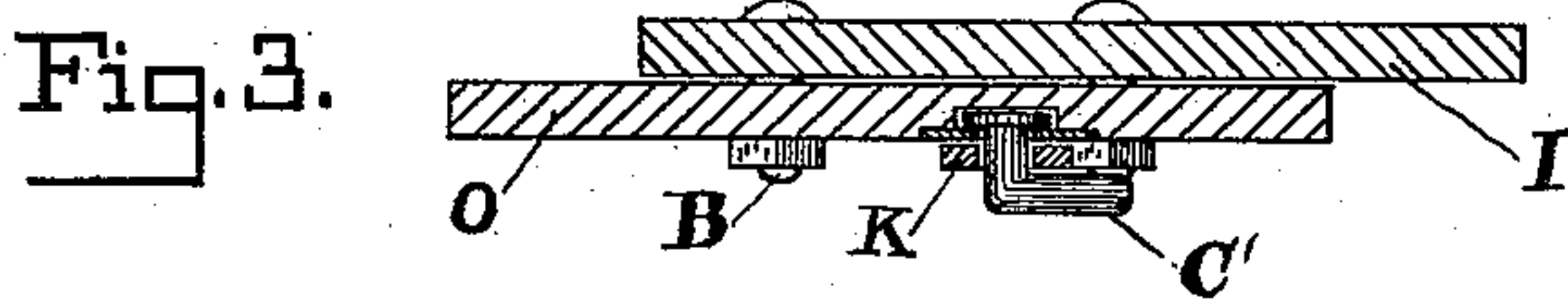
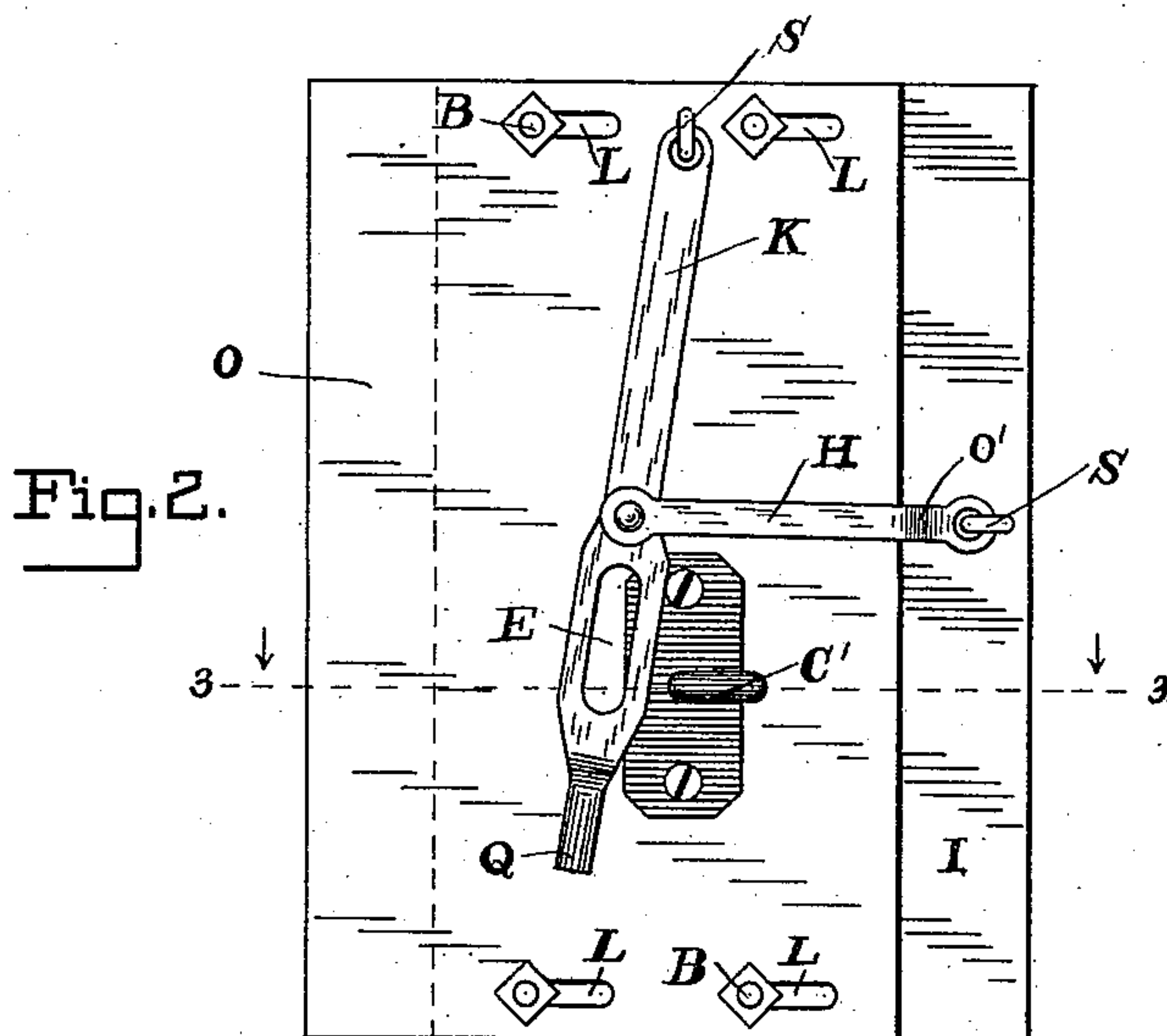
