

(No Model.)

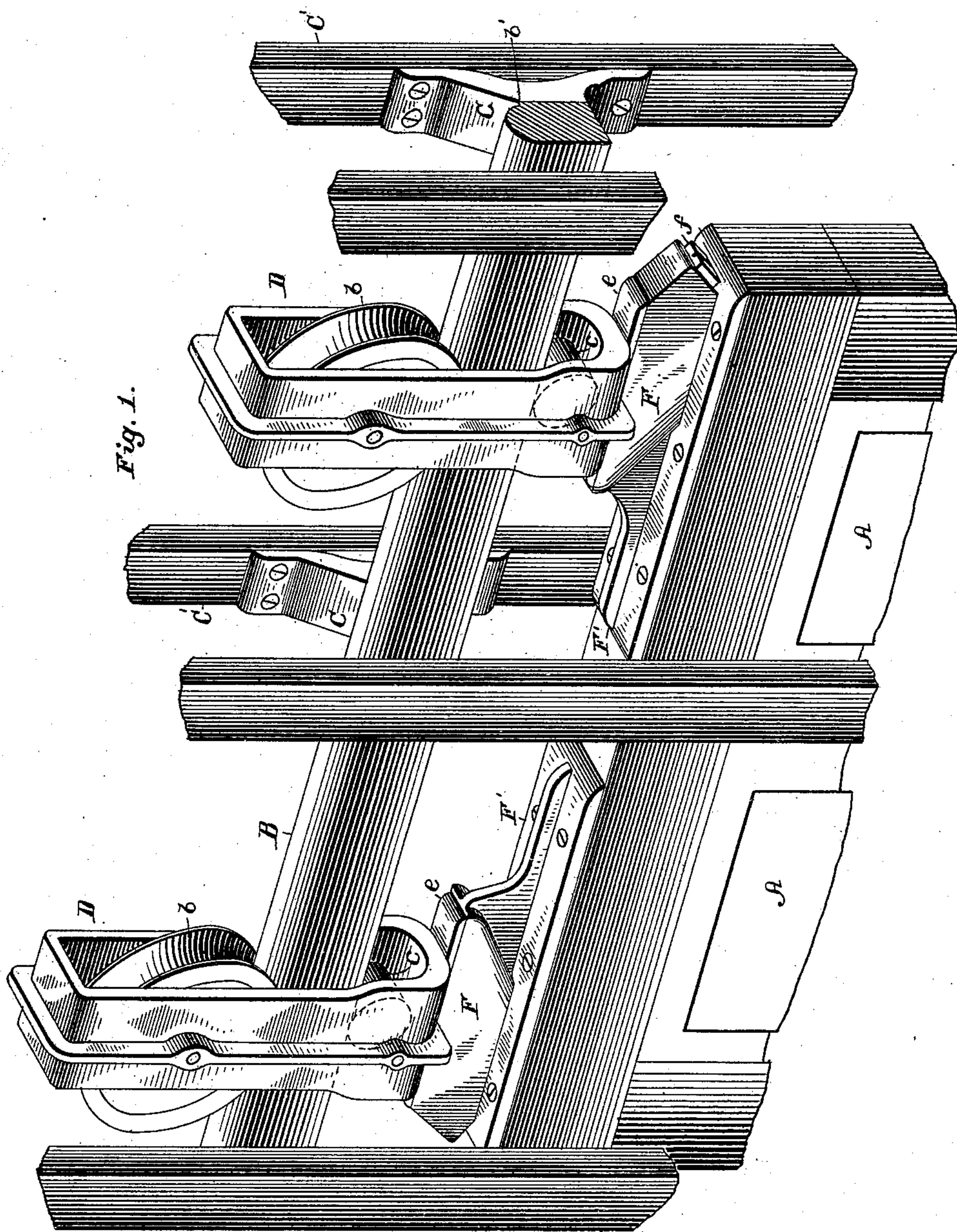
2 Sheets—Sheet 1.

H. FLEMING.

DOOR HANGER.

No. 373,178.

Patented Nov. 15, 1887.



