

(No Model.)

J. H. WILKIN.

CAR COUPLING.

No. 332,316.

Patented Dec. 15, 1885.

Fig. 1.

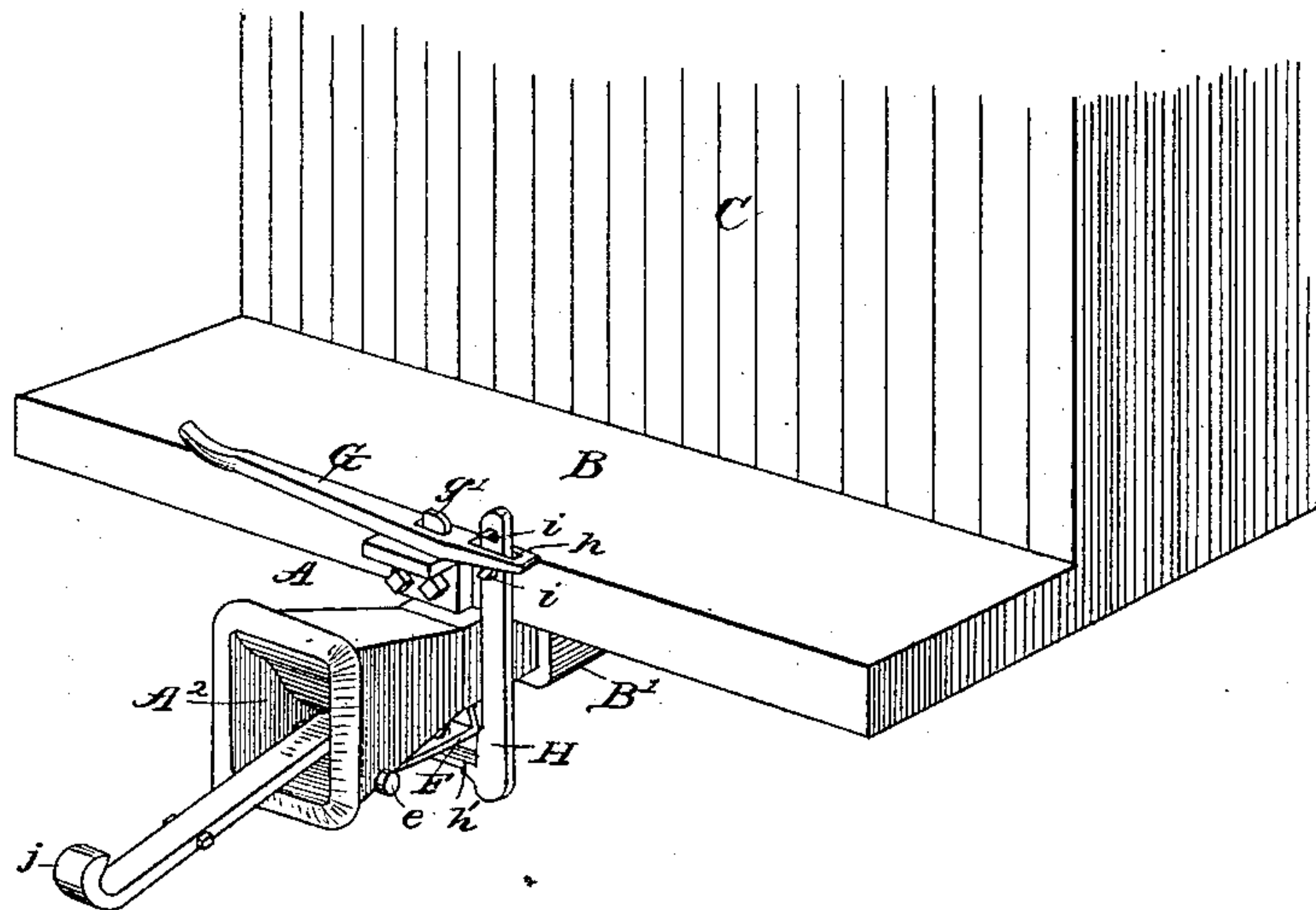


Fig. 2.

