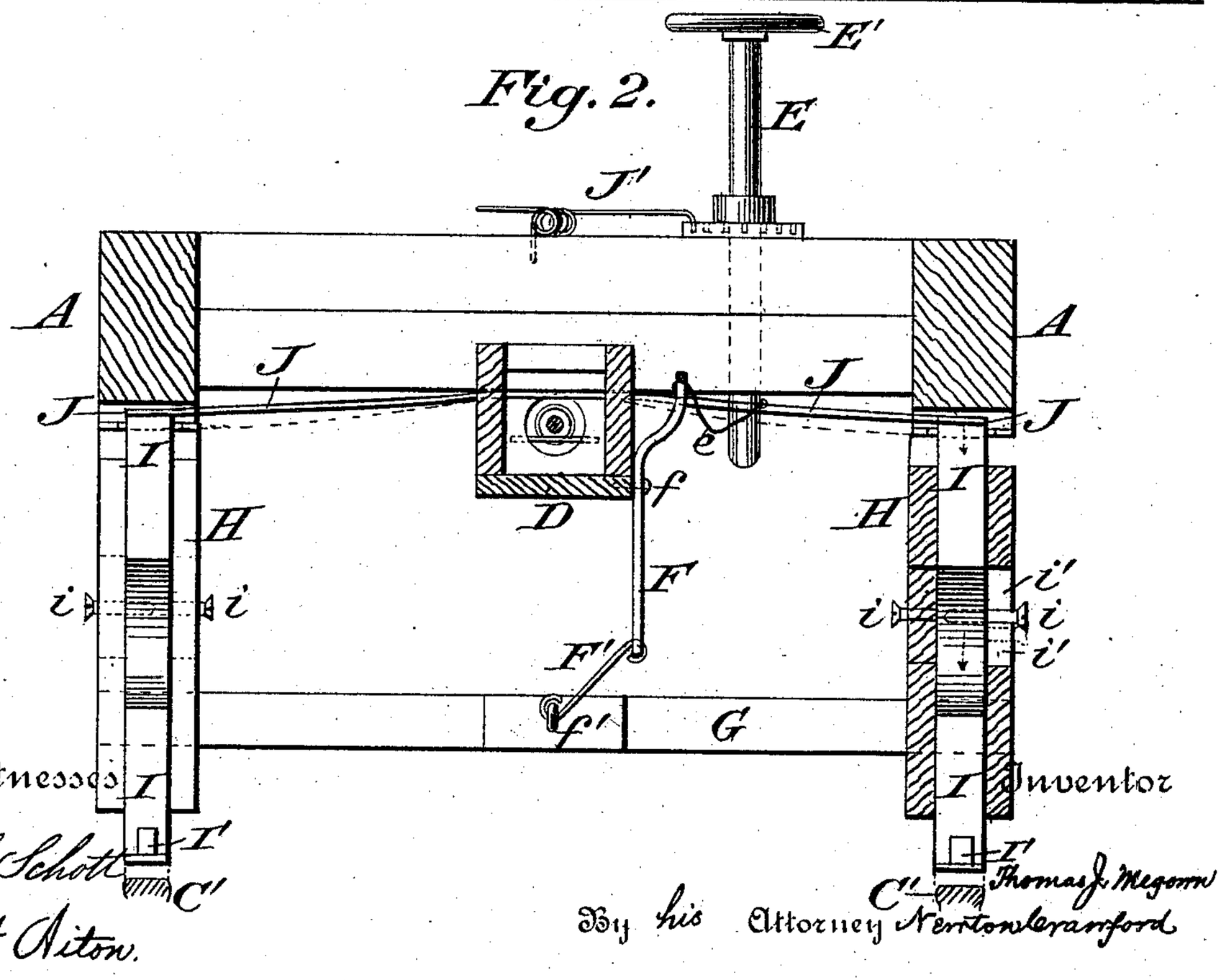


Fig. 3.

Fig. 2.



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UNITED STATES PATENT OFFICE.

THOMAS JEFFERSON MEGOWN, OF BEAVER FALLS, PENNSYLVANIA.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 365,839, dated July 5, 1887.

Application filed January 21, 1887. Serial No. 225,000. (No model.)

