

No. 848,451.

PATENTED MAR. 26, 1907.

J. DIERICKX.
SLIDING DOOR FASTENER.
APPLICATION FILED JAN. 24, 1906.

Fig. 1.

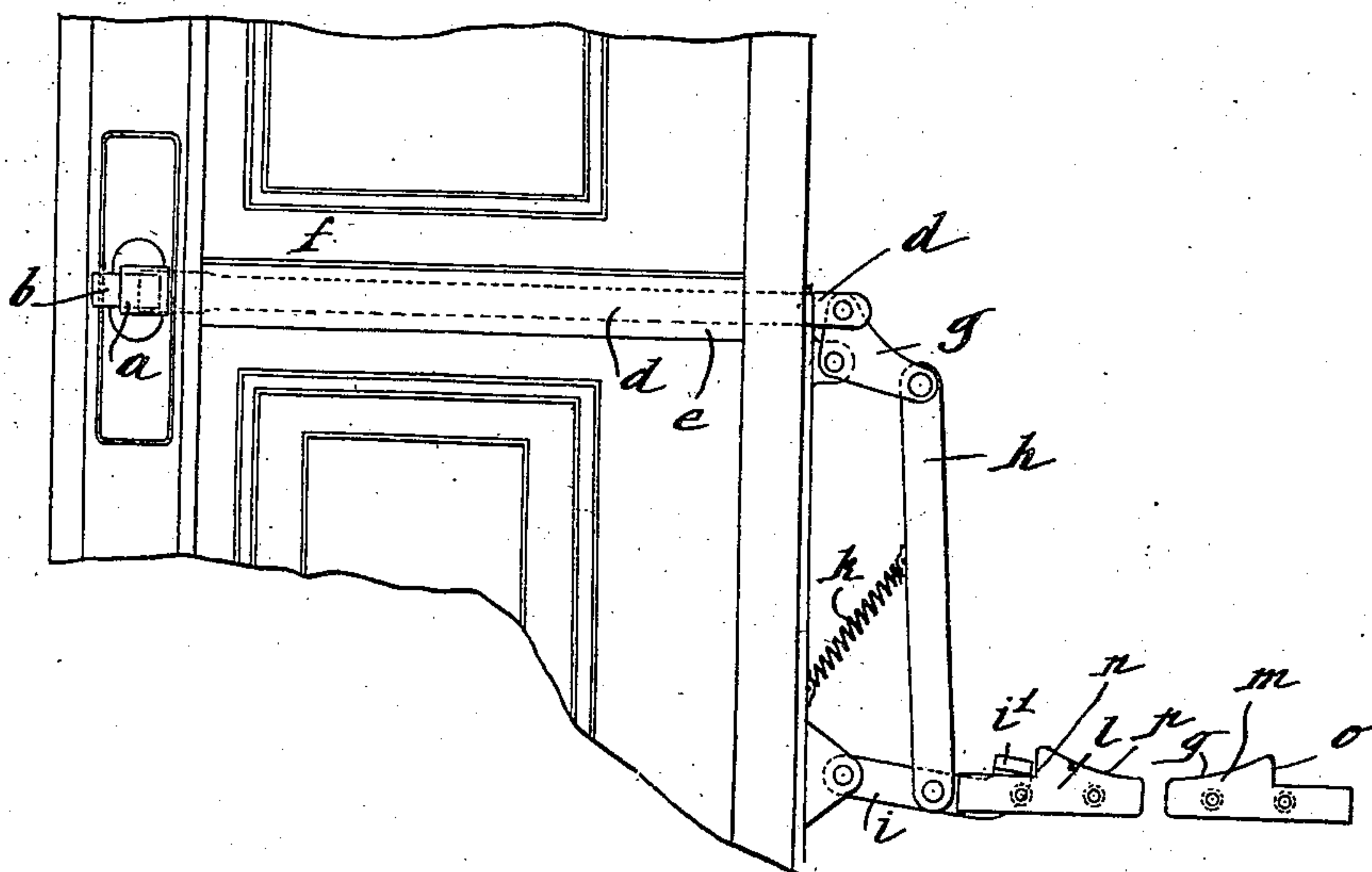
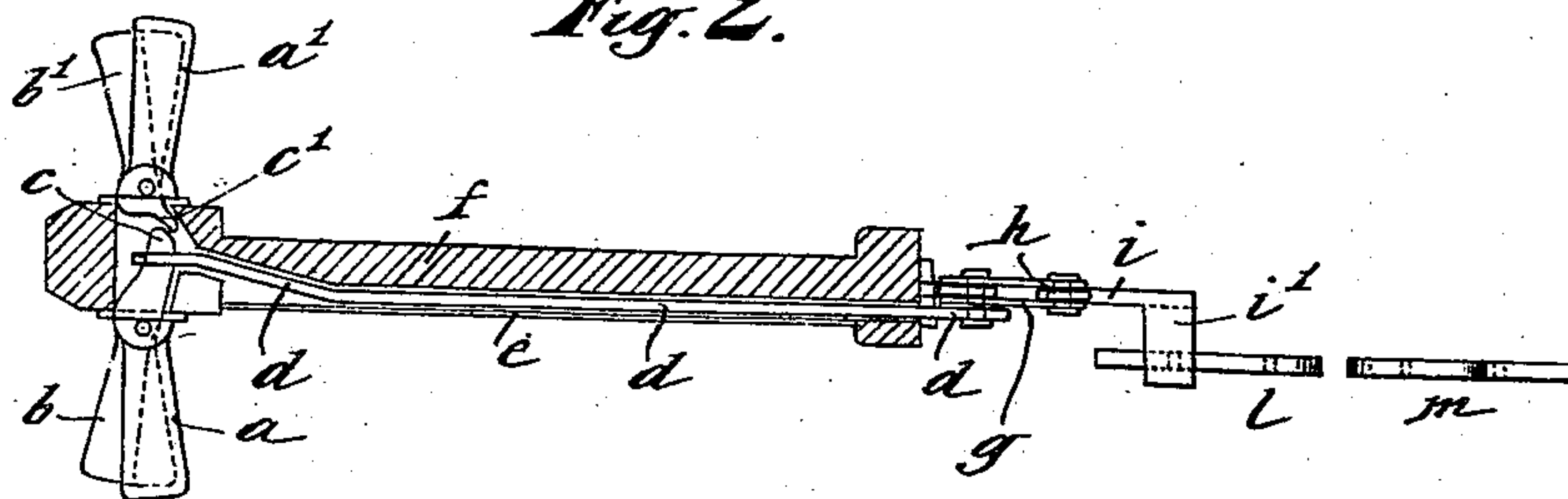


