

No. 747,683.

PATENTED DEC. 22, 1903.

V. E. CLARK.
FASTENING FOR KNOCKDOWN FURNITURE.

APPLICATION FILED JAN. 8, 1902.

NO MODEL.

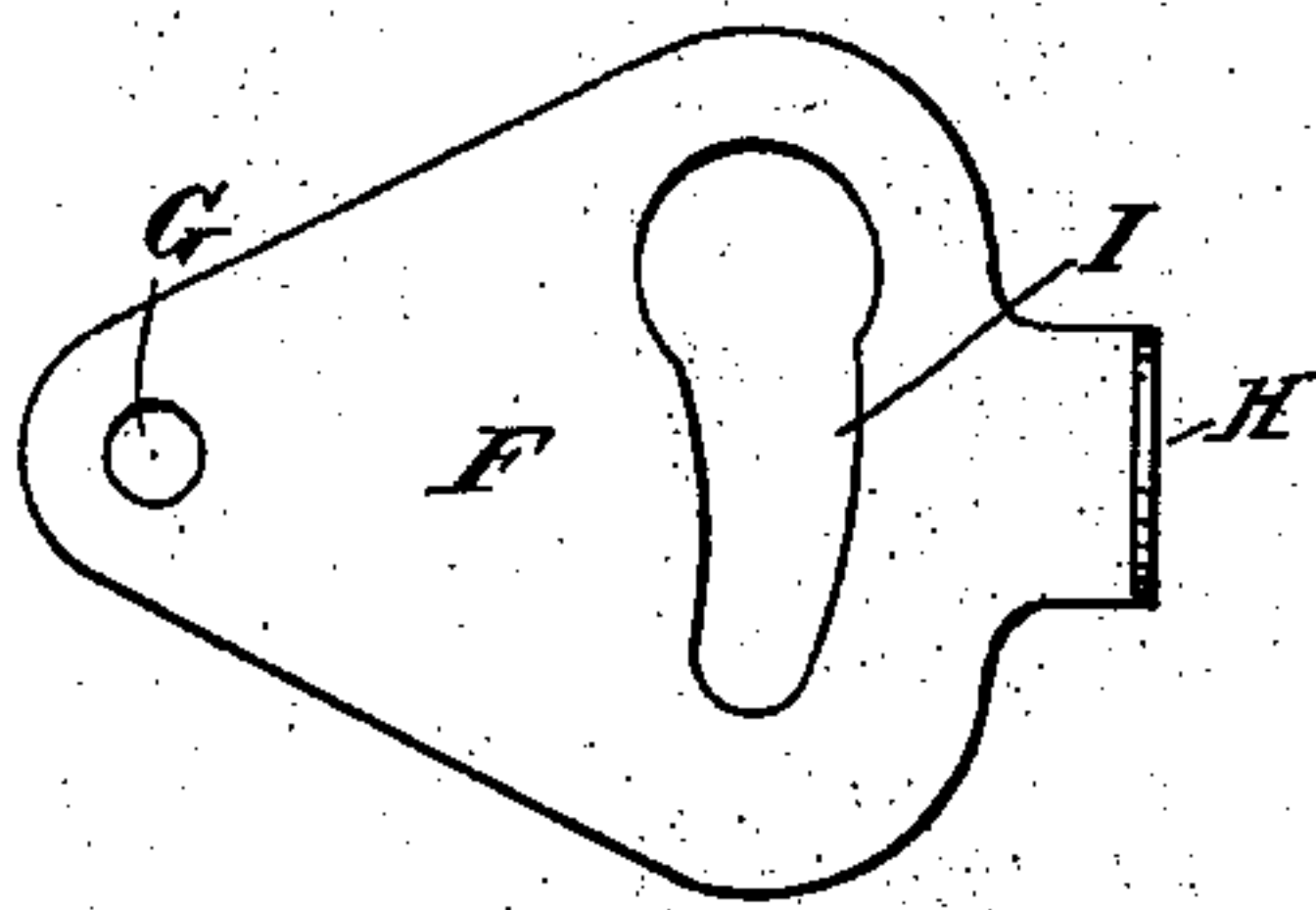


Fig. 3.

