

No. 619,991.

Patented Feb. 21, 1899.

A. W. PRESCOTT.
CAR DOOR FASTENING.

(Application filed May 13, 1898.)

(No Model.)

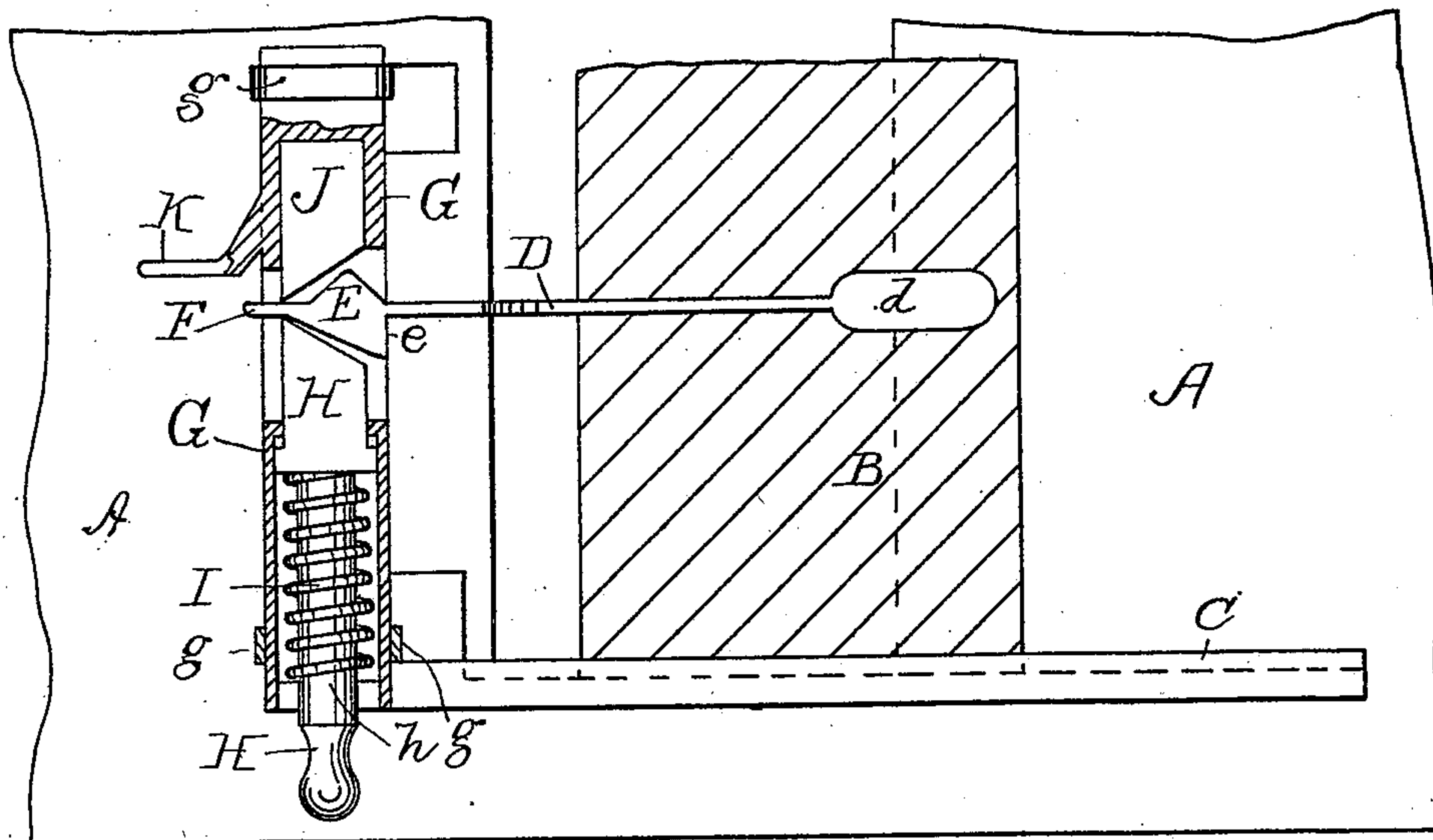


Fig. 1.

