

(No Model.)

C. O. CASE.
DOOR STOP.

No. 528,146.

Patented Oct. 30, 1894.

Fig. 1.

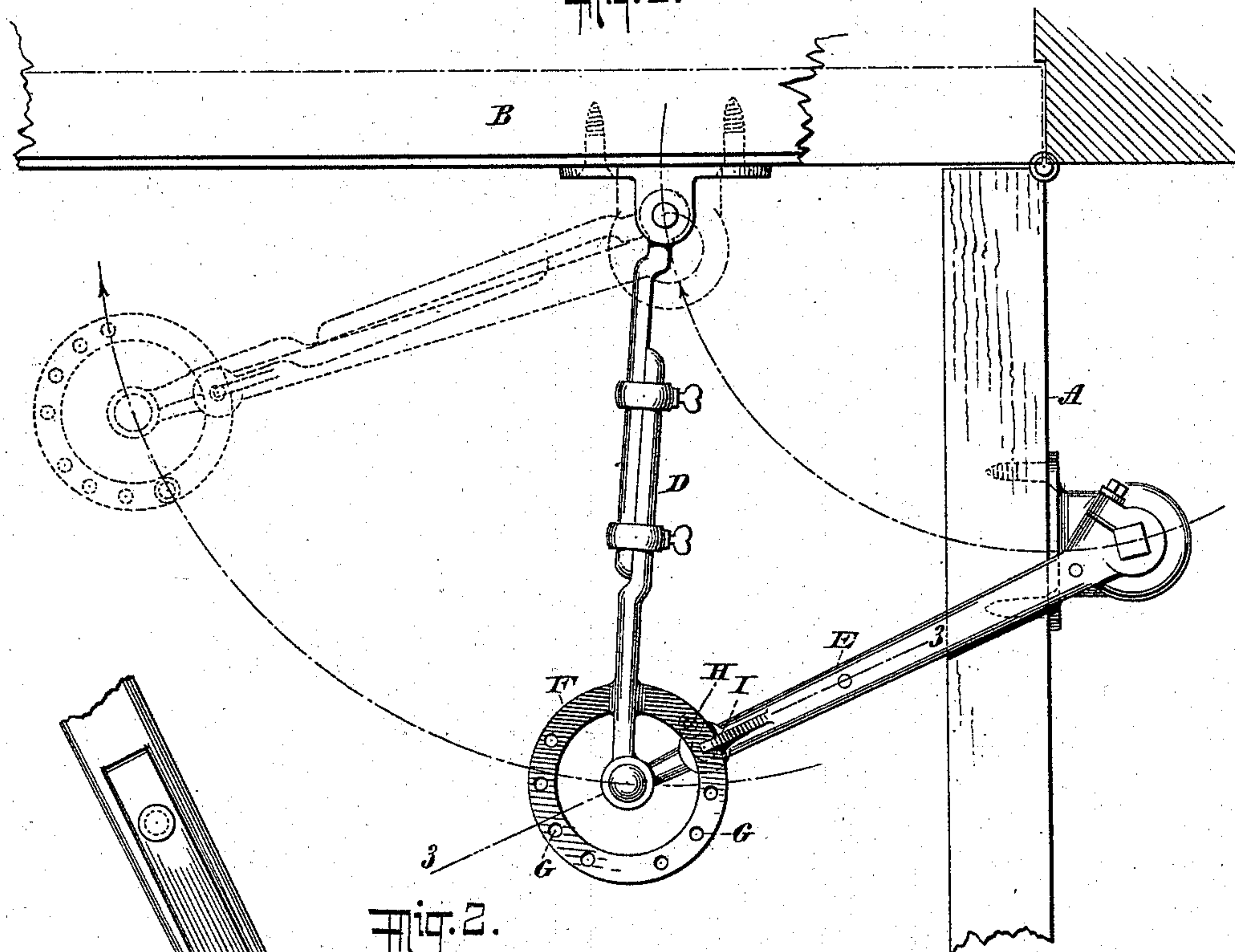


Fig. 2.