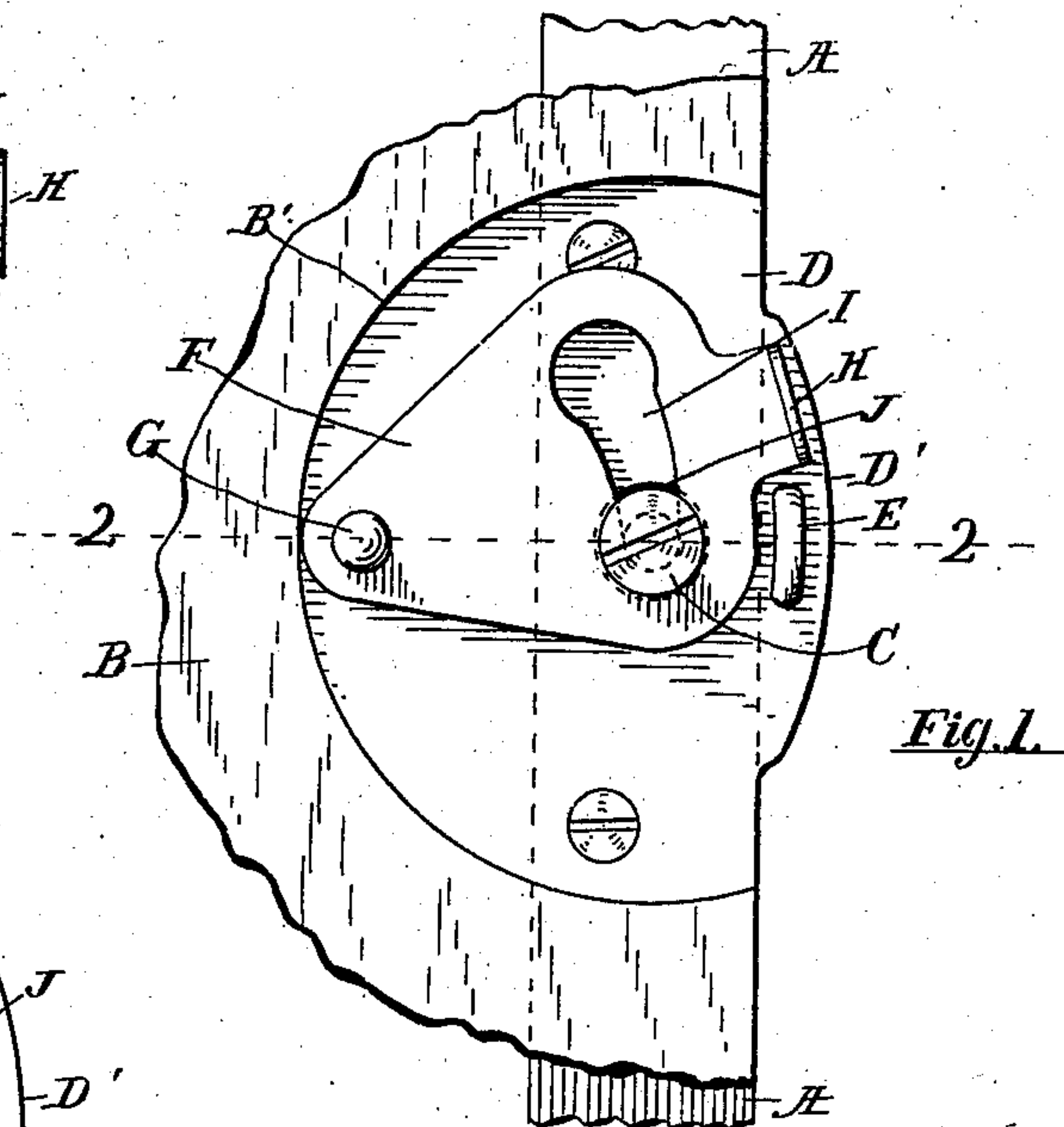


Fig. 1.

