

(No Model.)

E. W. WOODRUFF.
CABINET FOR FILE HOLDERS.

No. 335,668.

Patented Feb. 9, 1886.

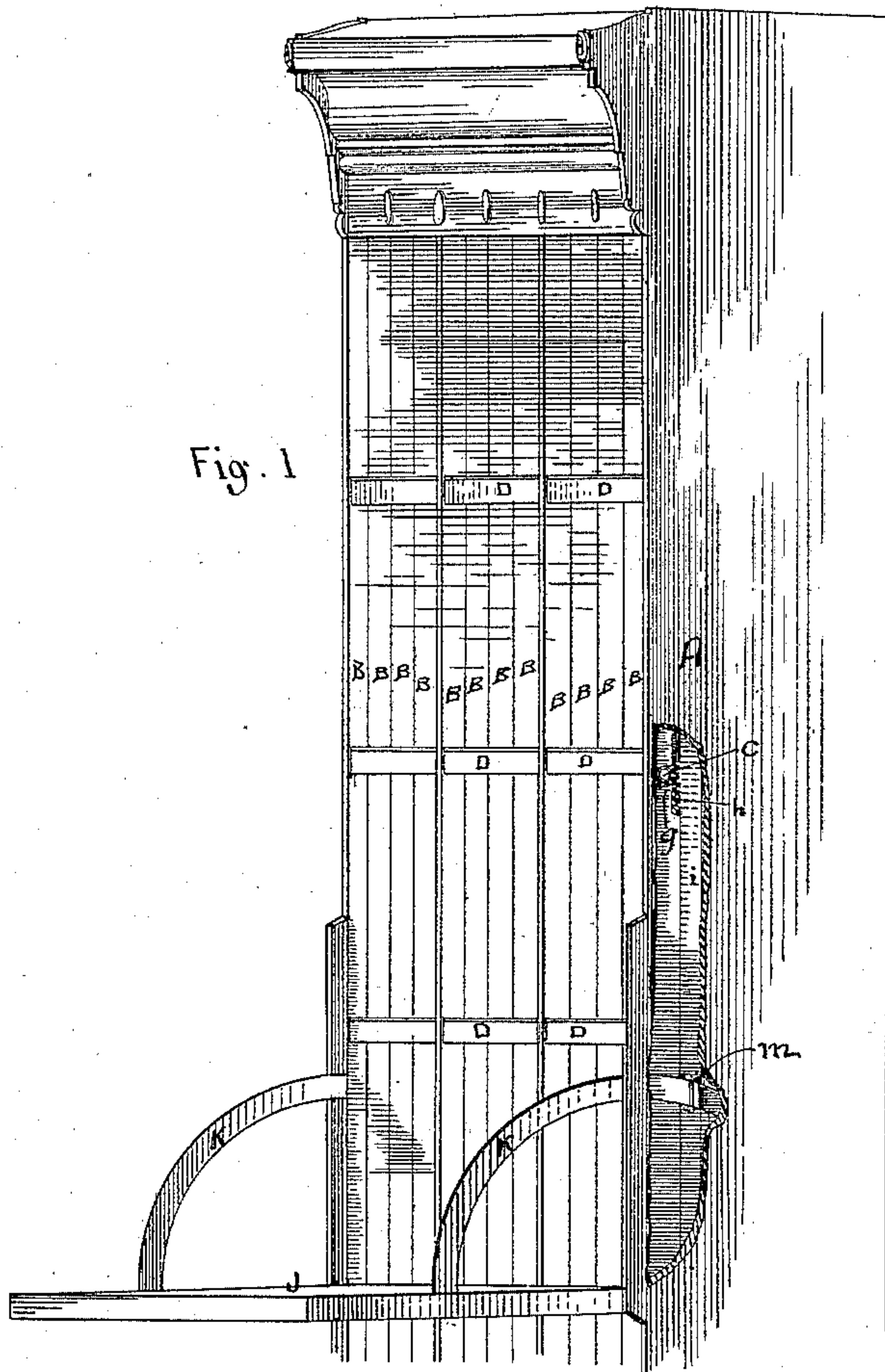


Fig. 1.

