

C. L. TROON.
CAR DOOR FASTENER.
APPLICATION FILED JULY 14, 1908.

916,804.

Patented Mar. 30, 1909.

Fig. 1.

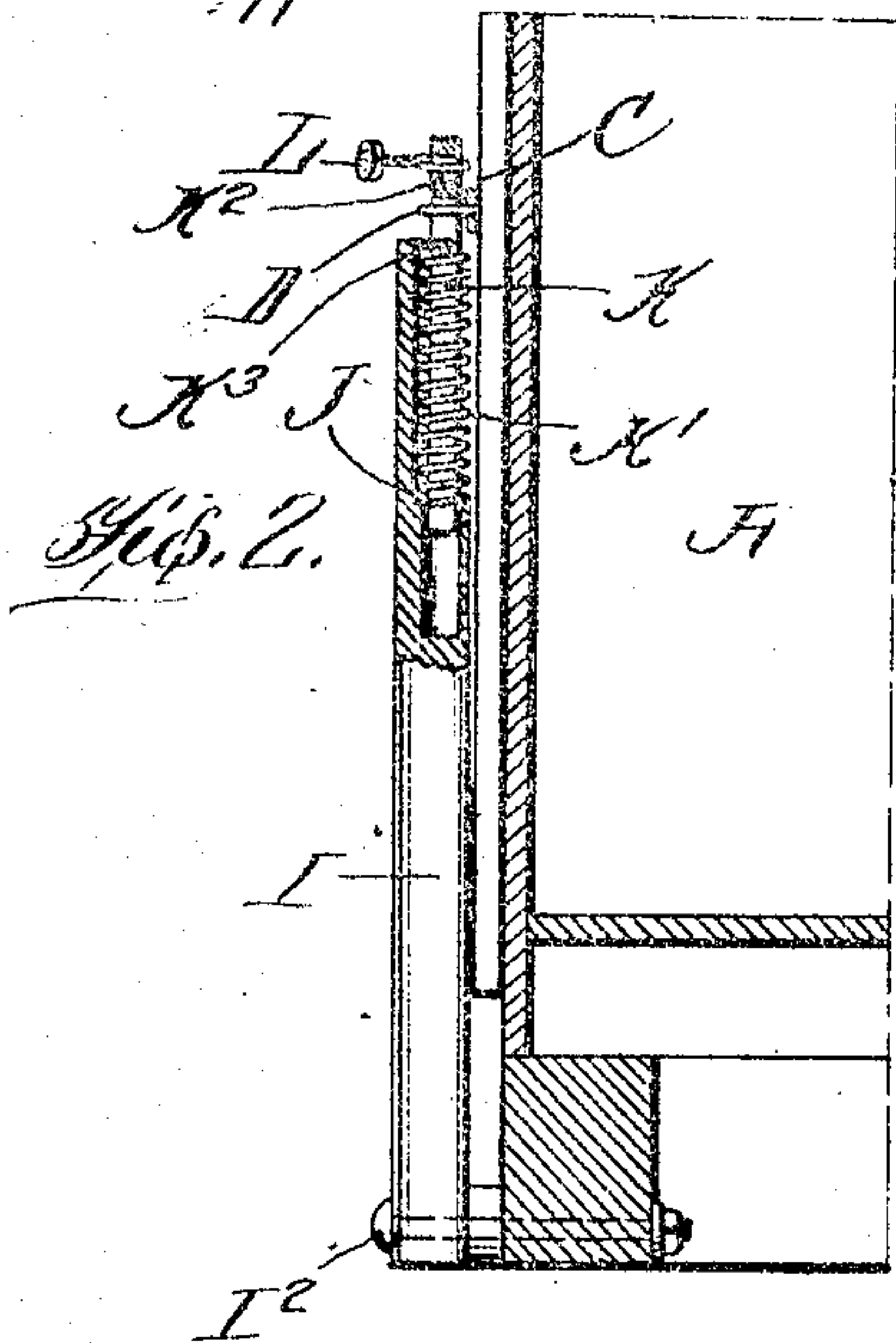