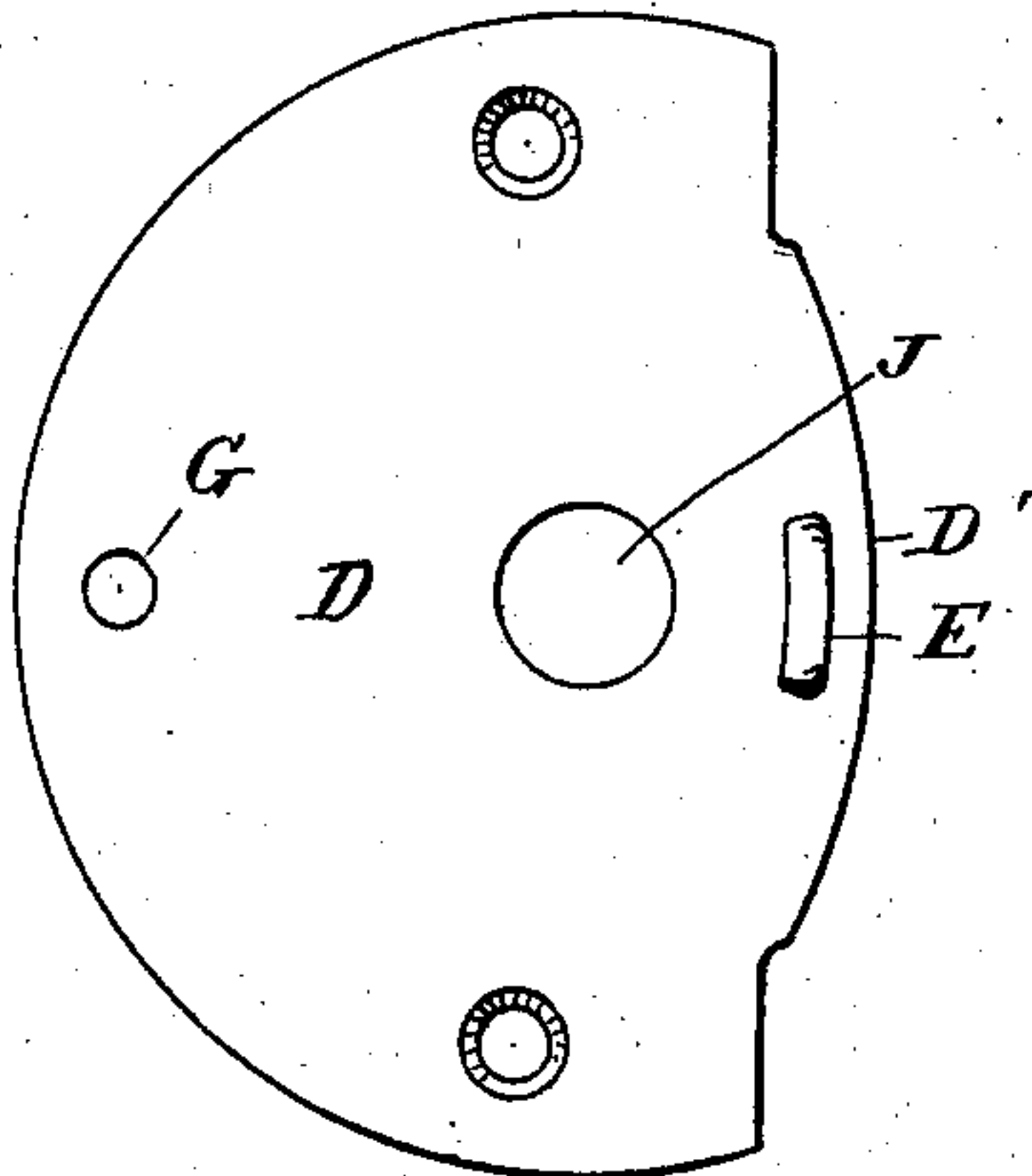


Fig. 4.