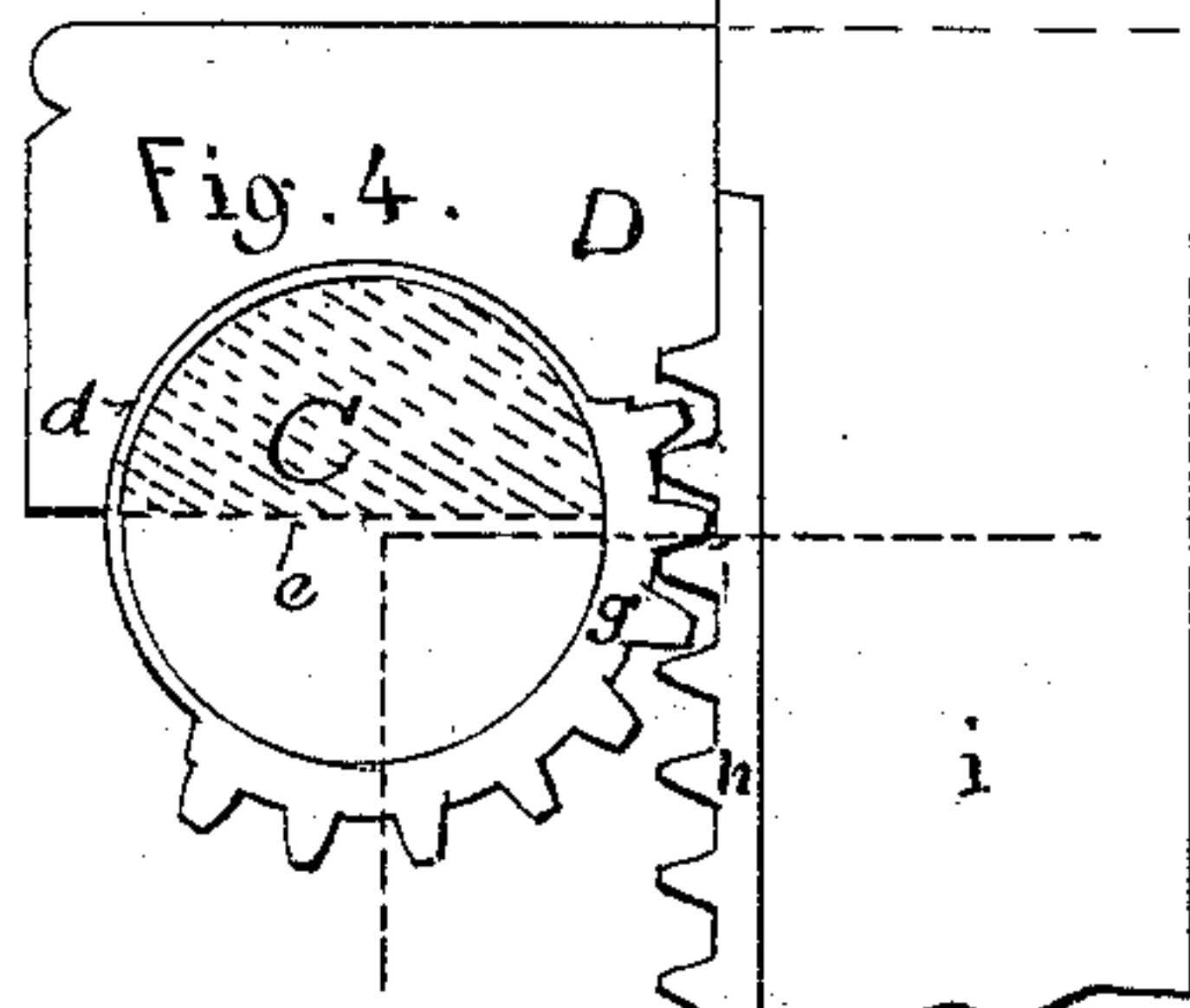


Fig. 4.