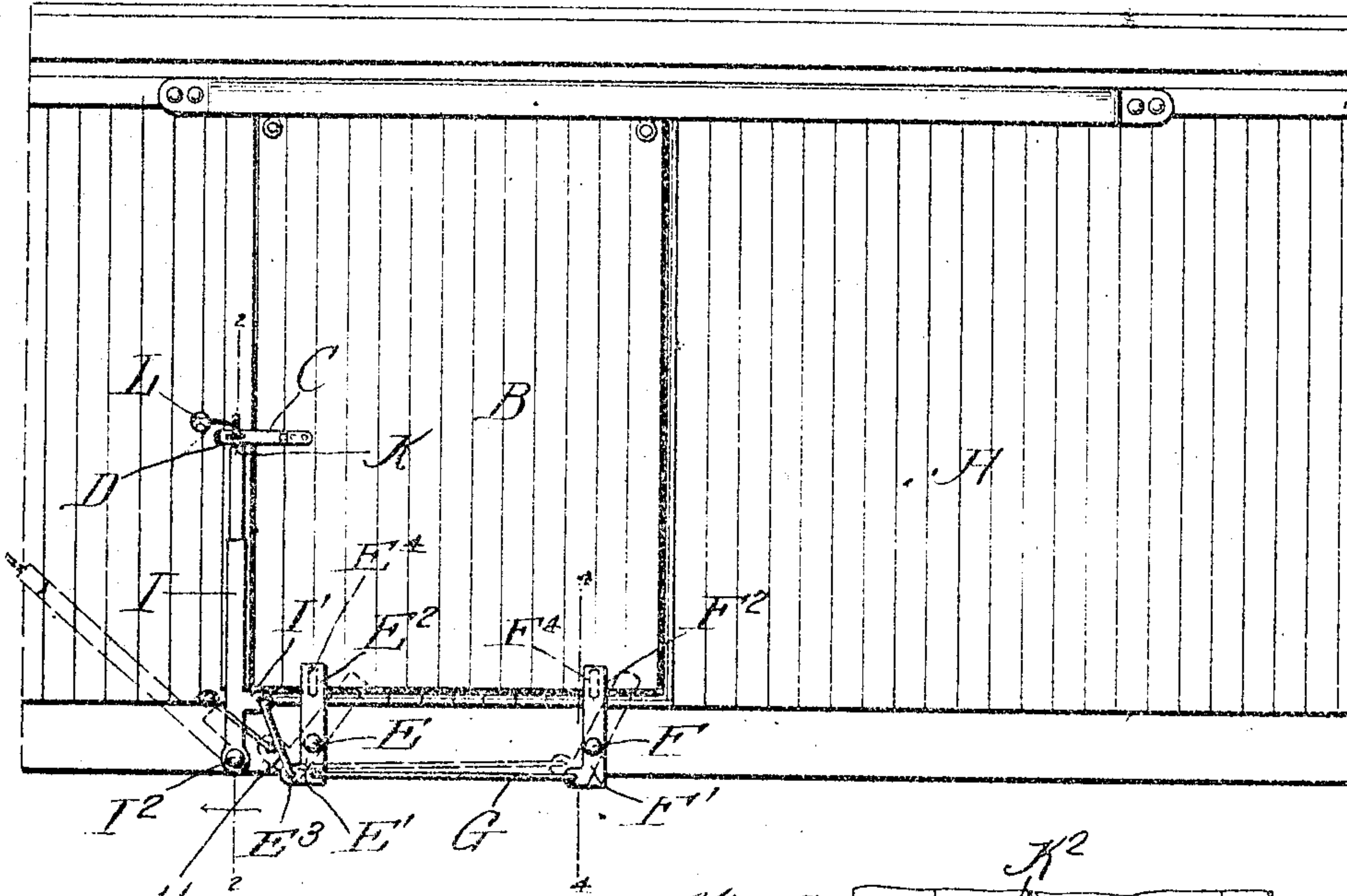
