

A. DUFAULT.  
DOOR SECURER.

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Patented Nov. 22, 1910.

976,444.

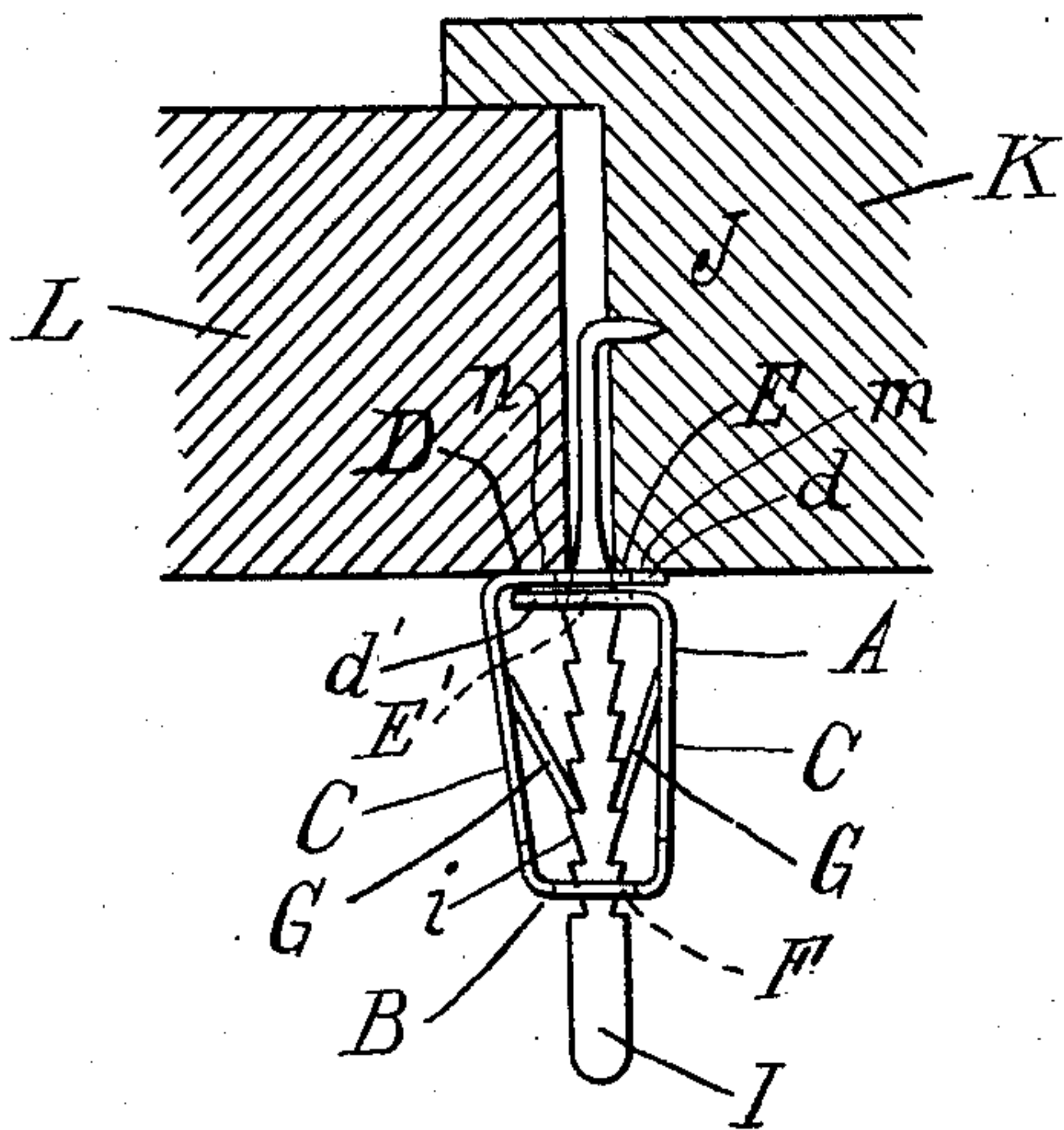


FIG. 1.