WITNESSES:

L. G. Fischer
Frank C. Rhodes

INVENTOR

BY *Henry Fleming*
J. C. Higdon
ATTORNEY.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

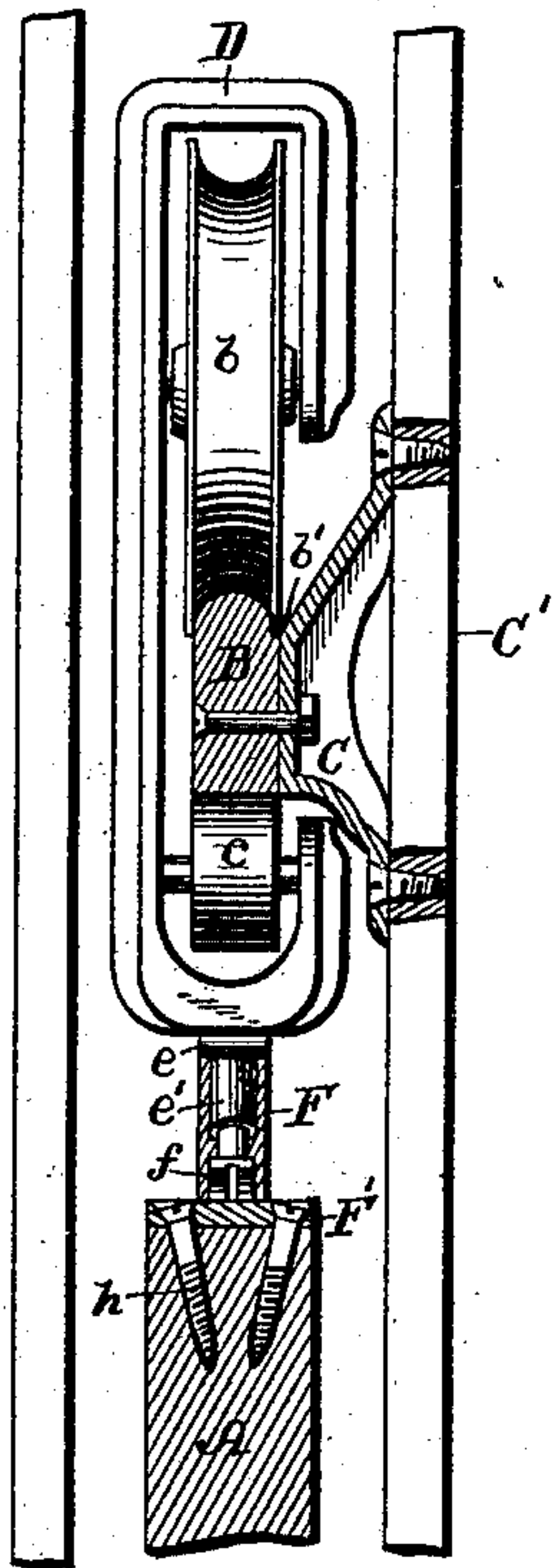


Fig. 5.

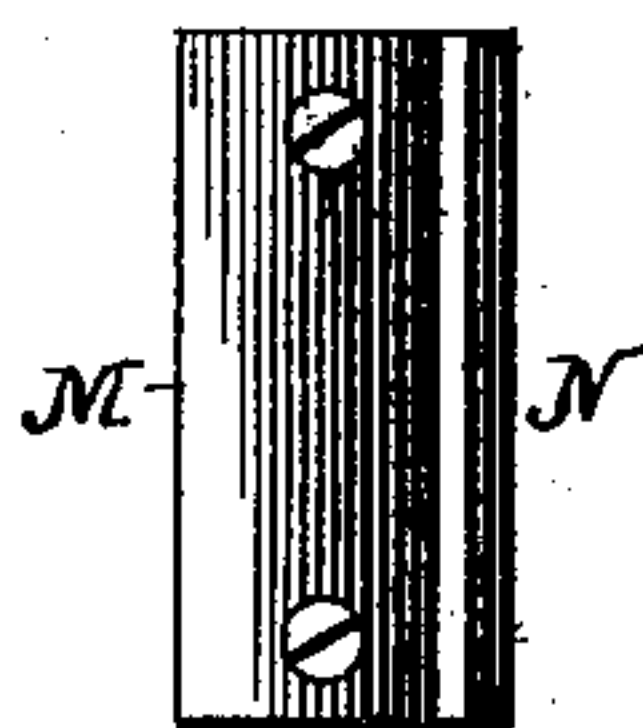


Fig. 3.