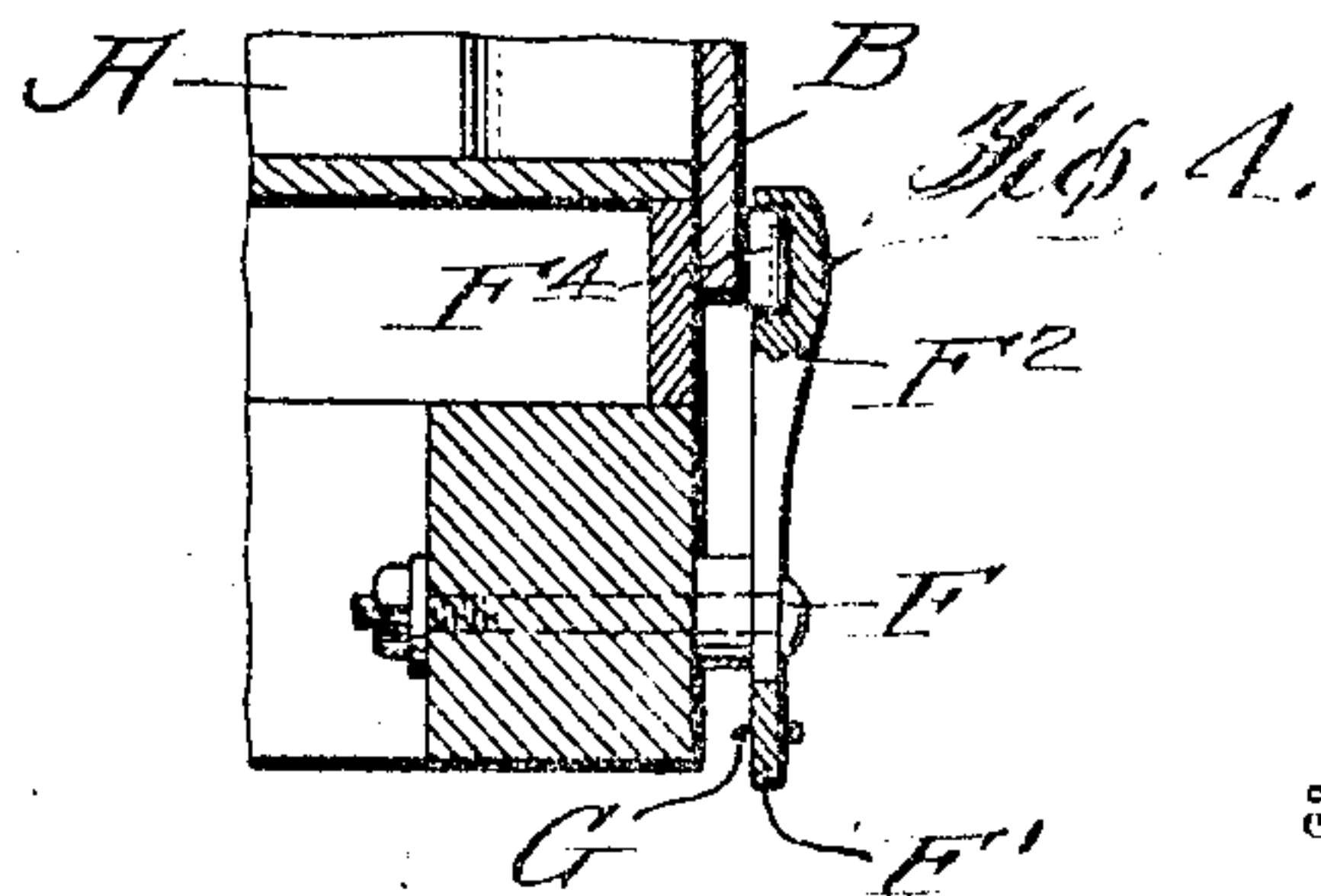
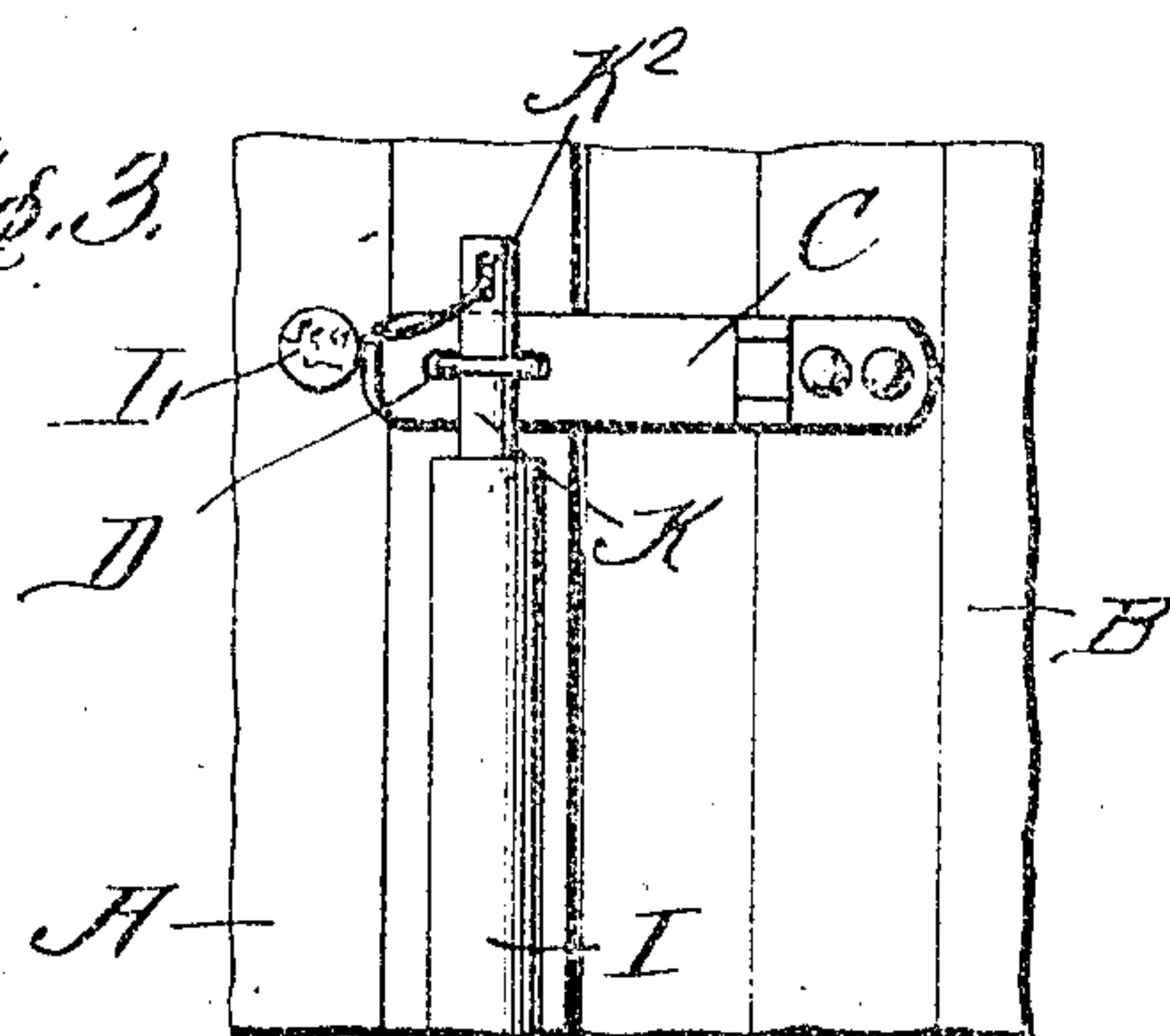