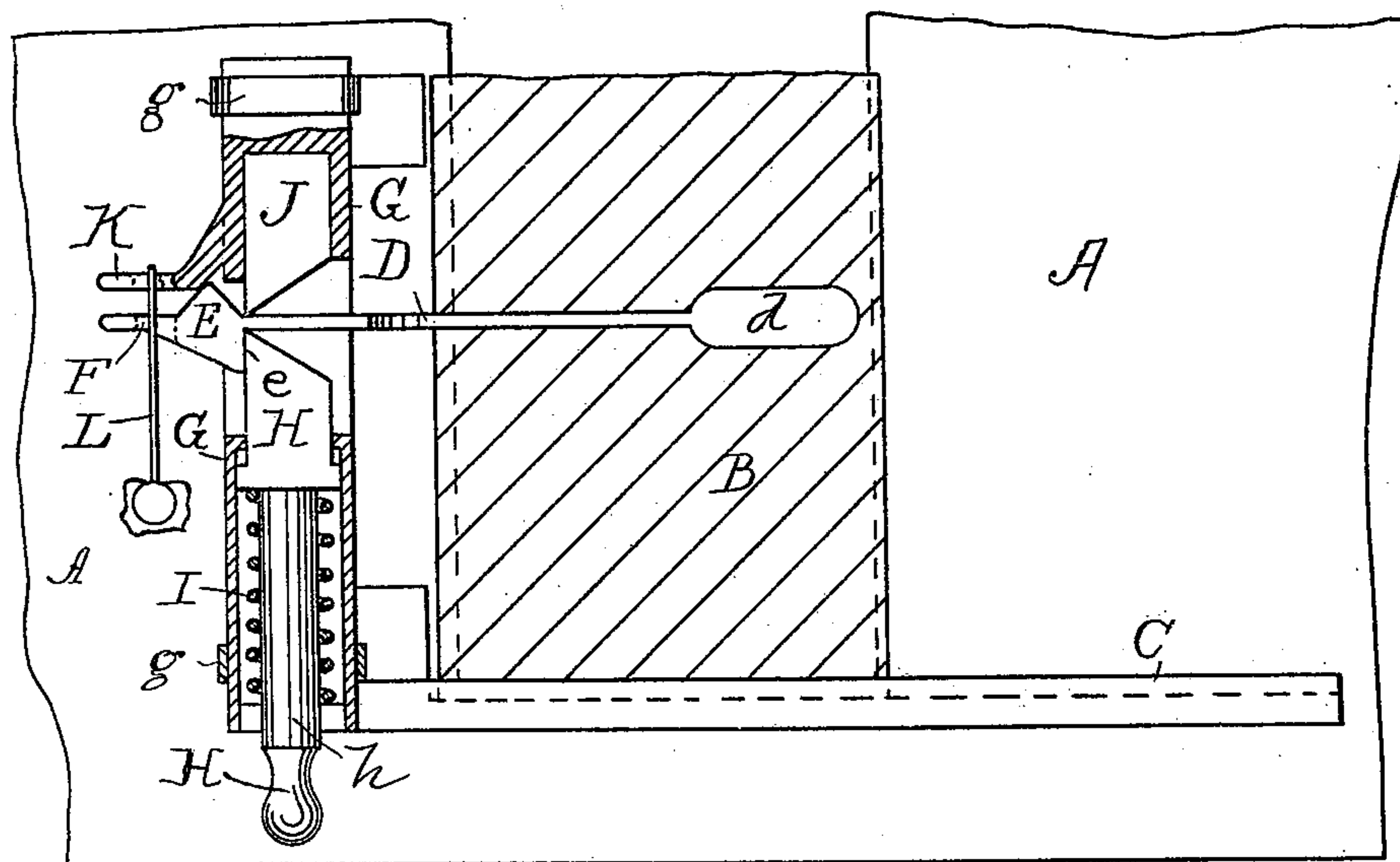


Fig 2.