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH DIERICKX, OF UCCLE, BELGIUM.

SLIDING-DOOR FASTENER.

No. 848,451.

Specification of Letters Patent.

Patented March 26, 1907.

Application filed January 24, 1906. Serial No. 297,694.

To all whom it may concern:

Be it known that I, JOSEPH DIERICKX, a subject of the King of Belgium, and residing at Uccle, near Brussels, 42 Rue des Chalets, Belgium, have invented certain new and useful Improvements in Sliding-Door Fasteners, of which the following is a specification.

The present invention relates to an arrangement designed to hold, bolt, or fasten rolling doors, &c., in the open and closed positions.

The invention consists, essentially, in the arrangement of a catch or bolt at the back edge of the door and controlled by a system of levers connected to the handle of the door, the catch automatically engaging itself in the notched stop placed so as to correspond to the two positions of opening and closing the door. The handle of the door is so arranged that when it is seized by the hand for effecting the movement of the door it produces at the same time the disengagement of the fastening-catch. It is, besides, arranged in such a manner as to enable the operation to be effected from both sides of the door.

The annexed drawings represent in Figure 1 an elevation, and in Fig. 2 a plan and partial horizontal section, of a rolling door fitted with a fastening device constructed in accordance with the present invention.

The handle consists of a hollow fixed part *a*, in the interior of which a movable handle *b* is pivoted, so as to work therein and terminating at the interior of the lock with a finger or lever *c*, entering a slot of a rod *d*, arranged in the interior of the door *f* and covered by a plate *e*. This rod projects at the back edge of the door, where it is connected, by a system comprising a pivoted bell-crank lever *g* and link *h*, to a catch or bolt *i i'*. The whole of the lever system *b c d g h i i'* are controlled by a spring *k*, so that the catch *i i'* is pressed normally downward, and the movable handle *b* is disposed outside the fixed handle *a*.

The end of the catch *i i'* is bent toward the side, Fig. 2. To the side of the path of the movement of the door are arranged two stops *l m*, situated not as shown in the drawings, near one another, but at a distance corresponding to the open and closed positions of the door—that is to say, at the two extremities of the path of travel of the door. Each stop has a tooth *n o*, each of which ends, respectively, in the inclined plane *p q*. The inclined plane *p* of the first stop *l* is directed

toward the back, while the inclined plane *q* of the second stop *m* is directed toward the front.

In the closed position of the door the end *i'* of the fastening-catch is stopped by the tooth *n* of the first stop, (see the position in the drawings,) and the door is thus held in this position. To open it, one evidently seizes the handle to push the door to one side. In doing this the lever *b* is pushed into the handle *a*, and thus exerts a pull on the rod *d*, which raises the catch *i'*. The resistance encountered by the hand necessarily obliges pressure to be put on the lever *b* in the opening effort. The door thus disengaged from its stops rolls to the end of its path under the ordinary action of pushing. Before having arrived at the complete open position the catch *i'* encounters the stop *m*, mounts the inclined plane *q* thereof, and afterward falls back of the tooth *o*, when the opening is complete. The lever *b* reassumes its initial position at the exterior of the fixed handle under the tension of the spring *k*, and the door is retained in its open position. To reclose the door, the handle is similarly seized and the lever *b* is pressed, disengaging the catch *i'* from the tooth *o*. The door may then be rolled toward the closed position until the catch *i'* encounters the inclined plane *p* of the first stop *l* and falls again back of the tooth *n* as soon as the door is entirely closed.

In order to enable the door to be operated from both sides, a fixed handle *a'*, corresponding to the handle *a*, is secured to the opposite side of the door and a movable handle *b'* pivotally connected thereto. The inner end of this movable handle *b'* carries a finger *c'*, which engages with the extremity of the finger *c*, carried by the movable handle *b*. With this construction it will be apparent that when the movable handle *b'* is swung against the fixed handle *a'* the finger *c'* will engage with the finger *c* and cause the latter to slide the rod *d* in such a manner as to release the latch.

The fastening arrangement herein specified can be applied to rolling doors of all descriptions. It is notably useful in the doors of tramways, omnibuses, ships, &c., in which the side movement can set up a spontaneous displacement of the doors.

What I claim as my invention, and desire to secure by Letters Patent, is—

A fastener for sliding doors comprising

stops, a catch mounted upon the door and engaging the stops, a rod slidably mounted upon the door and having an eye formed therein, connecting means between the rod
5 and the catch, a pair of movable handles pivotally mounted upon opposite sides of the door, an inwardly-projecting extension upon one of the handles, the said extension passing through the eye in the sliding rod, and an ex-

tension upon the opposite handle engaging to the said extension passing through the eye.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH DIERICKX.

Witnesses:

A. GRAETZ,
GREGORY PHELAN.