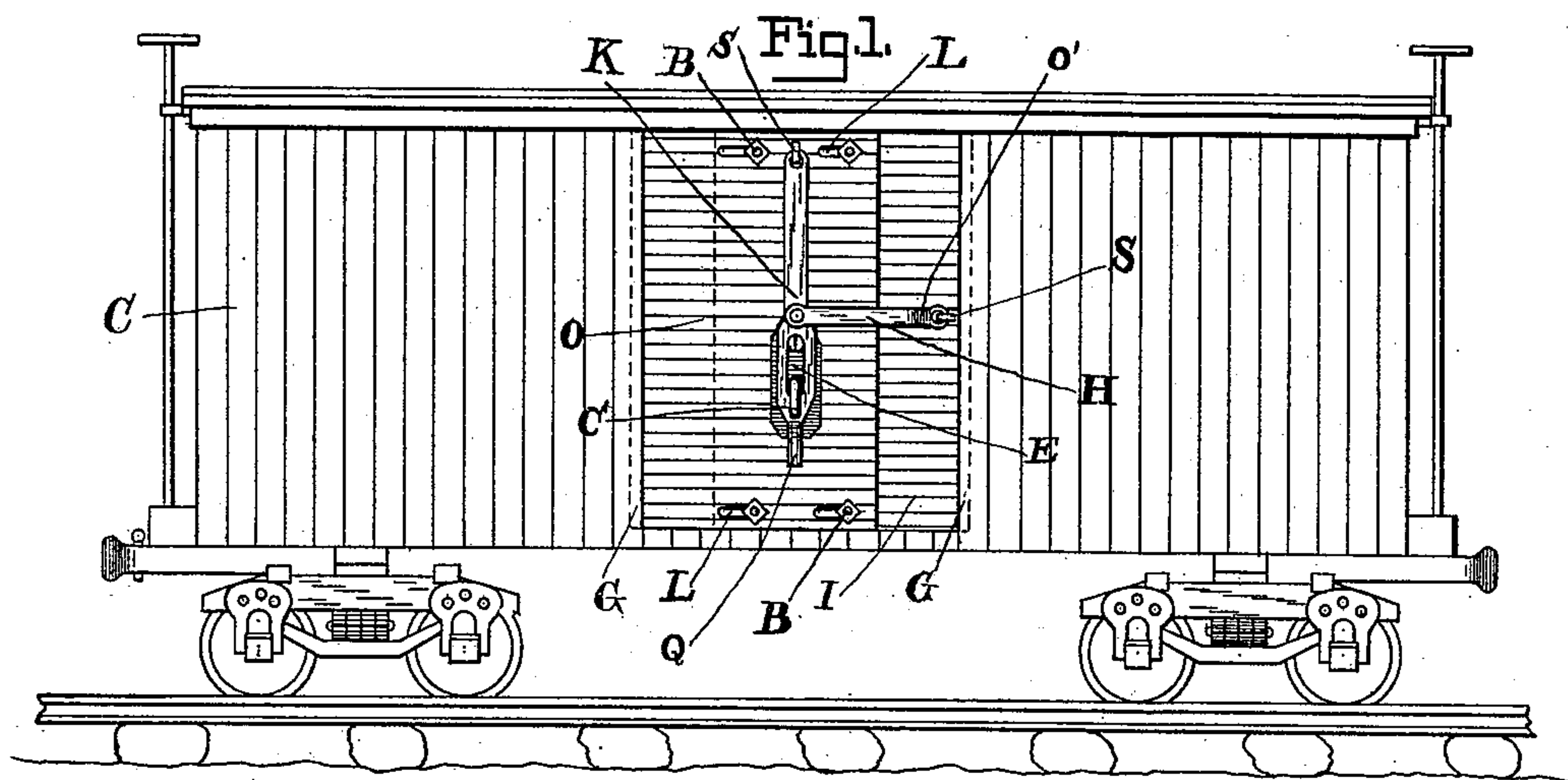