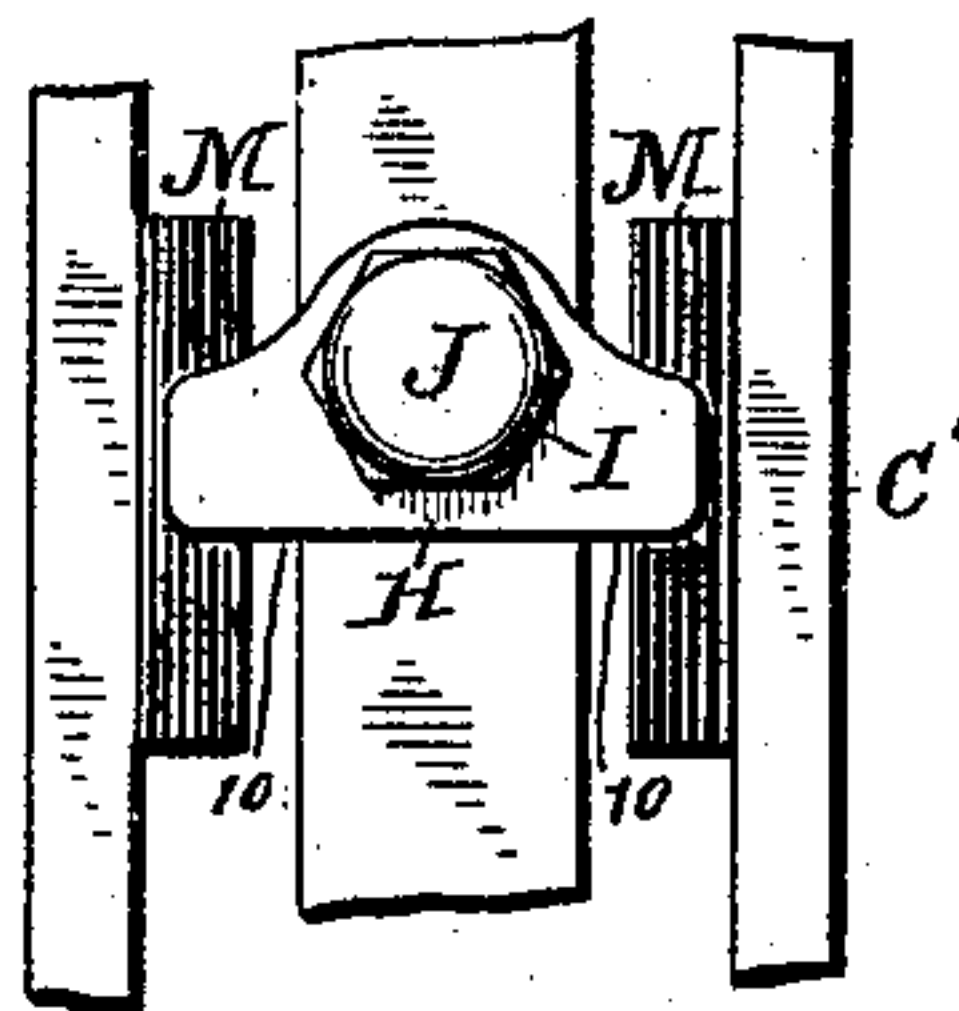
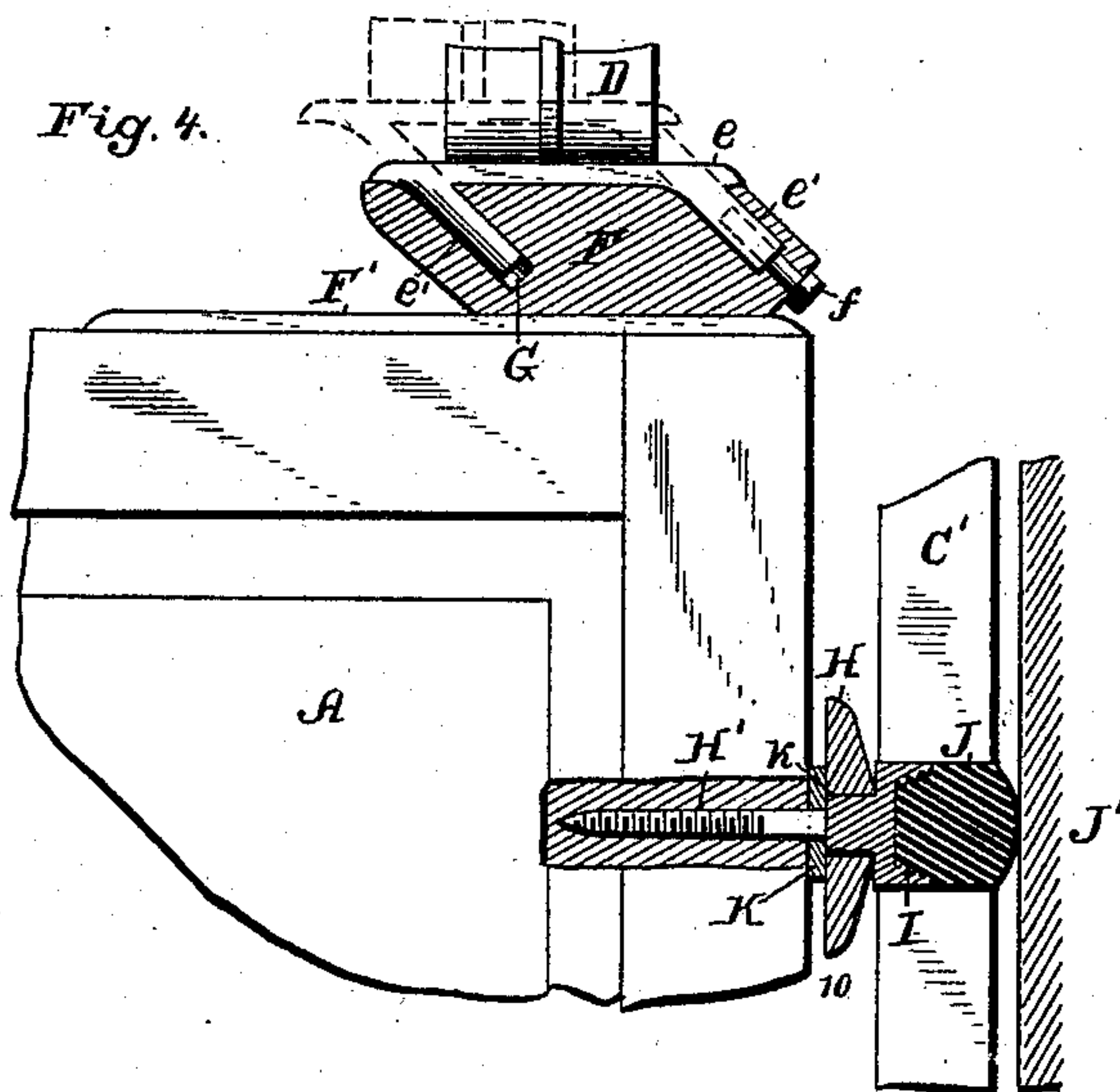