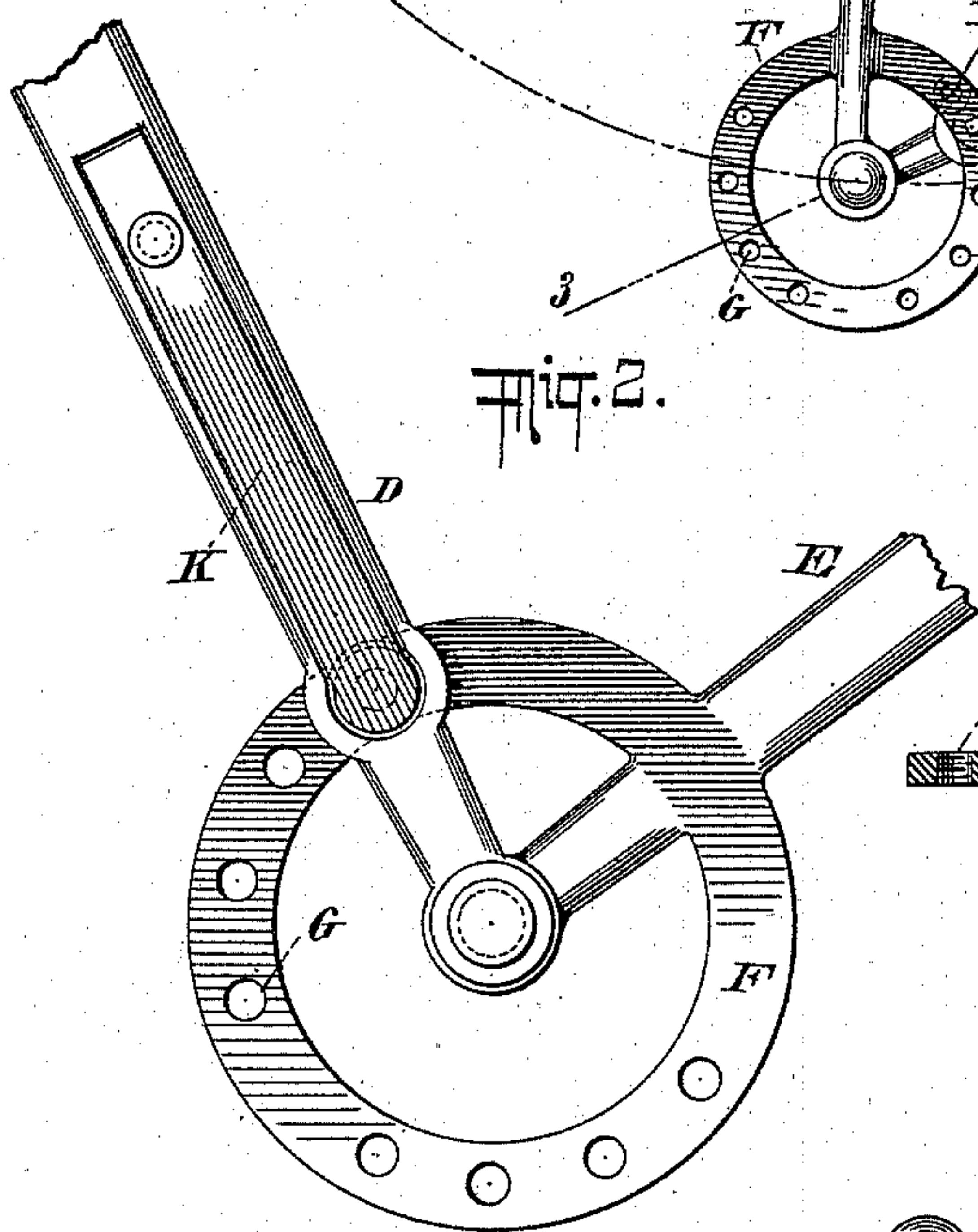


Fig. 3.