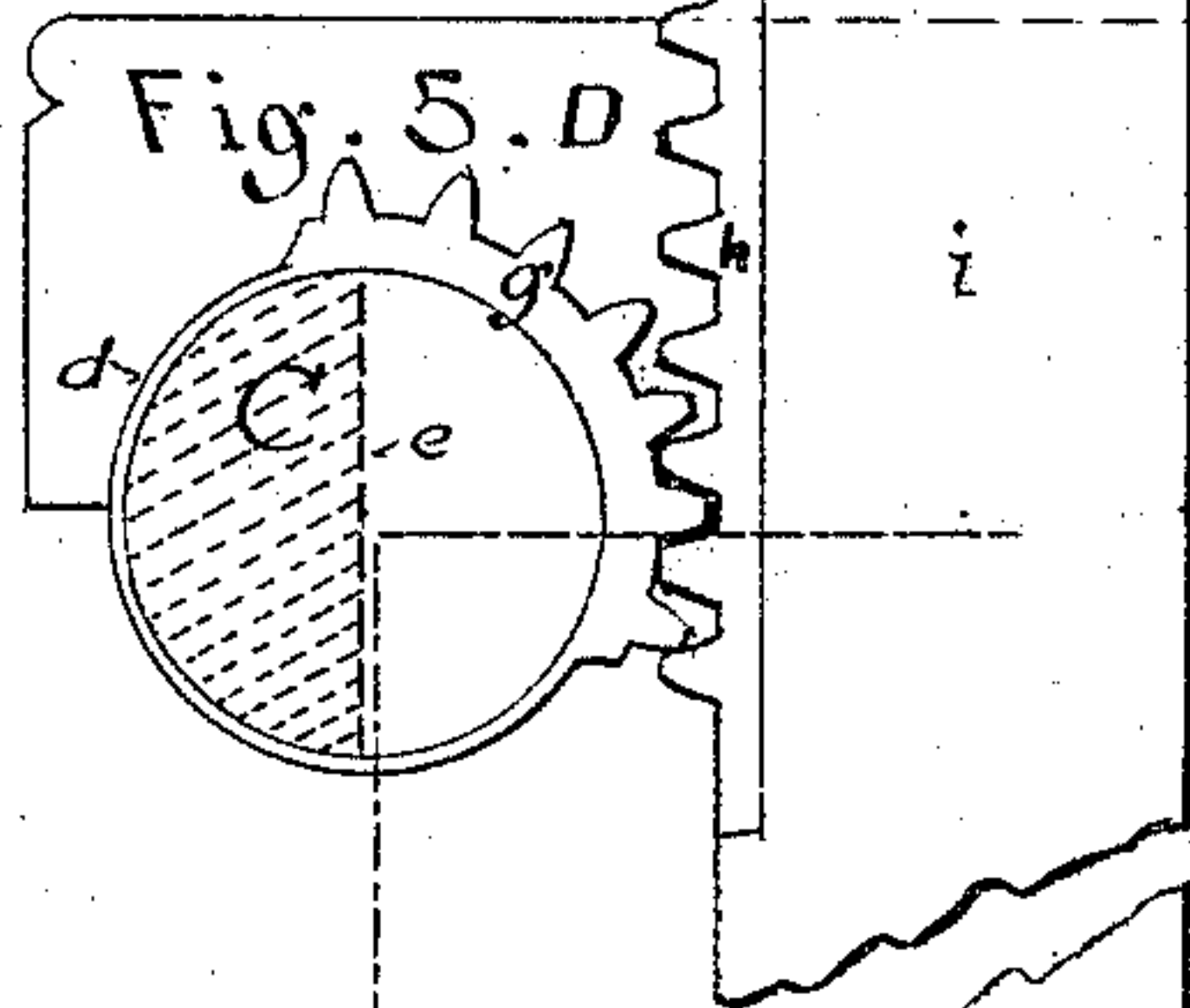


Fig. 5.