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY FLEMING, OF KANSAS CITY, MISSOURI.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 373,178, dated November 15, 1887.

Application filed May 5, 1887. Serial No. 237,162. (No model.)

To all whom it may concern:

Be it known that I, HENRY FLEMING, of Kansas City, Jackson county, State of Missouri, have invented certain new and useful

5 Improvements in Door-Hangers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention may be said to relate to certain

10 improvements upon the door-hanger shown and described in my United States patent of July 29, 1884, No. 302,628; and it consists in the devices and the combination and arrangement of devices hereinafter set forth, and pointed

15 out in the claims.

In the drawings, which illustrate the manner of carrying out the invention, Figure 1 is a perspective view of my improved hanger properly applied to a sliding door. Fig. 2 is

20 a sectional elevation showing the supporting devices for the door, the section being taken transversely of the supporting-track. Fig. 3 is a detail view of the rear edge of the door, showing the bumper and the devices used for

25 preventing the undue withdrawal of the door. Fig. 4 is a broken side elevation of the door, showing the bumper and the lower portion of a hanger attached to the door; and Fig. 5 is a detail view of a stop which is attached to stud-

30 ding for preventing the withdrawal of the door.

A represents an inside sliding door suspended from the single track B by means of hangers D. The hangers are provided with

35 oppositely-located forks, an upper and a lower one, and their lower ends, *e*, are provided with inclined pins *e'*, which engage correspondingly-inclined sockets or passages G, formed in door-plate F, as shown. A screw or bolt, *f*, pro-

40 vided with slot for screw-driver in its head, and having a square head, if desired, passes through one end of said door-plate and engages a threaded passage formed in one of the inclined pins *e'*, for the purpose of adjusting

45 the door with relation to the track. In the upper fork of the hanger is journaled the suspending-wheel *b*, and in the lower fork is journaled the under roller, *c*. Lateral movement of the hanger is prevented by the concave

50 groove in the tread of the said suspending-

wheel engaging the round head of track B, and the under roller is adapted, by contact with the under side of said track, to keep the door A from tipping, and so raising the other hanger from the track while being operated. 55

Thus, it will be seen, the hanger is composed of two main parts, one portion, D, carrying the wheels and having the inclined pins formed integral with its lower end, and the plate F, provided with passages G, which are inclined 60 to correspond with the said pins, and which is provided with a flange, F', for attachment to the top of the door.