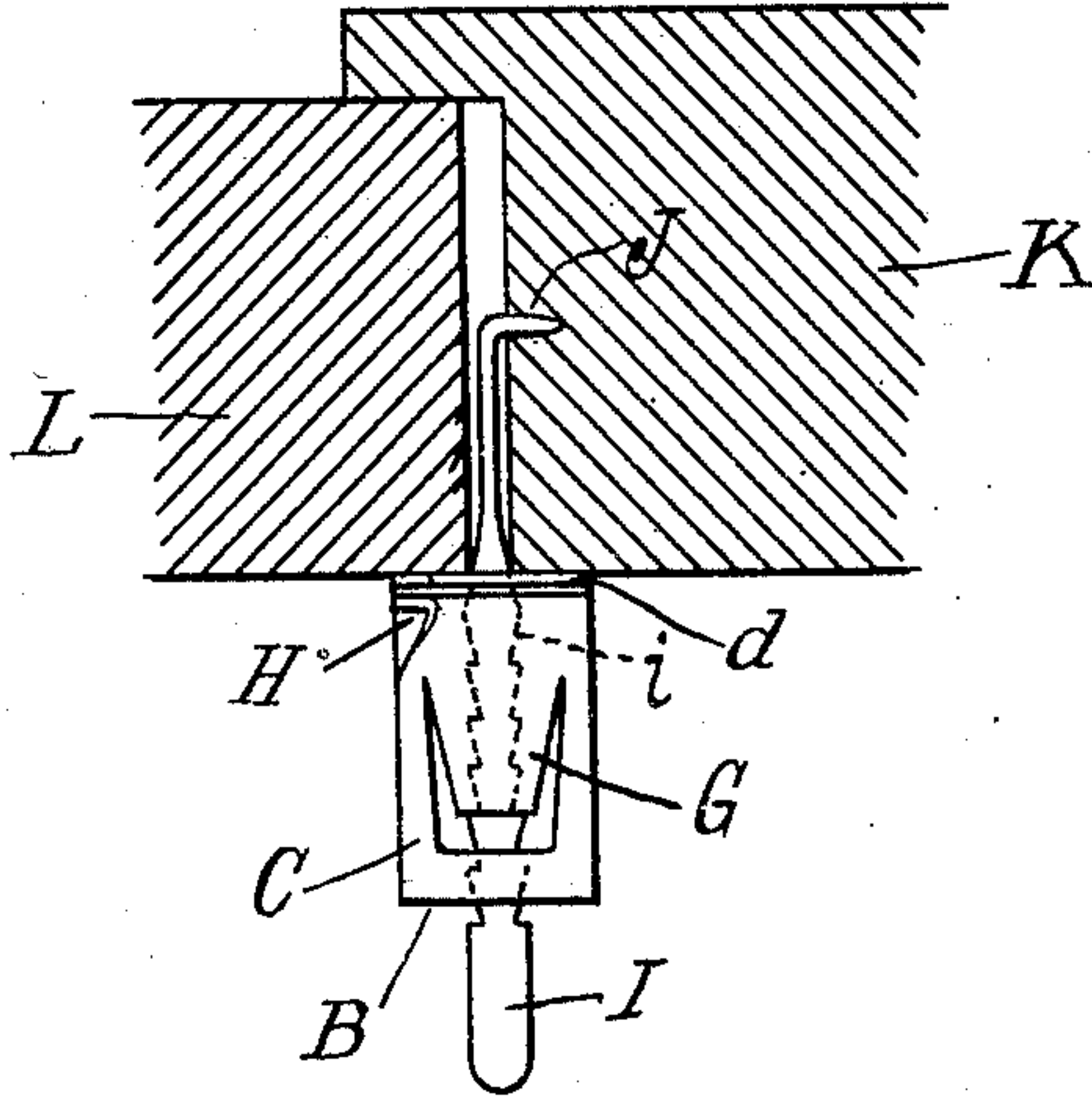


FIG. 2.