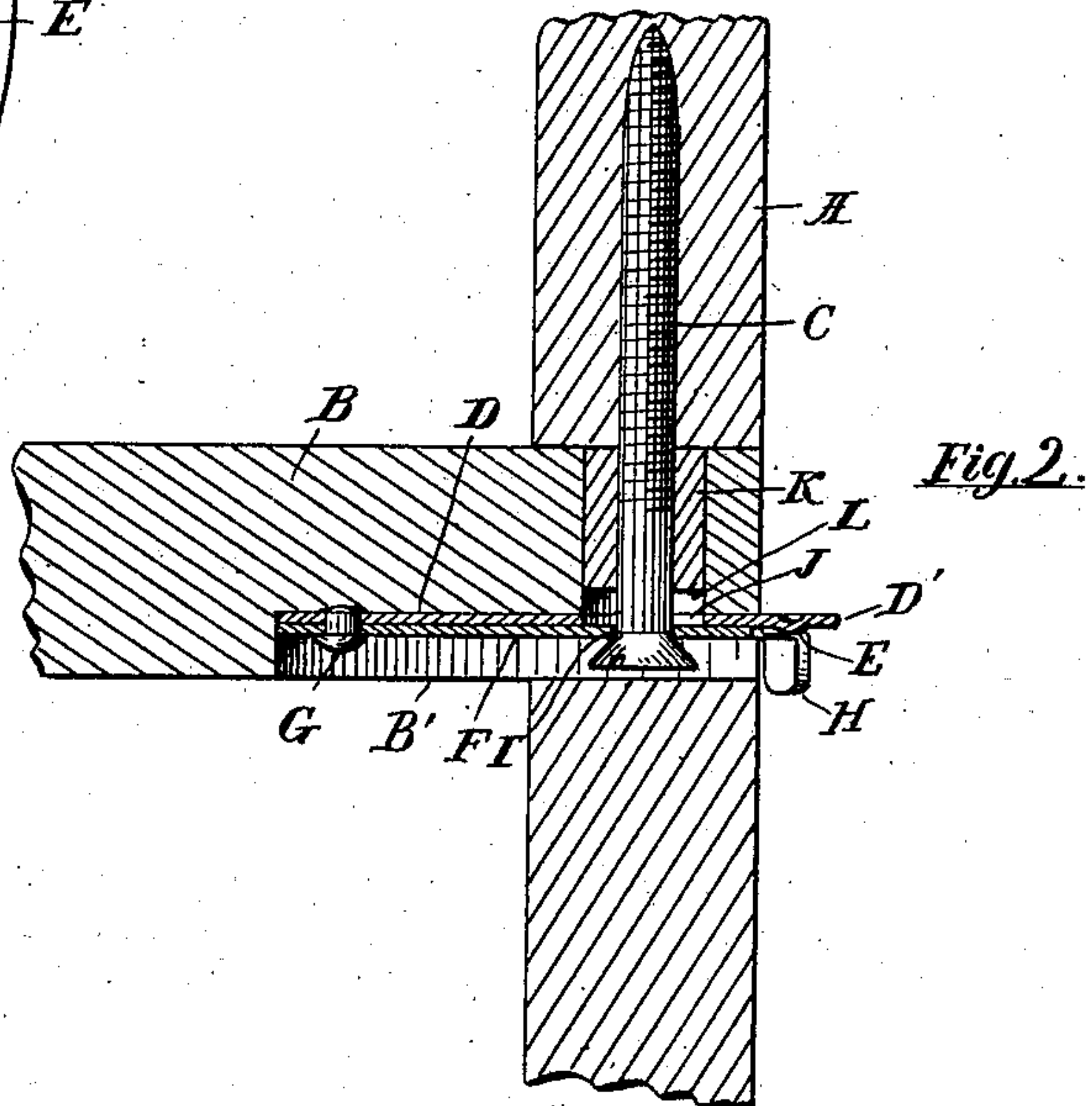


Fig. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

VICTOR E. CLARK, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR OF ONE-THIRD TO CLAUDE H. RICE, OF GRAND RAPIDS, MICHIGAN.

FASTENING FOR KNOCKDOWN FURNITURE.

SPECIFICATION forming part of Letters Patent No. 747,683, dated December 22, 1903.

Application filed January 8, 1902. Serial No. 88,879. (No model.)