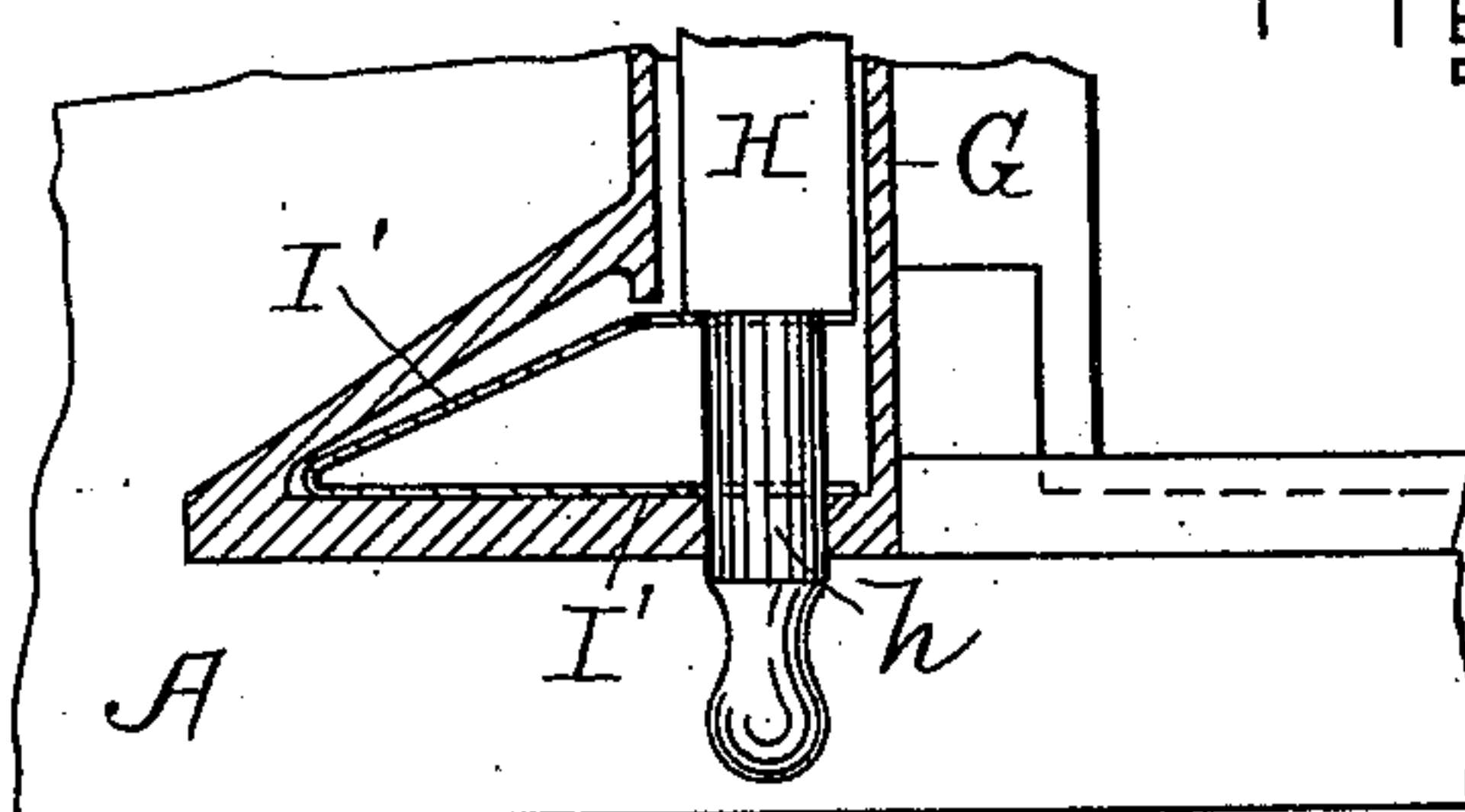


Fig. 3.

WITNESSES.
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UNITED STATES PATENT OFFICE.

AMOS W. PRESCOTT, OF HAVERHILL, MASSACHUSETTS.

CAR-DOOR FASTENING.

SPECIFICATION forming part of Letters Patent No. 619,991, dated February 21, 1899.

Application filed May 13, 1898. Serial No. 680,565. (No model.)

To all whom it may concern:

Be it known that I, AMOS W. PRESCOTT, a citizen of the United States, residing at Haverhill, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Freight-Car-Door Fastenings, of which the following is a specification.

The object of this invention is to provide for freight-car doors a convenient and effective lock which shall absolutely prevent the removal of freight from the car without destroying the seal-record and leading to detection.