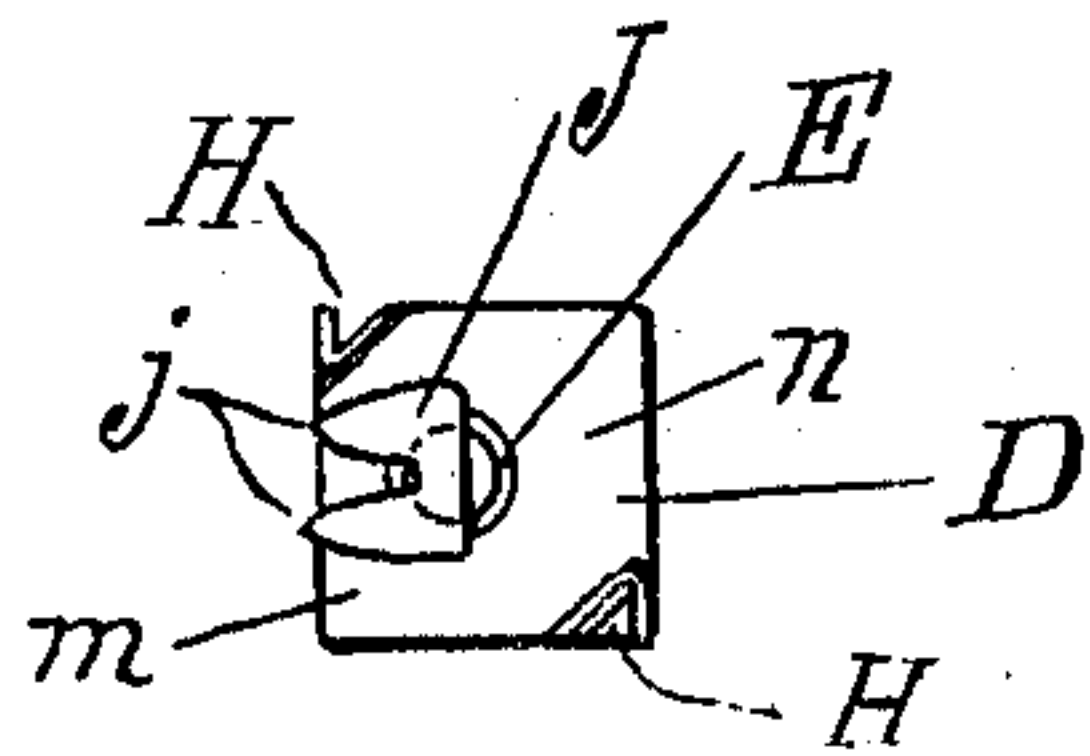


FIG. 3.