To all whom it may concern:

Be it known that I, VICTOR E. CLARK, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Fastenings for Knock-down Furniture; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in fastenings for knockdown furniture; and its object is to provide a cheap, effective, and convenient device and to provide the same with certain new and useful features, hereinafter more fully described, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of a device embodying my invention; Fig. 2, a vertical section of the same on the line 2 2 of Fig. 1; Fig. 3, a detail plan of the movable plate, and Fig. 4 the same of the fixed plate.

Like letters refer to like parts in all the figures.

A and B represent any two parts of any article of furniture or other structure, which parts are detachably secured to each other by my device.

C represents a screw inserted in the part A and having a truncated conical head, commonly known as a "flat-head" screw, and projecting therefrom a suitable distance to properly extend through openings in the part B and plate D and to engage the inclined sides of its head with the sides of a keyhole-slot I in the plate F. A bushing K is provided surrounding the projecting portion of the screw C and fitting in the opening L, whereby the part A is properly located and held relative to the part B.

D is a suitable plate attached to the part B and preferably located in a recess B' in the same to bring the screw-head within the plane of the said part. A portion of the plate D projects outside of the part B to prevent anything from contacting and accidentally moving the plate F. A portion E of the plate D is also raised to engage and hold the plate F from moving. This raised portion is

rounded at the ends and is of such elevation that the plate F will spring enough to pass over the same when sufficient force is applied for that purpose.

J is an opening to permit the passage of the head of the screw C.

The plate F is pivoted at one end to the plate D, as at G, and the other end of the plate F is turned away from the other plate, thus forming a projection H, by which the plate F may be moved on the plate D. In the plate F and opposite the opening J is a keyhole-slot I, having its longer axis concentric with the pivot G. The larger end of this slot is adapted to permit the head of the screw C to pass therethrough and the sides of the lateral extension of this slot converge, whereby as they engage and traverse the inclined sides of the screw-head two converging surfaces traverse two other converging surfaces arranged and movable at right angles thereto, and thus the converging sides of the slot coacting with the inclined sides of the screw-head produce the result in a manner peculiar to the device.

I am aware that movable parts presenting surfaces inclined to the longitudinal axis of a screw and engaging the under side of the screw-head are old. I do not claim such broadly.

From the foregoing description and an inspection of the drawings the operation of my device will be readily understood without further description.

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

1. In a fastener, the combination of a screw having a truncated conical head, a plate having an opening to permit the screw-head to pass therethrough, and a second plate connected to the first-named plate and slidable thereon, said second plate having a keyhole-slot to receive the screw-head, said slot having longitudinally-converging sides to engage the inclined sides of the screw-head.

2. In a fastening, the combination of a screw having a truncated conical head, a plate having an opening to permit the screw-head to pass therethrough, and a second plate pivoted at one end to the first-named plate and hav-

ing its opposite end projecting away from the same, said second plate having a keyhole-slot to receive the screw-head, said slot having longitudinally-converging sides to engage the
5 inclined sides of the screw-head.

3. In combination with a separable structure, one part having a screw inserted therein and projecting therefrom, said screw having a truncated conical head, the second part
10 having an opening to receive the screw, a bushing in said opening and surrounding the screw, a flat plate attached to the second part of said structure and projecting therefrom and having an opening to receive the screw
15 and a raised portion to frictionally engage and hold the second plate, and a second plate pivoted at its inner end to the first-named plate and projecting outside the structure, and turned away from the first-named plate
20 at its outer end, and also having a keyhole-slot with longitudinally-converging walls to engage the inclined sides of the screw-head.

4. As an article of manufacture, a plate having an opening to receive a screw-head,

and a second plate connected to the first- 25
named plate and slidable thereon, and having a keyhole-slot opposite the opening in the other plate, said slot having longitudinally-converging walls to engage the inclined surfaces of a screw-head. 30

5. As an article of manufacture, a plate having an opening to receive a screw-head, and a raised portion to frictionally engage and hold the second plate, and a second plate
35 pivoted at one end to the first-named plate and engaged near the other end by said raised portion, said second plate also having a keyhole-slot opposite the opening in the other plate, said slot having longitudinally-converging walls to engage the opposite sides of the
40 screw-head.

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

VICTOR E. CLARK.

Witnesses:

LUTHER V. MOULTON,
PALMER A. JONES.