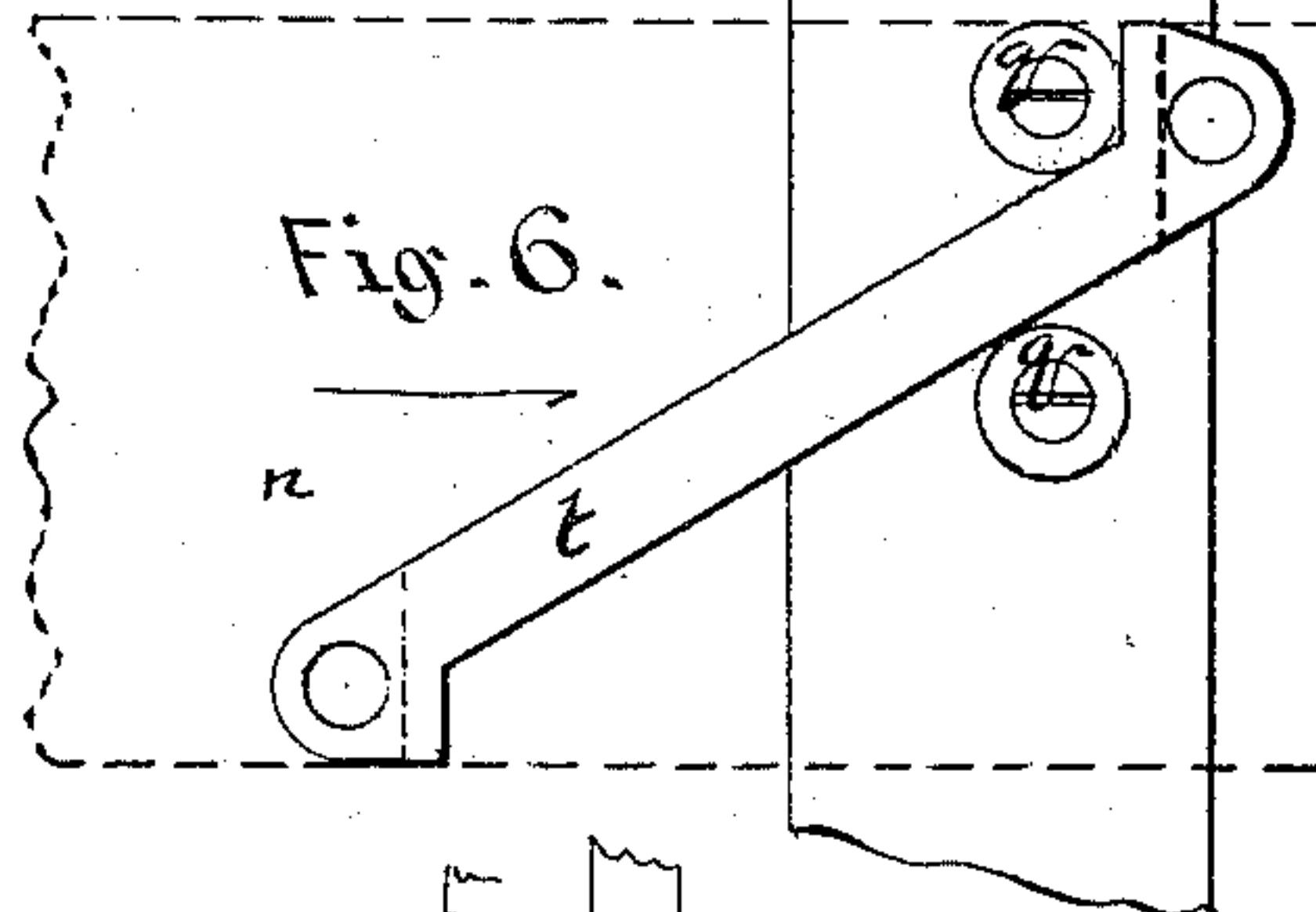


Fig. 6.