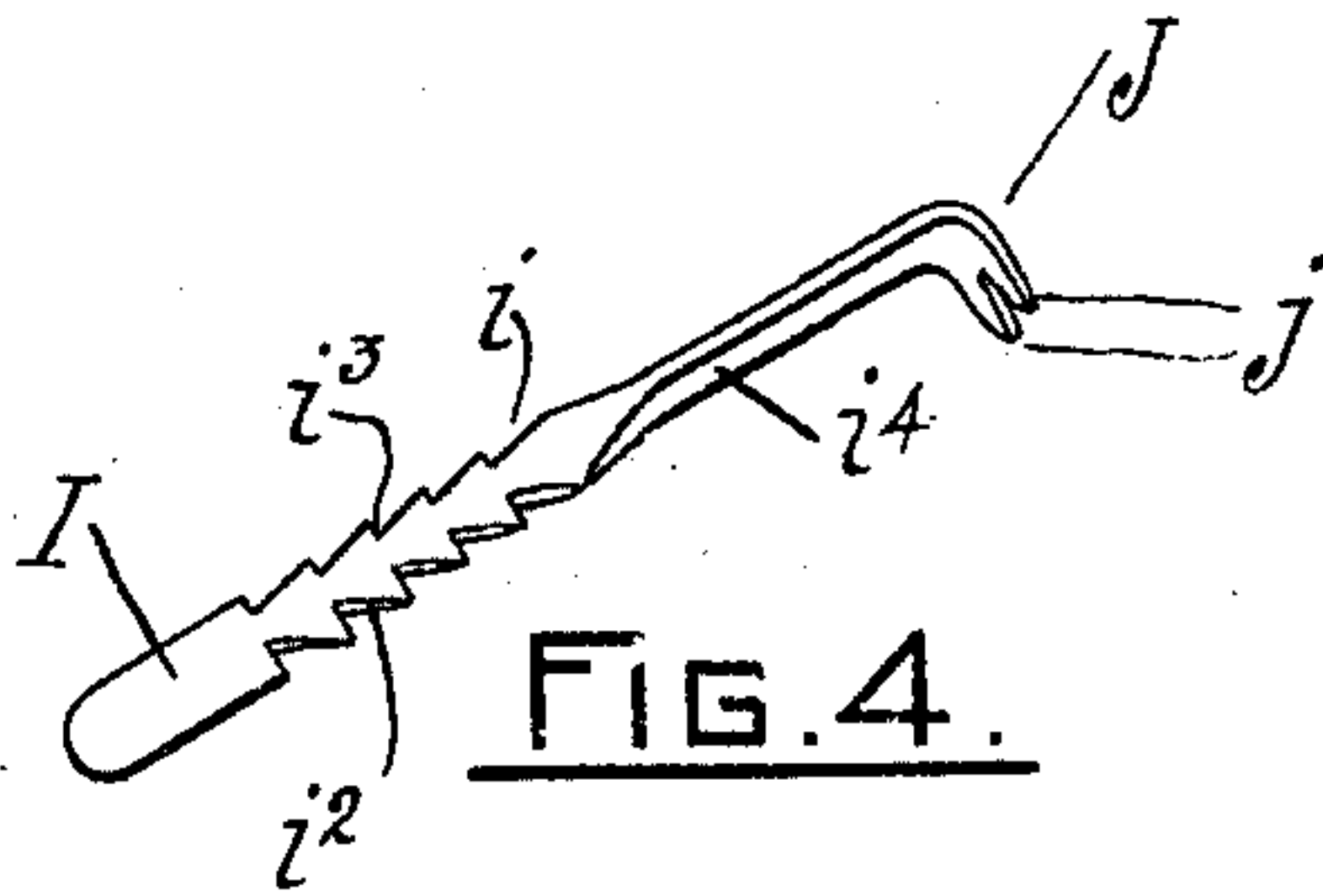


FIG. 4.