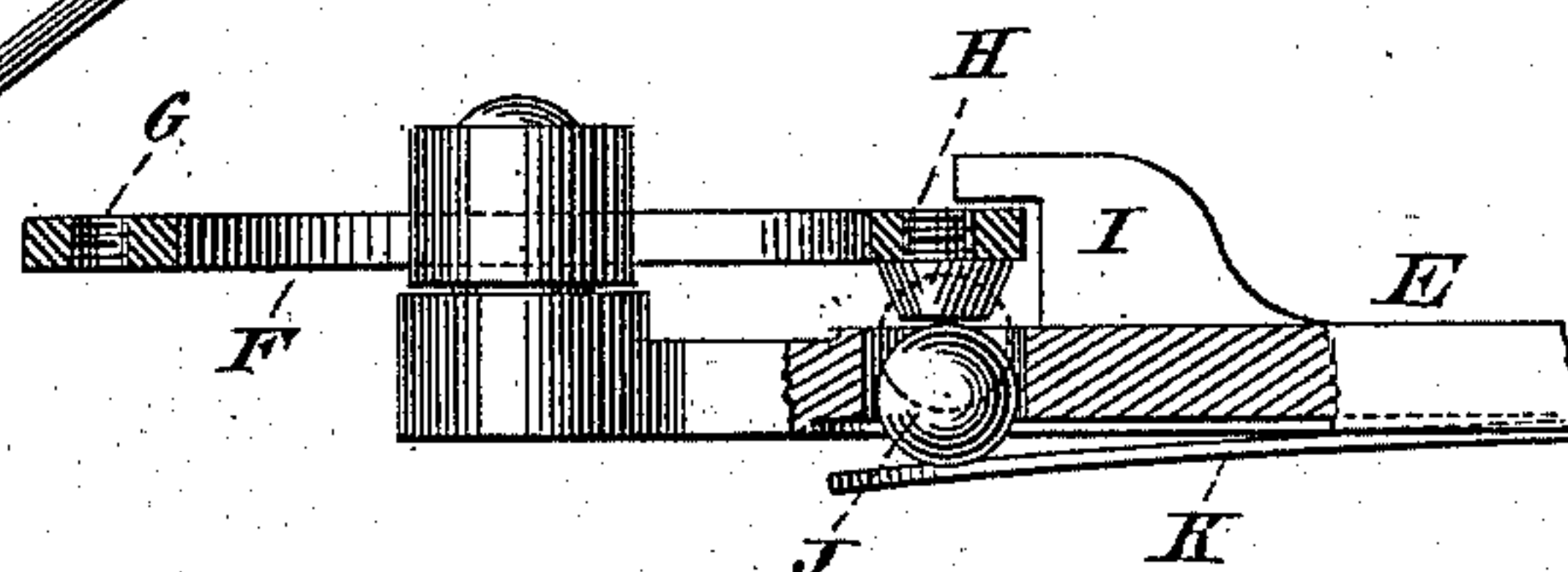
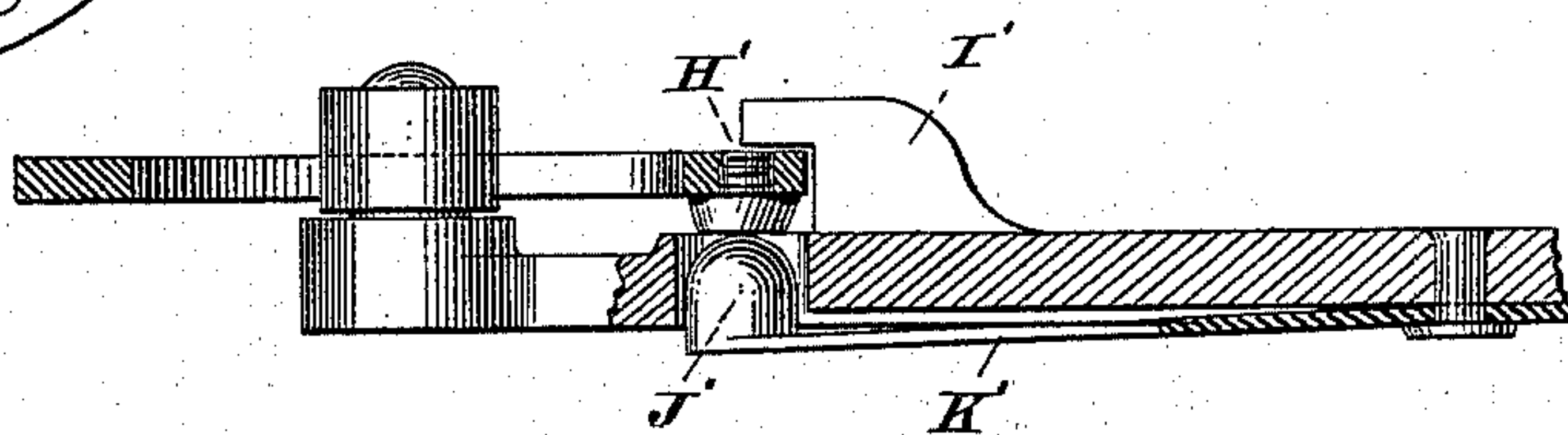


Fig. 4.



WITNESSES:

Gustave Dietrich
Edward Christy

INVENTOR

Cromwell O. Case

BY

R. C. Mitchell
ATTORNEY.

UNITED STATES PATENT OFFICE.

CROMWELL O. CASE, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE
P. & F. CORBIN, OF SAME PLACE.

DOOR-STOP.

SPECIFICATION forming part of Letters Patent No. 528,146, dated October 30, 1894.