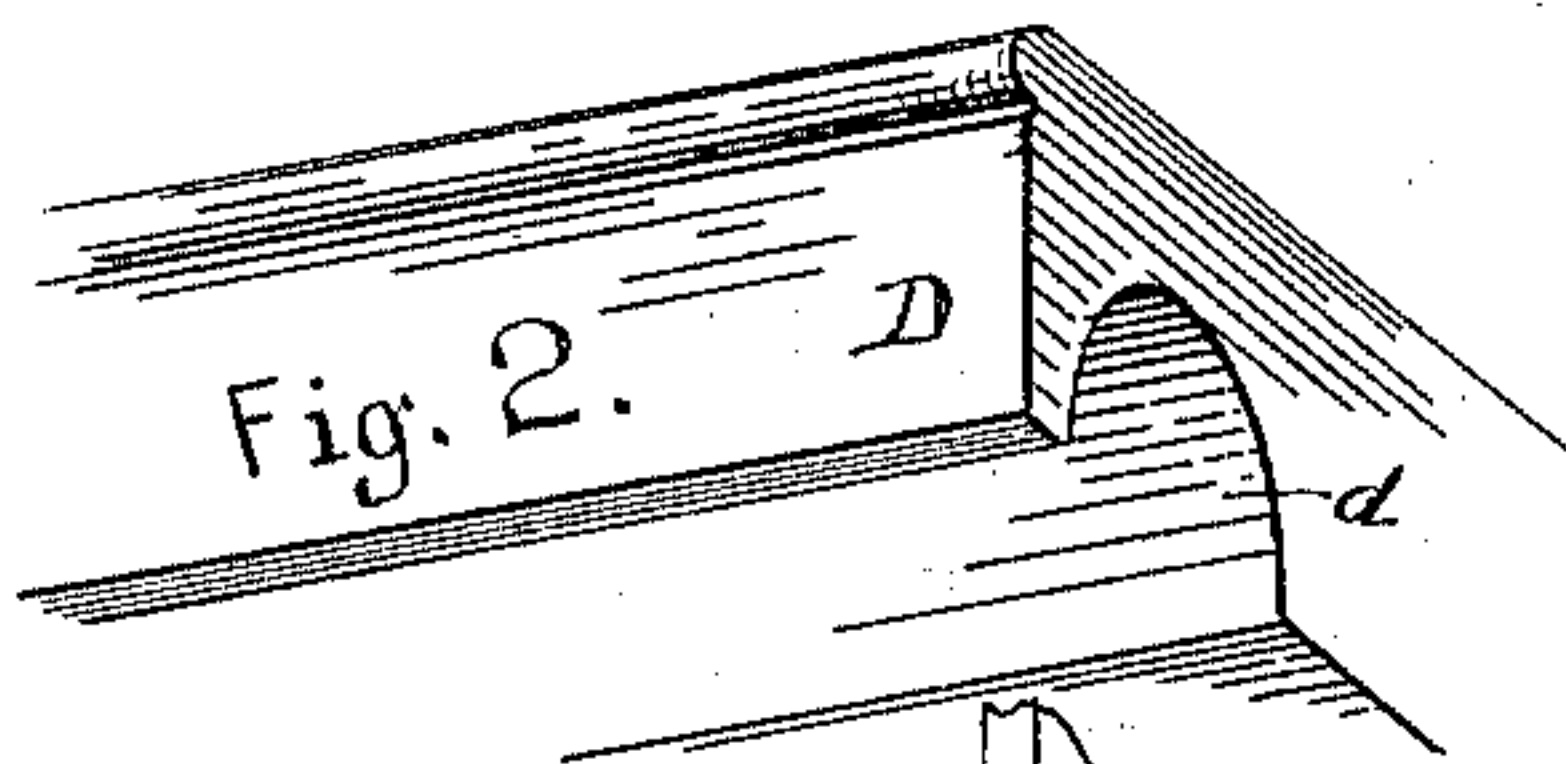


Fig. 2.