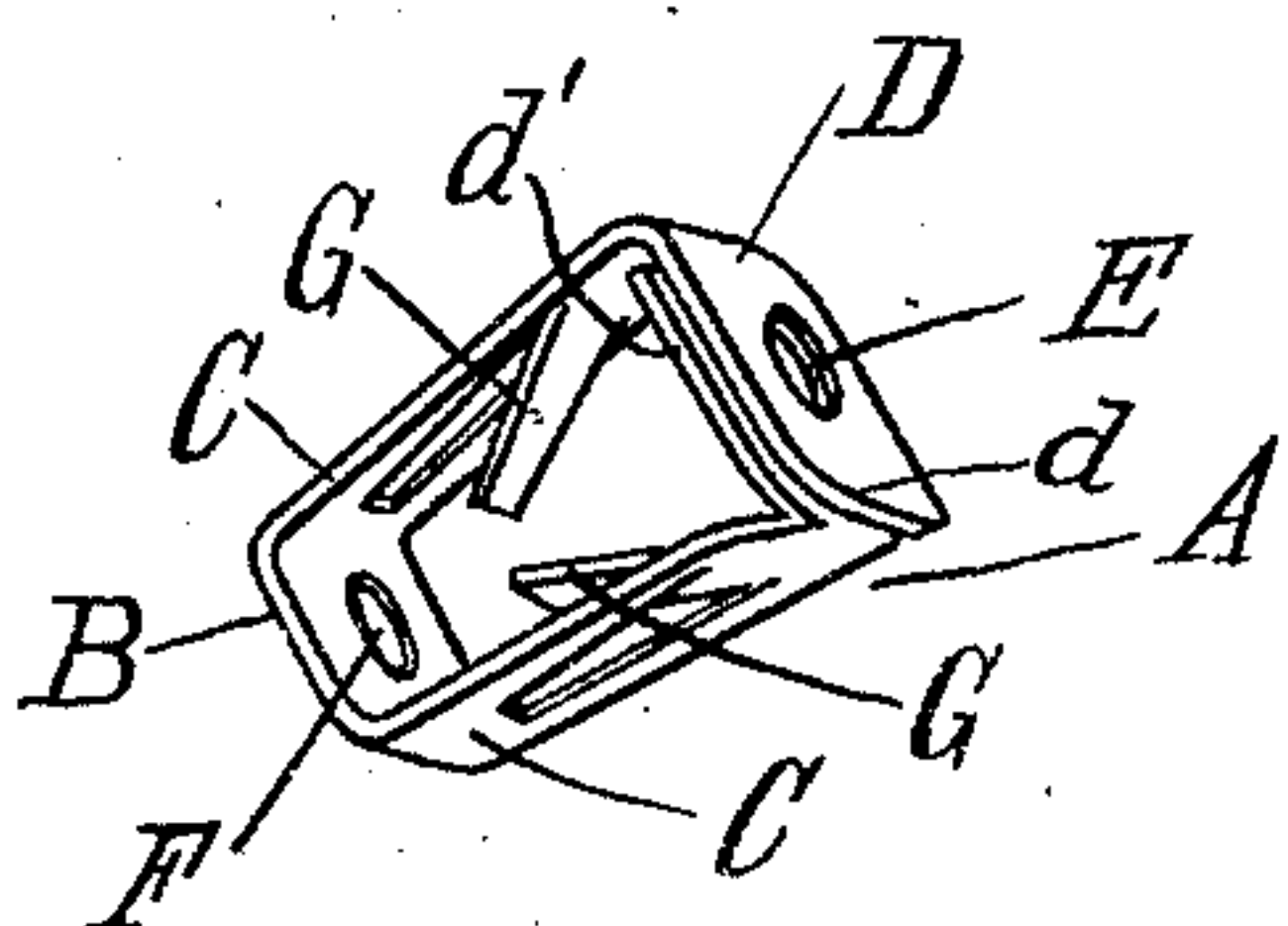


FIG. 5.