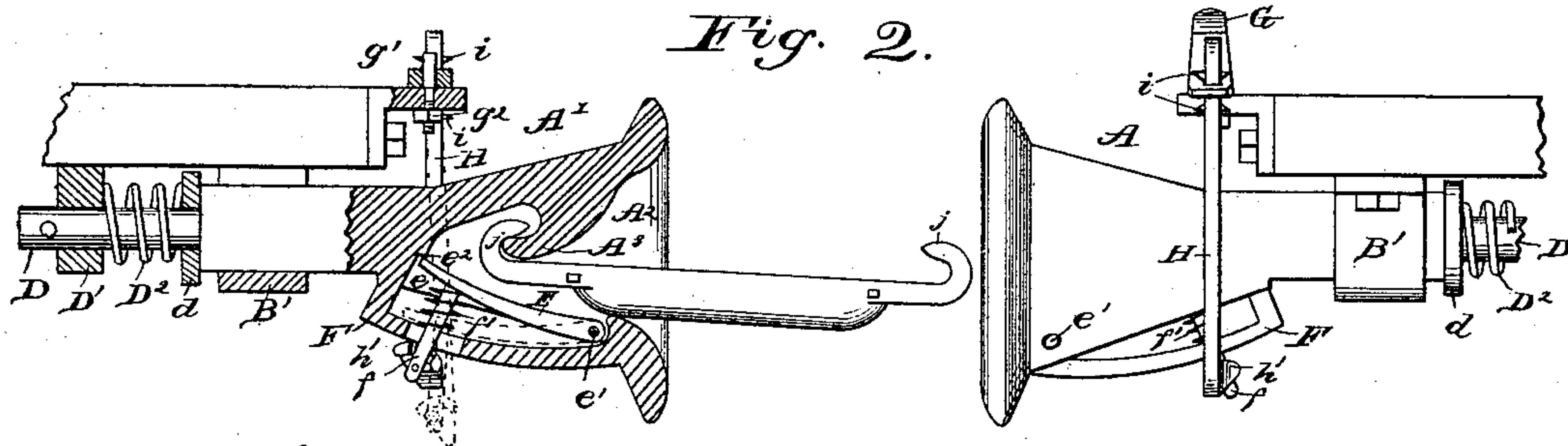


Fig. 4.

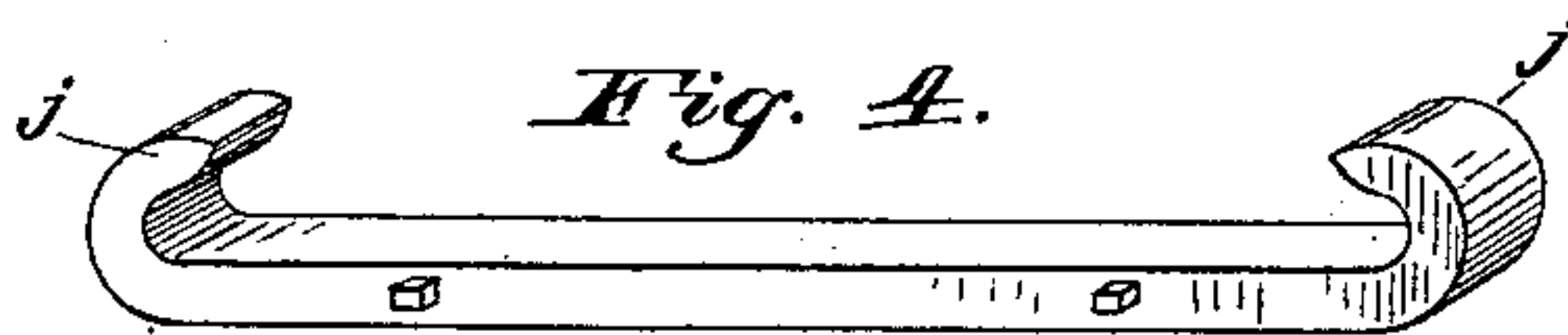


Fig. 5.