Application filed July 18, 1894. Serial No. 517,868. (No model.)

To all whom it may concern:

Be it known that I, CROMWELL O. CASE, of New Britain, county of Hartford, and State of Connecticut, have invented a certain new and
5 useful Door-Stop, of which the following is a full, clear, and exact specification.

My invention relates to a door stop, and consists essentially in providing a mechanical means in combination with the lever arms
10 of the door check, whereby a door, after being pushed open to a desired point, is at that point automatically held until it is desired to again close the door, when, by a pressure in the opposite direction sufficient to overcome
15 the stop, the door will be closed.

The object of my invention is to provide a simple and effective means to cause a door, provided with a spring check, to be temporarily held open at an intermediate point in
20 its swing.

My invention is illustrated by the accompanying drawings, in which—

Figure 1 is a plan view of my invention as it appears in the operation of holding a door
25 open. Fig. 2 is an enlarged view of the lower side of the essential portion of my invention. Fig. 3 is a sectional elevation of Fig. 2 taken on the plane of the line 3—3 Fig. 1, and Fig. 4 is a similar view illustrating a similar modification.
30 cation.

A is a door.

B is a door-jamb. Secured thereto in the ordinary manner is a door-check, as shown, provided with lever-arms D, E, pivotally connected at their outer extremities. To one of
35 these arms, D, near its outer end, is secured a flat metal disk or ring F, having its center coincident with the pivotal connection between the two arms. In this ring F at suitable points, may be provided one or more
40 perforations G G. These perforations are by preference screw-threaded.

H is a screw, the shank of which is adapted to screw into the perforations G G, while its
45 head projects above the flat surface of the ring F. Secured to the other arm E, by preference, is a lug I, the upper end of which extends slightly around the outside of the ring F, as shown. In the arm E, directly adjacent to the ring F and in a line coincident
50 with the circle marked by the perforations

G G, a hole is formed sufficiently large to permit a ball J to be loosely carried therein. The edge of this perforation adjacent to the ring F is constricted slightly, so as to prevent the ball J from slipping entirely there-
55 through. The diameter of the ball should be such that it will project partially through said perforation adjacent to the ring F, so as to stand into the path of the screw-head H. 60 A spring K secured to the opposite side of the arm E normally holds the ball J in this position.

It will be seen that, as the door is opened, the ball will travel around the ring F until it contacts with the screw-head H. The
65 spring K allows the ball to be depressed to a sufficient extent to permit it to slide past the said screw head, when it again assumes the position indicated by the dotted outline thereof in Fig. 3. In this position the door
70 will be held until sufficient pressure is applied against the opposite side of the door, to overcome the resistance offered by the stop. This resistance may be regulated by
75 the strength of the spring K. In Figs. 2, 3 and 4, the mechanism is shown in the position that it assumes just as the ball J is riding over the stop H.

The modification shown in Fig. 4 consists
80 merely in substituting in place of the ball J, a projection J' extending from the spring K', the head of which projection is by preference rounded off so as to facilitate its slipping over the stop H.
85

The purpose of making several perforations G G in the ring F is to provide a means whereby the angle at which the door is to be stopped may be readily changed by shifting the screw H.
90

It is obvious that instead of screw-threading the stop, a rivet with suitable head may be substituted in place of the screw. The screw-head H may have a round or angular surface, as desired. It is also obvious that a
95 segment may be substituted in place of the disk or ring F without departing from the spirit of my invention.

The ball J, or projection J' operates as a spring stop in conjunction with the rigid stop
100 H to hold the door open and it is obvious that these stops may be interchanged if desirable.

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

1. In combination with the arms of a door
5 checking device, a plate F connected to one arm near the outer end thereof and carrying a stop projection, with a stop carried by the other arm and co-operating with the stop on the plate F, one of said stops being spring
10 pressed, said arms being pivotally connected at their outer ends, substantially as and for the purpose specified.

2. In combination with the arms of a door
15 checking device, a circular plate F connected to one arm near the outer end thereof and carrying the rigid stop projection H, with the spring pressed stop carried by the other arm,

said stops co-operating with each other and said arms being pivotally connected at their outer ends, substantially as and for the pur- 20 pose described.

3. In combination with the arms of a door checking device, a ring F connected to one arm and perforated as described to facilitate adjustability of the stop H, with a spring 25 pressed ball J carried by the other arm and projecting partially above the surface of said arm into the path of the stop H, substantially as and for the purpose specified.

CROMWELL O. CASE.

Witnesses:

C. A. BLAIR,
G. E. ROOT.