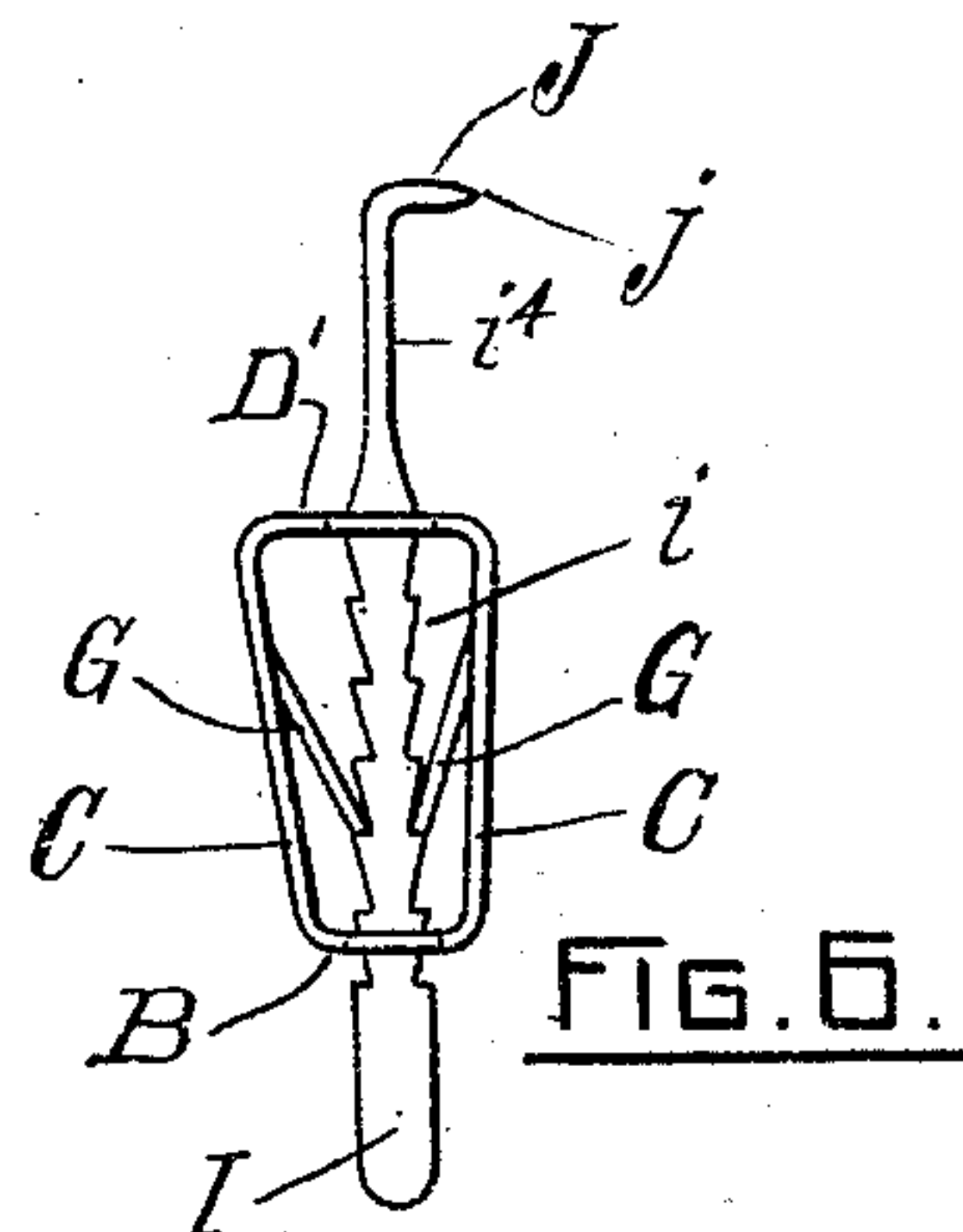


FIG. 6.

WITNESSES

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# UNITED STATES PATENT OFFICE.

ARTHUR DUFAULT, OF PROVIDENCE, RHODE ISLAND.

DOOR-SECURER.

976,444.

Specification of Letters Patent.

Patented Nov. 22, 1910.

Application filed September 23, 1910. Serial No. 583,384.

*To all whom it may concern:*

Be it known that I, ARTHUR DUFAULT, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Door-Securers, of which the following is a specification.

My invention relates to door securers and is purposed for portable use for the convenience of travelers and others desirous of an auxiliary means for locking a door.

The essential objects of my invention are those commonly sought in this class of devices; also convenience of manipulation, adaptability to use in conjunction with jambs of irregular outer dimensions, accuracy of operation, strength, simplicity and inexpensiveness of construction.

To the above ends primarily my invention consists in the novel construction and combination hereinafter set forth, and illustrated in the accompanying drawings wherein,—Figure 1 is a plan elevation of my se-curer engaged in a door, showing the door and jamb in transverse section, Fig. 2, similar elevation of the same showing the frame turned at an angle of 90 degrees from the position shown in Fig. 1, or in disengaged position, Fig. 3, a front end elevation of my device, Figs. 4 and 5, perspective views of the bar and frame respectively, and Fig. 6, a plan elevation of a modified form of my invention.

Like reference characters indicate like parts throughout the views.