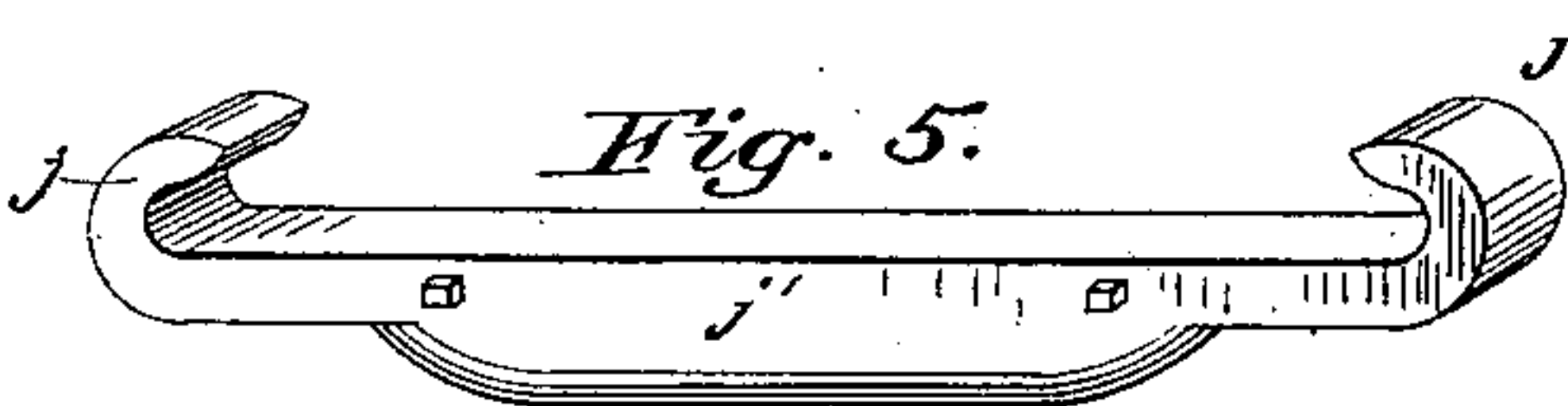


Fig. 6.