According to my improvement the sliding car-door has a projecting spring-latch formed with a nearly diamond-shaped head adapted to be forced forward between the inclined faces of a rigid block and a yielding or spring-pressed bolt, the movement of which is vertical or in a plane at right angles to the sliding movement of the door. The latch is elastic only laterally—that is, in a vertical plane—and when it is forced forward in closing the car-door it yields downwardly to pass its angular head beneath the inclined surface of the rigid block, the spring-pressed bolt receding at the same time to permit such head to pass and then advancing under the pressure of its own spring and presenting a vertical face behind a vertical shoulder of the head to prevent withdrawal of the latch. The rigid block or its casing is provided with an eye, and the tip of the spring-latch has a corresponding eye adjacent thereto when the car-door is closed to receive the hasp of a padlock or the connecting-wires of the ordinary forms of a car-seal. The spring-pressed bolt has a knob at its end by which it may be retracted when the door is to be opened; but it cannot open without first springing the latch far enough to one side to enable its angular head to pass the rigid block and then moving the latch endwise with the sidewise movement of the door. This cannot be done until the seal is broken. This sidewise and endwise movement of the latch is incidental to the construction peculiar to my invention. The casing in which the rigid block and yielding bolt are located is secured from within the car permanently to the car-body in a position parallel to the edge of the sliding door. Said block may be held within the casing by

transverse pins, which can be removed, so that a new block may be introduced if the first becomes badly worn.

In the drawings, Figure 1 is an elevation of part of a car and sliding door provided with my improved fastening, the front of the casing being removed, the door nearly closed, and the latch ready to enter the lock. Fig. 2 is a similar view showing the locked position of the parts. Fig. 3 is a detail of a modified arrangement of spring for the bolt.

A represents the car-body, B the sliding door, and C the grooved way in which the door moves.

D is a spring-steel latch secured at its end to the car-door and projecting horizontally beyond the edge of the door, being free to spring laterally and yield in a vertical plane within the limits of its own elasticity in locking and unlocking the door.

Near its free end the latch has an enlarged angular head E approximating a diamond shape, one of its faces being about vertical, as shown at *e*, to engage with the fastening-bolt, while the other faces are inclined, as will be explained. The tip of the latch forward of the head forms a loop or eye F to receive the hasp of a padlock or a wire seal, as in Fig. 2.

G represents a casing, preferably of malleable iron, secured to the outer wall of the car in a vertical position near the door B, the fastening-bolts having nuts or heads within the door. Within this casing the vertical bolt H is mounted, its stem *h* being encircled by a coiled spring I, which presses the bolt upwardly into contact with the spring-latch D and behind the vertical face of its angular head. The upper end of said bolt is beveled or made oblique to be acted on by the tip F and head E of the latch D when it advances in closing the door. In the modification, Fig. 3, a V-shaped spring I' is substituted in place of the coiled spring I.

A rigid block J, having a beveled or oblique lower end, is secured within or formed in one with the upper part of the casing G, its inclined lower end serving to deflect the latch D downwardly when the oblique upper front face of the latch-head E impinges thereon in closing the door B. The other oblique upper face of the head impinges on the tip of the

block J in opening the door and deflects the latch again downwardly. In Figs. 1 and 2 the casing G is shown provided near its top and bottom with straps or flat staples g, the 5 extremities of which are properly secured within the car.

K represents a projecting loop or eye formed on or rigidly secured to the side of the casing G opposite to the door B and just above the 10 eye F at the tip of the latch. The hasp or seal-wire L passes through and connects these two eyes, as will be understood by those familiar with railway practice.

I claim as my invention—

15 In a car-door lock, the laterally-elastic latch projecting from the car-door and formed with

an enlarged, angular head having oblique faces, a vertical shoulder and a terminal eye, in combination with a rigid block and yielding bolt having inclined ends between which 20 the latch-head is thrust in closing the door, and with a casing for said block and bolt and a rigid eye for the seal-wire which engages the latch, substantially as set forth.

In testimony whereof I have hereunto set 25 my hand in presence of two subscribing witnesses.

AMOS W. PRESCOTT.

Witnesses:

A. H. SPENCER,
PHILIP HIGHBY.