To all whom it may concern:

Be it known that I, THOMAS JEFFERSON MEGOWN, a citizen of the United States, residing at Beaver Falls, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Brakes for Railroad and other Cars; 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in railroad-car brakes, and especially upon the brake that is described and shown in a pending application, filed by myself on the 26th day of May, 1886, No. 203,342, and to which it adds the quality of easily and securely braking up or stopping the motion of a car when such car is uncoupled from other cars to go upon a siding or switch-track, and when the automatic brakes are not in position to act, as will be fully hereinafter described and shown; and the invention consists in the combination of special parts, by the construction and arrangement of which the desired result will be fully accomplished when the parts are put in operation, as described.

In the drawings, Figure 1 represents a section of a car-frame in side view, with the brake device partly in section as applied to a wheel of a car. Fig. 2 represents a transverse sectional view on line 1 1 of Fig. 1; and Fig. 3 is a transverse section on line 2 2, Fig. 1.

A represents the longitudinal sills of a car. A′ represents a transverse end sill of the car-frame, and *a* and *a′* are other transverse timbers necessary in the car-frame, and to which the devices for braking up a car are or may be attached.

B represents a common pedestal, in which the axles B′ to wheels C are secured in proper boxes or bearings.

D represents a box or case securely attached to the frame-work of the car and underneath the sills thereof, and in which the draw-head D′ and draw-bar D″ are secured in any secure manner, and to give the proper elasticity thereto in starting a car.

E is a perpendicular shaft at the end of a car, and passes down through the end transverse sill far enough to have a winding-chain, *e*, secured to its lower end.

E′ is a hand-wheel or winch upon the top of shaft E, and by which the shaft is revolved in winding or unwinding the brake-chain *e*, which extends backward from shaft E to the top of a lever-arm, F, that is pivoted at *f* to box D or other fixed part of the frame, and at the lower end this arm is connected to link F′, that extends to and is attached to transverse brake-beam G by the eyebolt *f′*.

H H are brake-shoes, having a groove, *h*, between opposite sides, which groove is open on the side toward the wheels, and each shoe has friction-rollers *h′ h′* between the sides and in the groove, free to revolve on their axles *h″*, that have their bearings in the sides of the shoes, which shoes are attached to the transverse brake-beam G, as seen in Figs. 1 and 3.

I I are the brakes that are forced upon both the wheels C, and the rails C′ are made to freely slide in the grooves *h* of the shoes, with their outer edges bearing against the friction-rollers *h′*, and are guided in their reciprocations by the guide-pins *i i*, that project from opposite sides of the brakes and slide in grooves or slots *i′* in opposite sides of shoes H.

At the bottoms of the sliding brakes I there are removable soles I′, to bear upon the rails C′ in braking up a car or train of cars. These removable soles, for winter use and when the rails are covered with ice or snow, are made of steel, the lower surface, *i″*, being serrated or file-cut and very hard, by which surfaces the snow or ice is cleaned off the rails, and the file-cut surface will, when hard pressed and upon a downgrade, take hold of and abrade the upper face or tread of a rail and stop the motion of a car sooner than by a smooth sole or by other known means.

J is a transverse spring-bar secured at its center to the cross-girt *a*, and each of its ends made fast to the top of a brake, I, so that when the force is off that presses the brakes upon the rail this spring will exert itself to raise the brakes up and out of contact with the rails.

The operation of this hand-brake to check or stop the motion of a car is as follows: By turning the shaft E to wind chain *e* thereon it

causes the upper end of pivoted lever F to vibrate in the direction of the arrow, while its lower end will vibrate in the opposite direction, which, through the link F′, will cause the transverse brake-beam G to force the brake-shoes H, with the brakes I, against the wheels C, and the rotation of the wheels will cause the sliding brakes I down upon the rails C′, when it can be locked in that position by the common ratchet-wheel and pawl or by the device J′.

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

1. The winding-shaft E, chain *e*, arm F, link F′, and brake-beam G, in combination with the brake-shoes H and sliding brakes I, whereby friction is applied to both the wheels of a car and to the rails of a railway, substantially as described.

2. In a hand-brake for a rail car, the combination of the brake-shoes H and sliding brakes I therein, having removable soles I′, serrated or file-cut on their lower surfaces, with the wheels C of the car, substantially as and for the purpose described.

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

THOMAS JEFFERSON MEGOWN.

Witnesses:
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