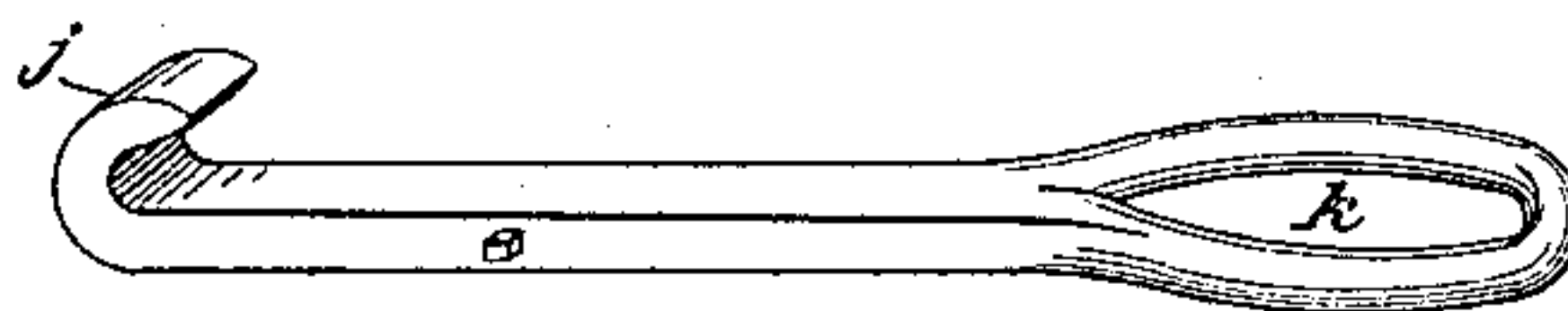
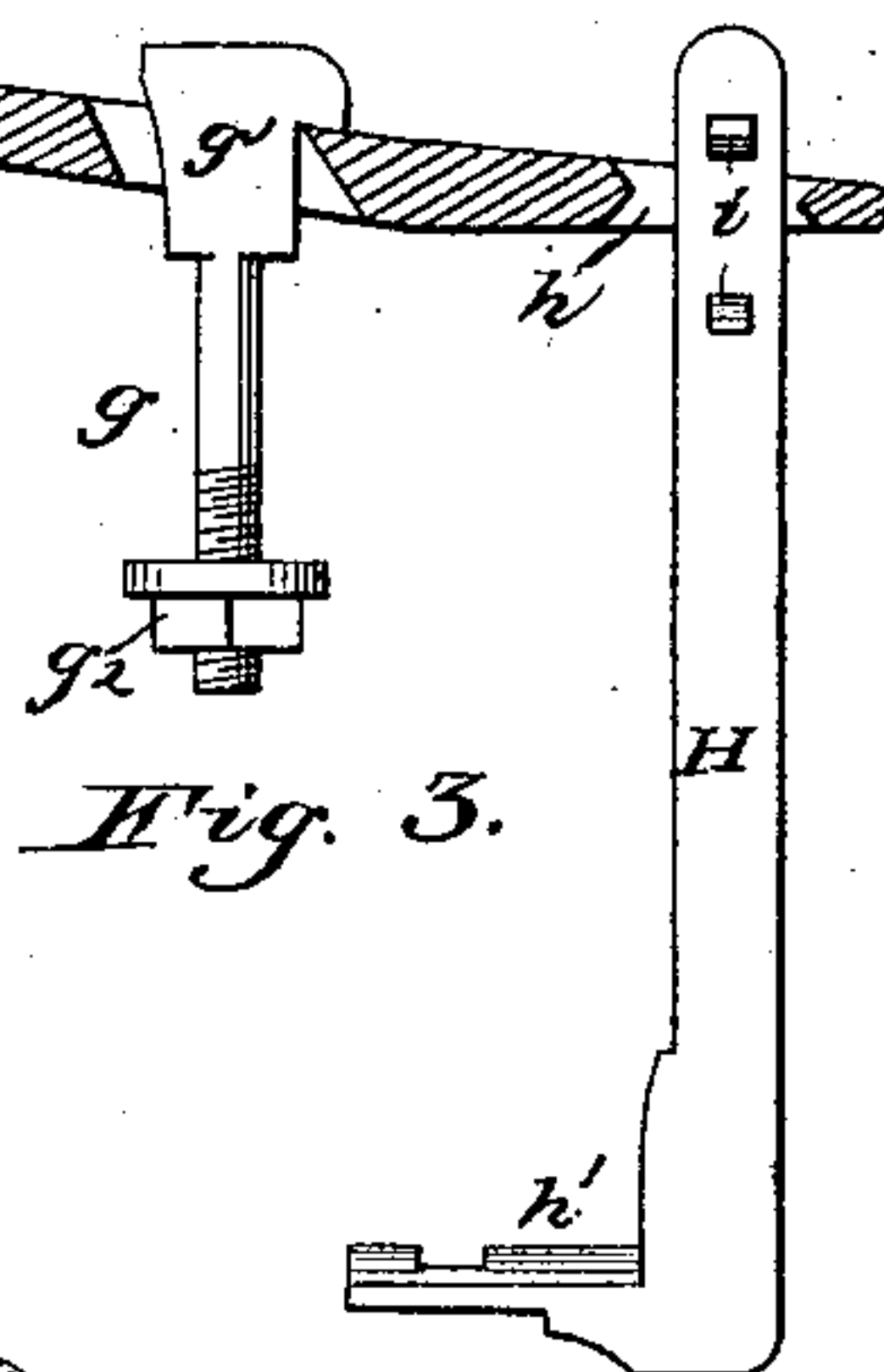


Fig. 3.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHN HUNTER WILKIN, OF LOVEVILLE, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 332,316, dated December 15, 1885.

Application filed October 9, 1885. Serial No. 179,427. (No model.)

To all whom it may concern:

Be it known that I, JOHN HUNTER WILKIN, a citizen of the United States, residing at Loveville, in the county of Centre and State of Pennsylvania, have invented new and useful Improvements in Automatic Car-Couplings, of which the following is a specification, reference being had to the accompanying drawings.

My invention has relation to improvements in car-couplings; and the novelty consists in the peculiar construction, combination, arrangement, and adaptation of the various parts for service, substantially as hereinafter fully set forth, and specifically pointed out in the claims.

My invention has for its object to provide a car-coupling which shall be automatic and thoroughly effective in operation, which shall couple cars of varying heights, which can be coupled with draw-heads of ordinary construction, and which shall combine simplicity, strength, and durability of construction with ease of manipulation to uncouple the cars, and which shall act as a buffer to decrease the shock to the cars between the meeting draw-heads.

In the accompanying drawings, Figure 1 is a perspective view of a car-coupling embodying my invention, a portion of the platform and a body of an ordinary car being shown. Fig. 2 is a side view of two draw-heads in position for coupling, one of said draw-heads being shown in section. Fig. 3 is a detail view of the operating-lever for uncoupling the cars. Figs. 4, 5, and 6 are detail perspective views of the various forms of coupling-links to suit various conditions or requirements.