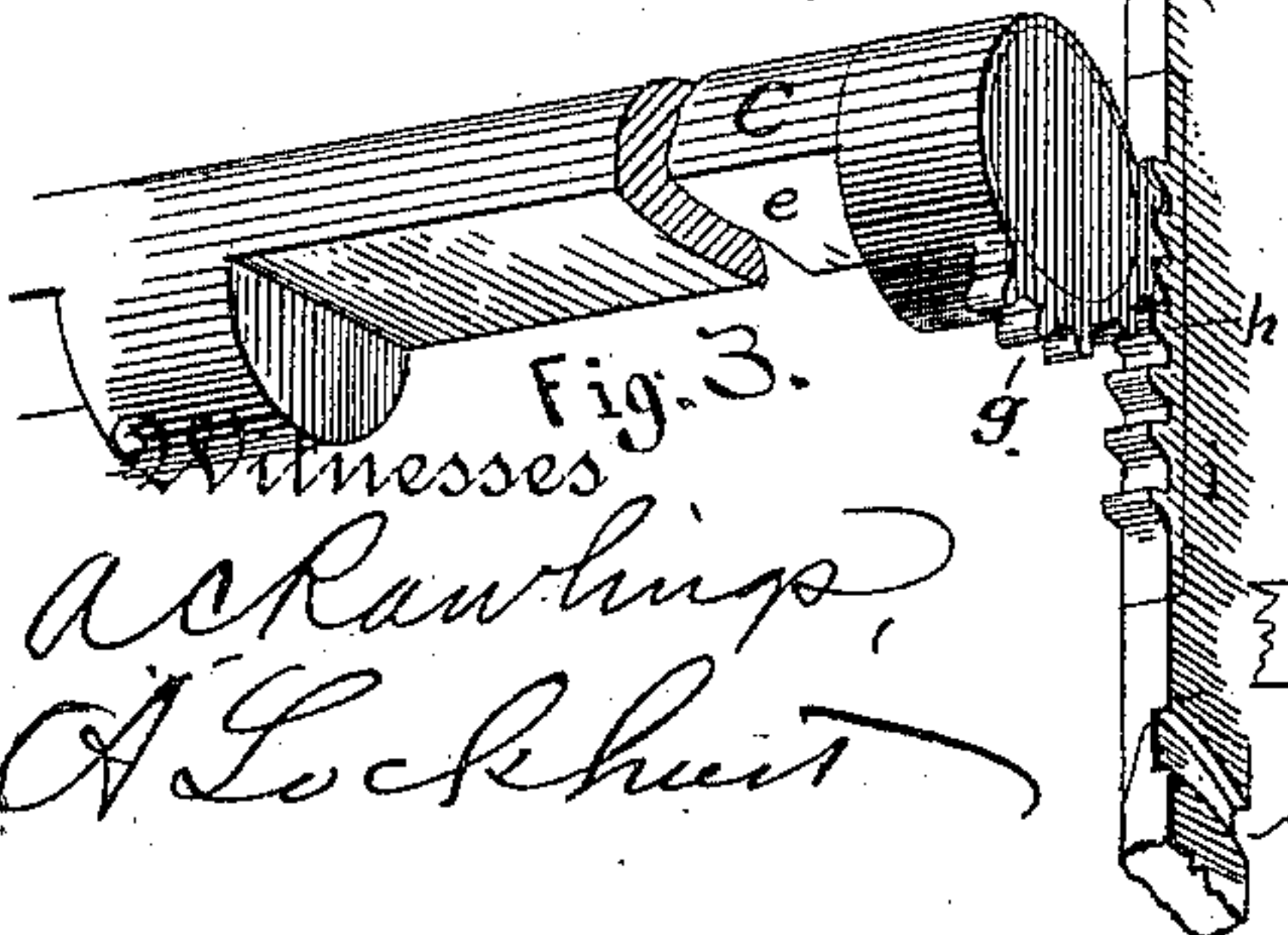


Fig. 3.