In detail my device comprises a frame A which in its preferred form of embodiment comprises a rear outer end portion B, forwardly diverging, sides C and a forward portion D substantially parallel with the end B, preferably constructed from a thin resilient sheet of metal. The top D comprises a lip portion  $d$  integral with one of the sides C and bent to overlap a similar oppositely disposed lip portion  $d'$  integral with the opposite side C. The lip portions  $d$ ,  $d'$ , are in slidable contact with each other, and are provided respectively with openings E E' in longitudinal alinement with each other at one side of the centers of the lip portions. The end B of the frame is provided with an opening F.

Cut and bent from the material of the sides C of the frame are rearwardly and inwardly inclined tongues G. This form of frame is

adapted to very cheap construction, since it is bent up from a blank strip of metal in which the openings and lips have been previously pierced and cut by suitable tools. Two forward diagonally opposite corners of the frame, as at H, are cut away forming inclined surfaces to facilitate the rotation of the frame in contracted quarters.

I is a cylindrical rod or bar provided intermediate its length upon opposite sides with forwardly inclined teeth or corrugations  $i$ , whose side faces  $i^2$  are inclined, and whose forward faces  $i^3$  are not inclined. The forward portion of the rod I is flattened as at  $i^4$ , and terminates in a sharpened anchor portion J disposed at right angles to the body of the rod, and provided with sharp serrations  $j$ . The rod is mounted in the frame, passing loosely through the openings E, E', and F. The diameter of the openings E and E' are preferably of greater diameter than the thickness of the bar I which passes therethrough. The free ends of the tongues G engage the teeth  $i$  of the bar. The frame is capable of free forward movement upon the bar while the tongues are engaged, because of the forward inclination of the sides of the teeth; but cannot be moved rearwardly because of the surfaces  $i^3$ , unless the frame be given manually a quarter turn, bringing the tongues upon the smooth cylindrical surfaces of the bar I as shown in Fig. 2, whereupon the frame may be slid forwardly or back any desired distance.

The operation of my device is as follows: The forward end of the bar is inserted between the jamb K and door L with the member J embedded in the jamb. The frame A, in the position shown in Fig. 2 is then slid forward into contact with the door and jamb, and then given a quarter turn in the position shown in Fig. 1 whereupon the tongues G are brought into locked position. The narrower portion,  $m$ , of the end D, occasioned by the offset of the opening E, rests against the jamb, and the broader portion,  $n$ , against the door. This is especially convenient when, as is often the case, a beading or other elevation occurs upon the face of the jamb near the margin.

In Fig. 6 is shown a modified form of frame wherein the forward end D' is integral with both sides C.

What I claim is,—

1. In a door se-curer, the combination of



a flexible frame provided with openings in its ends, a lock bar rotatably mounted in the frame and extending through the openings, teeth upon opposite sides of the bar, and tongues upon the frame engaging the teeth.

2. In a door securer, the combination of a frame provided with a rear end and with independent overlapping forward ends, said forward ends and said rear end being provided with openings, a lock bar rotatably mounted in the frame and passing through the openings, teeth upon opposite sides of the bar, and tongues rigidly connected with the frame engaging the bar.

3. In a door securer, the combination of a frame comprising a broad forward end, a narrow rear end, and inclined sides, the forward end being provided with an opening off center, and the rear end being provided with a central opening, a lock bar rotatably mounted in the frame and extending through the openings, teeth upon opposite sides of the bar, and tongues integral with the sides of the frame adapted

to engage successively the teeth and the smooth portions of the bar, during the relative rotation of the parts.

4. In a door securer, the combination of a flexible frame, a lock bar rotatably mounted in the frame and provided on diametrically opposite sides with teeth having forwardly inclined side faces, tongues upon the frame slidably engaging the sides of the teeth in one direction, and adapted when the frame is given a quarter turn to slidably engage the bar in both directions.

5. In a door securer, the combination of a frame comprising a rear end, a front end, and sides forming corners upon the front end, the diagonally opposite front corners being inclined, a lock bar rotatably mounted in the ends of said frame, and tongues upon the frame adapted to engage the bar.

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

ARTHUR DUFAULT.

Witnesses:

HORATIO E. BELLOWS,  
WILLIAM E. TEFFT.