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES L. TROON, OF POMEROY, IOWA.

CAR-DOOR FASTENER.

No. 916,804.

Specification of Letters Patent.

Patented March 30, 1909.

Application filed July 14, 1908. Serial No. 443,488.

To all whom it may concern:

Be it known that I, CHARLES LORY TROON, a citizen of the United States, residing at Pomerooy, in the county of Calhoun and State of Iowa, have invented a new and useful Improvement in Car-Door Fasteners, of which the following is a specification.

This invention relates to car door fasteners, especially adapted to be used on freight cars, the object being to provide a fastener which will securely lock the door.

Another object of my invention is to pivotally mount on the sill of the door a pair of arms adapted to extend up above the lower edge of the door, so as to hold the door in a proper position, whereby the door can be readily opened by swinging the arms out of engagement with the door.

Another object of my invention is to connect an operating lever to the arms provided with a spring actuated bolt adapted to extend through the ordinary staple and secure the hasp in place.

With these objects in view, the invention consists in the novel features of construction, combination and arrangement of parts hereinafter fully described and pointed out in the claims.

In the drawings forming a part of this specification:—Figure 1 is a side elevation of a portion of a freight car showing the application of my improved fastener. Fig. 2 is a section taken on line 2—2 of Fig. 1. Fig. 3 is a detail side elevation, and Fig. 4 is a section taken on line 4—4 of Fig. 1.

In the drawings A indicates an ordinary car provided with the usual sliding door B carrying a hasp C adapted to fit over the staple D for locking the door. Secured in the sill of the car under the door-opening are bolts E and F on which are pivoted mounted arms E', F' which are provided with enlarged portions E² F² having recesses formed therein in which are mounted anti-friction rollers E⁴ F⁴ adapted to extend up along side of the door B when in a vertical position so as to prevent the lower portion of the door from being forced outwardly by the pressure of the material within the car and to allow the car door to slide easily. The arms E' and F' are provided with openings in which the ends of the connecting link G are secured for connecting the arms together so that they will be operated in unison, the arm E being provided with an arm E³ to which is connected a link H carried by an arm I' of a lever I which is

pivotally mounted on a bolt I² secured in the sill and is provided with a reduced upper end forming a shoulder J in which is formed a vertical bore having a bolt K slidably mounted therein which is surrounded by a coil-spring K', one end of which is secured to the bolt, and the other rests on the shoulder, so as to normally hold the bolt in an extended position. The bolt is provided with a slot K² at its upper end adapted to receive a seal L when forced through the staple for securely locking the door. The upper portion of the bolt extends through a guide-eye K³ formed on the upper end of the lever, so as to limit the upward movement of the same, which prevents it from being forced out of the bore of the lever by the spring.

The operation is as follows:—Suppose the fastener to be in position as shown in Fig. 1 and it is desired to open the door, the seal is broken and the bolt drawn downwardly out of the staple so as to allow the hasp to be removed and by forcing the lever to one side, as shown in dotted lines in Fig. 1, the arms will be swung out of engagement with the door so that the door can be readily opened.

From the foregoing description it will be seen that I have provided a very novel car-door fastener, the parts of which are so arranged and connected that they can be easily and quickly operated. It will also be seen that by connecting the pivoted arms to the operating lever they will be swung out of engagement with the door when the lever is operated, so as to allow the door to be moved easily, thereby overcoming the difficulties now existing with devices of this character, as it is almost impossible to open the door when the pressure of the material within the car is against the door as the door jams against the guide member.

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

1. The combination with a car provided with a sliding door, of arms pivotally mounted under said door provided with rollers for engaging the door and a lever for operating said arm carrying a locking bolt for locking said door.

2. The combination with a car provided with a sliding door, of arms pivotally mounted under the door opening of said car, a link connecting said arms, and a lever connected to one of said arms provided with a spring actuated bolt for locking said door.

3. The combination with a car provided with a staple, of a door provided with a hasp adapted to fit over said staple, arms pivotally mounted under said door adapted to
5 extend up above the lower edge of the same, a link connecting said arms, a lever pivoted to one side of said door, a link connecting said lever to one of said arms, and a spring actuated bolt carried by said lever adapted
10 to extend through said staple, for locking said door.

4. The combination with a car provided with a sliding door carrying a hasp adapted to fit over a staple secured to the car, of

arms pivotally mounted below the door 15
opening of the car extending above said door, a link connecting said arms, a lever pivoted to said car provided with an arm, a link connecting one of said arms to the arm of the lever, a bore formed in the free end of 20
said lever, and a spring actuated bolt mounted in said bore provided with a slot adapted to extend through said staple.

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Witnesses:

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