The track B consists in a single piece of material, preferably hard wood, formed substan- 65 tially rectangular in cross section, except its upper side, which is rounded, as shown, and with an offset, *b'*, upon the side, that engages the supporting-brackets C. The purpose of this offset is to provide for the passage of the 70 suspending-wheels between the track and the said brackets, as it is evident that were it not provided said wheels would strike the brackets in their passage by them.

The supporting-brackets C are made of cast- 75 iron, of such form as to hold the track at proper distance from the studding C', and provided with screw-holes at their opposite ends, and with a hole for the passage of bolt *d*, located intermediately of said screw-holes, said 80 bolt securely locking the track to the brackets without further fastening.

I prefer to stop the door and prevent its withdrawal from its proper position between the studding by means of the gravity-stop H, 85 which is hung on bolt H'. The bolt H' is provided with a screw-thread upon its inner end and with a hollow head, I, for the reception of a rubber bumper, J. A shoulder, *k*, is formed upon the body of the bolt intermedi- 90 ately of the head and the thread, and a washer, K, of metal, is located on the bolt between the shoulder and the door to receive the impact of the said shoulder when the bumper comes in forcible contact with the bumper-stud- 95 ding J'.

A gravity-stop, H, is hung on the bolt H' between the head thereof and the impact-washer K, and its construction is such that a preponderance of weight is located in its lower 100

part, thereby causing it to retain the position shown in Fig. 3 until disturbed in removing the door for repairs or other purposes. Said stop is provided with lateral extensions 10 on opposite sides of the bolt H', which are adapted to engage brackets M, located in their path and secured to the studdings upon opposite sides of the door.

Normally, the extensions 10 will always be in position to engage the stop-brackets M; but when the door is to be removed said stop can be partially revolved upon the bolt H' by a suitable instrument inserted between the door and the side of one of the brackets, thereby causing said stop to assume a vertical position with relation to said door and permitting it to pass the stop-brackets without engaging therewith. This position of the stop is indicated in Fig. 4.

The contact face of the stop-brackets M is faced with a layer of rubber or other suitable cushioning material, N.

The head of bolt H' can be made either round or square, as preferred.

Having thus described my invention, what I claim is—

1. A door-hanger constructed with oppositely-located forks containing wheels or rollers and provided with inclined pins at its lower end, substantially as and for the purpose set forth.

2. In a door-hanger, the combination of the hanger proper, constructed with opposite forks, wheels or rollers located in said forks, said hanger having inclined surfaces formed integral with its lower end, a suitable door-plate having inclined surfaces which are engaged by the surfaces on the hanger, and a supporting-track which is engaged by said wheels or rollers, substantially as described.

3. In a door-hanger, the combination of the

hanger proper, constructed with opposite forks and having inclined pins formed integral with its lower end, wheels or rollers located in said forks, a door-plate having inclined passages or sockets which are engaged by the inclined pins on the hanger, and a single track which is engaged upon opposite sides by said wheels or rollers, substantially as described.

4. In a door-hanger, the combination of the hanger proper, D, constructed with opposite forks and having inclined pins *e'*, formed integral with its lower end, grooved suspending-wheel *b*, located in the upper fork of the hanger, under roller, *c*, located in the lower fork, door-plate F, provided with inclined passages G, which are engaged by the pins on the lower end of said hanger, adjusting-screw *f*, passing through one end of said door-plate and engaging a threaded passage formed in one of the inclined pins *e'*, a single track or track-rail having a round head and a plain under side, which is engaged upon its head by said supporting-wheel and upon its under side by the roller, and suitable supporting-brackets for securing said track to the studding of a building, substantially as described.

5. In hanging doors, a combined stop and bumper consisting in the combination of bolt H', provided with screw threads upon its inner end and with a hollow head, washer K, located on the bolt between the head and the edge of door, stop H, hung on the bolt between the washer and the head, and rubber bumper J, located in the hollow head of the bolt, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY FLEMING.

Witnesses:

A. SAVAGE,

F. G. FISCHER.