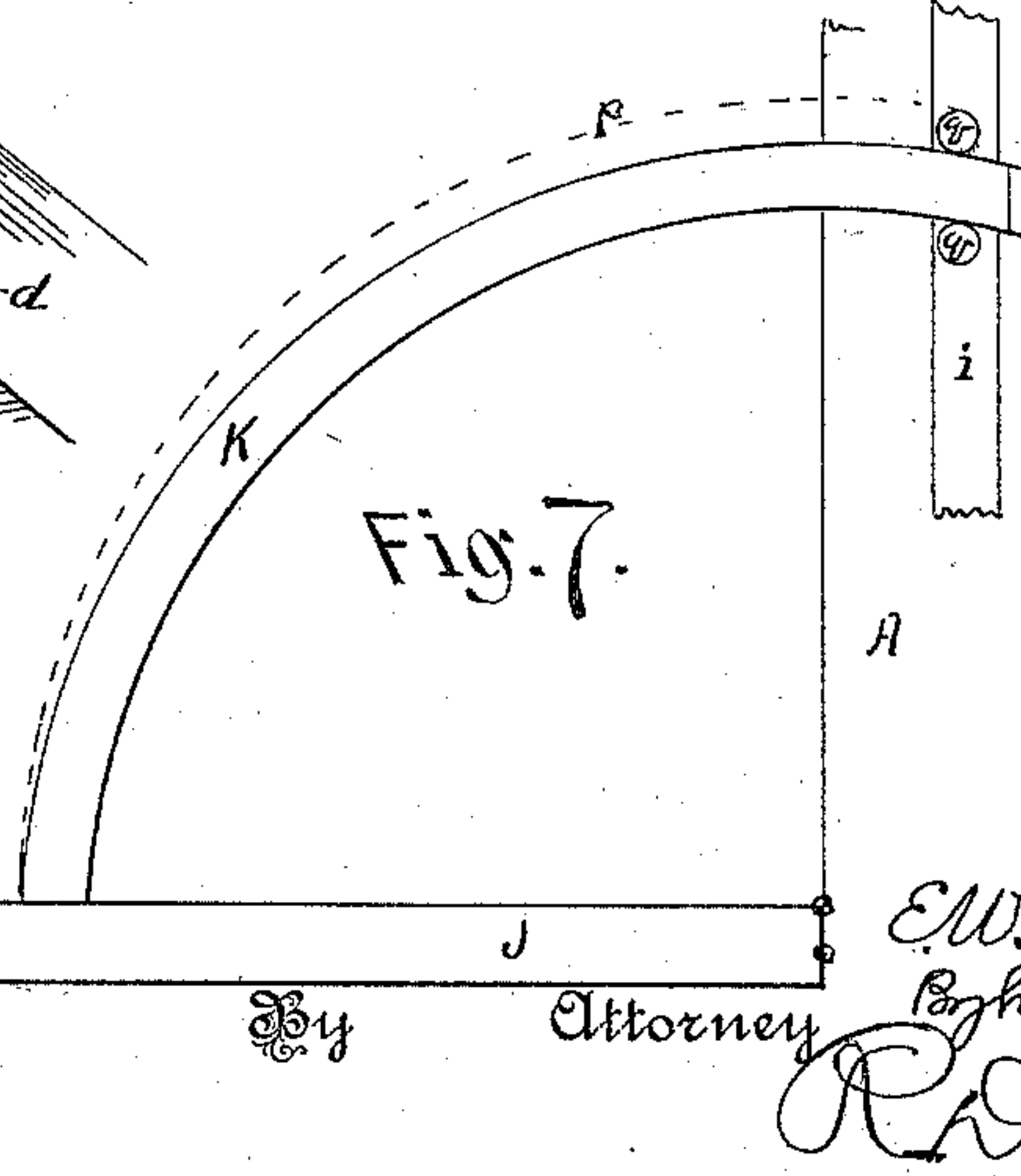


Fig. 7.

Witnesses
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UNITED STATES PATENT OFFICE.

EDMUND W. WOODRUFF, OF WASHINGTON, DISTRICT OF COLUMBIA.

CABINET FOR FILE-HOLDERS.

SPECIFICATION forming part of Letters Patent No. 335,668, dated February 9, 1886.

Application filed October 20, 1885. Serial No. 180,441. (No model.)

To all whom it may concern:

Be it known that I, EDMUND W. WOODRUFF, of Washington, in the District of Columbia, have invented new and useful Improvements in Locks to Secure File Holders or Boxes in their Cases or Cabinets; and I do hereby declare that the following is a full and accurate description of the same.

This invention relates to cases or cabinets adapted to receive file or paper holders of the general character of well-known "Woodruff File-Holders," or boxes or drawers adapted or fitted to shelves or pigeon-holes of a case or cabinet; and it consists of a locking-strip or series of locking-strips concealed in the frame or shelf, and adapted to descend in front of the tops or upper ends of the file-holders, so that said strip obstructs the way and prevents the withdrawal of said holders from their places. When the cabinet comprises several shelves for the file-holders, it is desirable to actuate all the locking-strips by the same manual movement and secure them all in position by the same final lock. In practice I have preferred to employ a semi-cylinder for a locking-strip, whereby it may be moved into or out of action by a quarter-revolution on its cylinder-axis, it being out of action when its plane side lies horizontal and in action when said side stands vertical.

In the accompanying drawings, Figure 1 is a perspective view of one of my cabinets, partly in section, with my improvement added. Figs. 2 and 3 are perspective views of shelf and locking-strip detached. Figs. 4, 5, and 6 are elevations showing the action of the locking-strip, rack-bars, and cam. Fig. 7 is a side elevation of the eccentric segment-cam.