(No Model.)

J. F. McGHEE.
GRAIN CAR DOOR.

No. 464,078.

Patented Dec. 1, 1891.



Witnesses

A. O. Babendreier.

N. J. Gollamer.

Inventor

John F. McGhee.

By his Attorneys,

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UNITED STATES PATENT OFFICE.

JOHN F. MCGHEE, OF GUTHRIE CENTRE, IOWA.

GRAIN-CAR DOOR.

SPECIFICATION forming part of Letters Patent No. 464,078, dated December 1, 1891.

Application filed April 15, 1891. Serial No. 389,067. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. MCGHEE, a citizen of the United States, residing at Guthrie Centre, in the county of Guthrie and State of Iowa, have invented a new and useful Grain-Car Door, of which the following is a specification.

This invention relates to railway-cars, and more especially to the doors used in cars which carry grain.

The object of the present invention is to provide a cheap and simple construction of door adapted for ready insertion and fastening in the usual grooves of the door-opening and for ready removal therefrom, and this object is accomplished by the device hereinafter more fully described and claimed, and as illustrated on the sheet of drawings, wherein—

Figure 1 is a side elevation of a grain-car with my improved door in use therein. Fig. 2 is an enlarged elevation of the door itself removed from the car. Fig. 3 is a horizontal section on the line 3 3 of Fig. 2.

Referring to the said drawings, the letter C designates an ordinary grain-car, which may be of any approved construction. Such cars are usually provided with vertical grooves G in the sides of their door-openings, as seen in dotted lines in Fig. 1, and my invention is an improved door adapted to be removably seated in said grooves. The door comprises an inner member I and an outer lapping member O, the latter provided with preferably four longitudinal slots L and the former with bolts B, which project through said slots and allow a slight longitudinal adjustment of the parts upon each other. The complete door is of such length that when distended, as seen in Fig. 1, it fills the width of the door-opening; but when it is contracted, as seen in Fig. 2, it is shorter than the width of said opening, and hence the weight of the grain will cause the door to fall out of place.

The letter H designates a link connected at one end to a staple S in the outer face of the inner member I, bent slightly outward at O', and pivoted at its other end to a locking-lever K between the ends of the latter. The upper end of this lever is connected to a staple S in the outer face of the outer member O and near its upper edge, and its lower end is formed into a handle Q, by means of which it may be

operated. Just below the pivot above mentioned the lever is provided with an elongated slot E. An ordinary staple may project from the outer face of the outer member O at a proper point to engage the slot E when the door is locked in place; but I prefer to provide the L-shaped catch C' for this purpose. This catch is swiveled in the outer member, as seen in Fig. 3, and its outer end is bent laterally, as shown.

In operation the door is shortened by moving the lever K outwardly, after which the door is placed in position, with its ends opposite the grooves in the door-opening. The lever K is then moved inwardly, whereby the two members will be distended and their outer ends caused to enter said grooves and be held therein. At this time the slot E in the lever is just over the catch C'. It is pressed down, so that said catch passes through the slot, after which the catch is turned to the position shown in Fig. 1, and the door is locked closed. To unlock the door, the operation is reversed. Obviously if a staple were used instead of the catch when the lever was pressed down over the same to lock the door a padlock could be passed through the staple to hold the lever locked. However, the weight of the bent tip of the catch will hold the latter in proper position to keep the lever closed, and, if desired, a railroad-seal may be placed upon such tip to prevent meddling therewith. This device is cheaply constructed and easily operated, and its use will be obvious to all skilled in the art.

What is claimed as the salient features are—

1. The herein-described door for grain-cars, the same comprising an inner member provided with a number of outwardly-projecting bolts, an outer member lapping over the inner and having longitudinal slots engaging the shanks of said bolts, a lever linked at its upper end to the outer member, a link connected at one end to the inner member and at the other end to said lever, and a catch carried by one member and engaging the lever when the two members are distended, as and for the purpose set forth.

2. The herein-described door for grain-cars, the same comprising an inner member provided with a number of outwardly-projecting bolts, an outer member lapping over the in-

ner and having longitudinal slots engaging the shanks of said bolts, a lever linked at its upper end to the outer member, a link connected at one end to the inner member and at 5 the other end to said lever, and a catch swiveled in the outer member and having a laterally-bent tip passing through a slot in the lever when the two members are distended, substantially as and for the purpose hereinbefore 10 set forth.

3. The herein-described door for cars, the same comprising an inner and outer member

lapping each other and connected by a bolt-and-slot connection, and a lever connected to the outer member to adjust one member upon 15 the other, and locking devices for the lever, substantially as set forth.

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

JOHN F. MCGHEE.

Witnesses:

F. A. ASHTON,
W. J. HAMMOND.