Like letters of reference indicate corresponding parts in all the figures of the accompanying drawings, referring to which—

A A' designate the draw-heads, B the platform, of an ordinary car, and C the body or box thereof. The draw-heads are arranged beneath and project beyond the platform B, and supported therefrom, to serve as a buffer, by means of a bracket, B', secured or bolted to the platform. The draw-heads are each provided with a chamber, A², having a depending locking-shoulder, A³, at its upper wall or ceiling, and at the rear end said draw-heads are provided with a bar or arm, D, that

fits and slides in an opening in a supporting-bracket, D', depending from and secured to the car-platform. The arm D carries a plate, d, or a collar, and between the plate or collar d and the bracket D' is arranged a coiled spring, D², that serves to keep the draw-head normally projected at a proper distance beyond the platform, and serves to act as a cushion to break the force with which the draw-head, which thus serves as a buffer, slides rearwardly when struck by the draw-head or coupling-link of the meeting car.

My improved draw-head is slotted or recessed in its under wall, as at e, and is provided with a pivoted tongue, E, arranged in an inclined position therein, to guide the coupling-link into engagement with the locking-shoulder A³. The forward end of the tongue E is pivoted to the draw-head, as at e', while the rear is held normally above the front pivoted end, and in engagement with a limiting shoulder or stop, e², by means of pin f, rigidly secured thereto and projecting through the slot or recess e in said draw-head, said pin having a coiled spring, f', affixed around the same and bearing at opposite ends on the pivoted tongue and the inner face of the lower or bottom wall of the draw-head, or on a bracket, F, arranged below the recess e in said draw-head.

G designates an operating-lever for uncoupling or releasing the cars, said lever being pivoted or supported upon a pin or bolt, g, having an enlarged head, g', fitting in a recess therein, and provided at its lower end with threads and a nut, g², by means of which it is secured to the platform B of the car. One end of the operating-lever is provided with a handle or finger-piece, and the opposite end is slotted, as at h, and connects with a connecting-link, H, the lower end of which carries a rigid arm, h', that is pivotally connected to the lower end of the spring-actuated pin f of the pivoted tongue E within the draw-head, which tongue serves to prevent the coupling-link from becoming disengaged with the locking-shoulder of the draw-head. The upper end of the connecting-link H is provided with two studs, i, that bear or fit on opposite sides of the slotted end of the operating-lever G, and thus serve to loosely connect the link H to said

lever, and when said lever is depressed it will depress the pivoted tongue E in the draw-head through the intermediate connections therewith of the link H, which will allow the coupling-link to drop from engagement with the locking-shoulder A³ of the draw-head, as will be very readily understood.

In Fig. 4 of the drawings I have shown a coupling-link with a hook, *j*, at each end to couple two draw-heads of similar construction to that shown in Figs. 1 and 2 when said draw-heads lie in different planes—*i. e.*, one above and below the other—while in Fig. 5 a coupling-link for draw-heads that are on approximately the same plane is shown, and which is provided on its lower surface with a rib or extension, *j'*, and the hooks *j* at each end; and in Fig. 6 I show a coupling-link to connect a draw-head similar to the class shown in Figs. 1 and 2 with a draw-head of the ordinary construction employing a drop coupling-pin, one end of said link having the hook *j*, while the opposite end thereof is slotted, as at *k*, to receive a coupling-pin.

Various slight changes in the form and proportions of the various parts may be made without departing from the principle or sacrificing the advantages of my invention.

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

1. In a car-coupling, the combination of the draw-head having a locking-shoulder, a coupling-link, a pivoted tongue, and a pivoted operating-lever connected to said tongue, substantially as described.

2. In a car-coupling, the combination of the draw-head having the locking-shoulder, a coupling-link, a tongue arranged in said draw-head and having its front end pivoted thereto and a spring-actuated pin at its rear end, and a pivoted lever connected to the pin of the tongue, substantially as described.

3. In a car-coupling, the combination of a recessed draw-head having a locking-shoulder, a hooked coupling-link to engage the shoulder, a tongue pivoted in said draw-head at its front end, having a spring-actuated pin to keep its rear end elevated and in engagement with a limiting-shoulder, a lever, G, pivoted on a bolt, and a connecting-link pivotally connected to the lever G and the pin of the pivoted tongue, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN HUNTER WILKIN.

Witnesses:

ROBT. STEWART,
THOS. M. WAY.