A is the case or cabinet, and B B are the file holders or boxes, adapted to properly fill the shelves D.

C C are the locking-strips, each half a cylinder, fitted in a semi-cylindrical groove, *d*, made in the under side of the shelf, so that the plane side *e* shall be flush with the under side of the shelf D when horizontal. It will not then offer any obstruction to the passage of the file-holder in or out. (See Figs. 3 and 4.)

When said strip is revolved one-quarter turn, its plane side *e* will stand vertical and project downward in front of the file holders or boxes

and prevent their removal, as shown in Fig. 5. At each end and at as many intermediate points as desired the strip C is provided with cylindrical portions, to serve as axial bearings. At each end said strip is provided with a segment-gear, *g*, and in mesh therewith a rack, *h*, attached to a bar, *i*. The endwise movement of said bar causes all the strips C connected therewith, as described, to be simultaneously revolved and the inclosed file holders or boxes to be locked in. It is not necessary to employ the segment-gears and rack-strip at both ends of the locking-strip, but it is preferable to do so to obviate torsion of the locking-strips. The rack-strips move in proper grooves concealed in the ends of the case A.

For convenience in handling and examining papers, the cabinet generally in use to hold my file-boxes is provided with a falling leaf or shelf, J, hinged at one edge to and fitted to turn up against the face of the cabinet and be locked there, thus wholly covering one shelf and the file holders or boxes thereon. My invention, however, comprehends the connection of the rack-strips *i* with the falling leaf, so that the opening or closing of said leaf will likewise cause all the rack-strips to reciprocate simultaneously, and be held in place as long as said falling leaf remains at rest.

Operative connection between the falling leaf J and the rack-bars *i* may be made with a variety of mechanical expedients—as, for instance, by segment and rack, by a connecting-link, &c.; but I prefer a reciprocating cam moving in a notch, *m*, in the rack-bar *i* or between pins *v*, set therein. This cam may be straight, as at *t*, attached to a slide, *n*, Fig. 6; but I prefer to make it in the form of an eccentric segment, K, attached to the falling leaf J, and thereby when said leaf is raised it causes said rack-bars to rise also and the locking-strips to be revolved, as and with the effect set forth. The eccentricity of the segment K is shown by the dotted line *p*. The segment K also serves to support said leaf when turned down.

This device for locking the file-holders in the cabinet may be applied to chests of drawers and similar articles of furniture.

I am aware that multiple locks of various kinds for fastening several drawers with a single key are common, and therefore I do not

claim, broadly, mechanism to produce that result.

Having described my invention, I claim—

1. In a cabinet or case provided with shelves
5 D and adapted to receive file holders or boxes
to hold papers, &c., a semi-cylinder locking-
strip, C, fitted to rotate in a groove, *d*, combined
with a segment-gear, *g*, and rack-bar *i*, where-
by the longitudinal movement of said rack-
10 bar causes the locking-strip to rotate into or
out of position of action.

2. In a cabinet or case, A, provided with
shelves D and adapted to receive file holders
or boxes to hold papers, &c., a series of half-
15 cylinder locking-strips, C, fitted to rotate in
semi-cylindric grooves *d*, combined with the
segment-gears *g* and rack-bars *i*, whereby the
longitudinal movement of said rack-bars causes
a simultaneous movement of all the locking-
20 strips of the series, as set forth.

3. In a cabinet or case, A, provided with

shelves D, adapted to hold file holders or boxes
to hold papers, &c., a series of semi-cylindrical
locking-strips, C, fitted to rotate in grooves *d*,
and provided with segment-gears *g* and a recip- 25
rocating rack-bar, *i*, in mesh therewith, com-
bined with a reciprocating cam in engagement
with said rack-bar, for the purpose of actuating
the same and the strips C, as set forth.

4. In a cabinet or case, A, provided with 30
shelves D, and adapted to receive file holders
or boxes for holding papers or other articles, a
series of locking-strips, C, substantially as set
forth, segment-gears *g*, and reciprocating rack-
bars *i*, combined with the eccentric cam-seg- 35
ment K and the falling leaf J, substantially
as set forth.

EDMUND W. WOODRUFF.

In presence of—

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