

(No Model.)

J. E. ARMSTRONG.
DOOR BOLT.

No. 540,532.

Patented June 4, 1895.

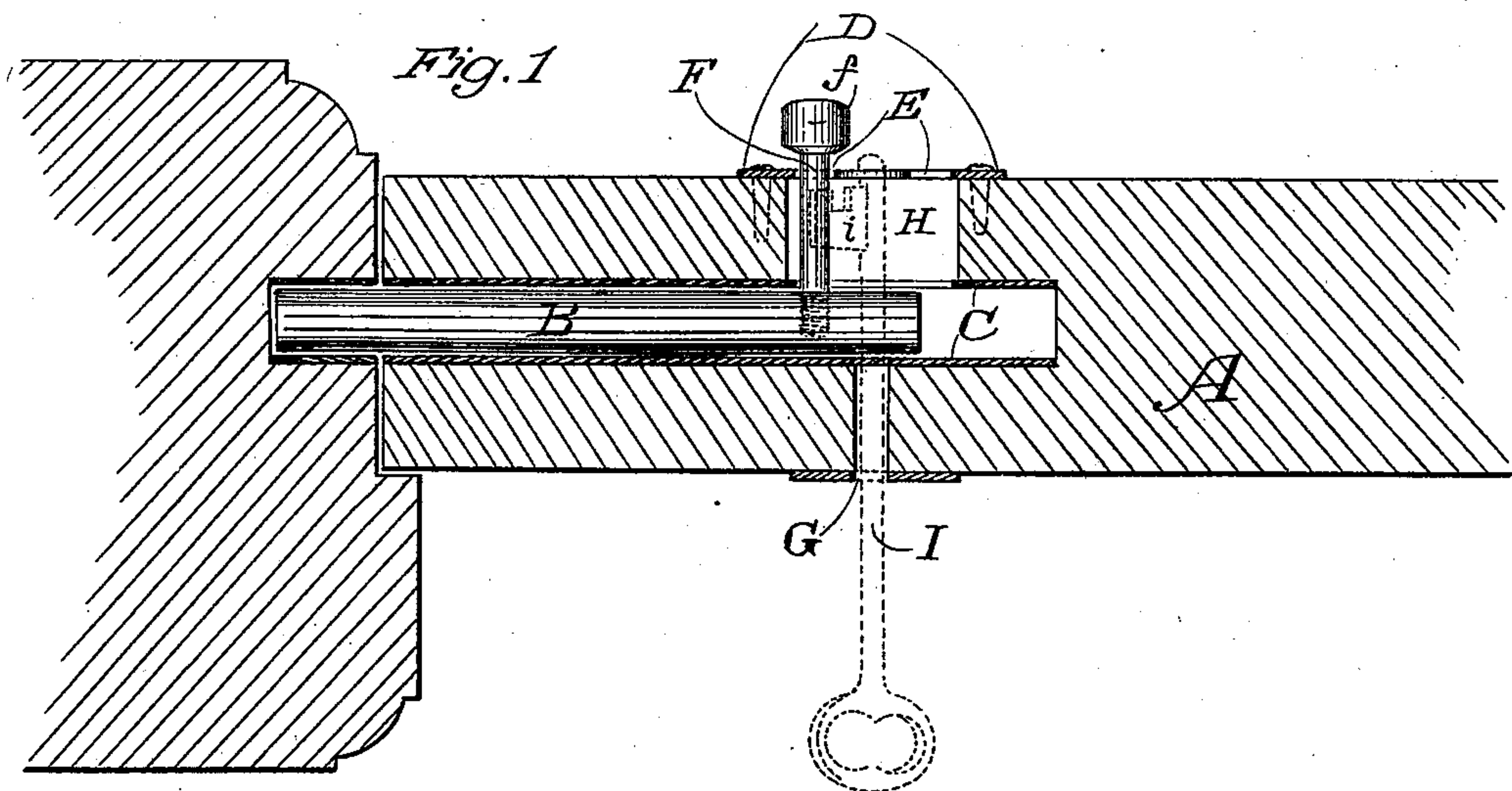
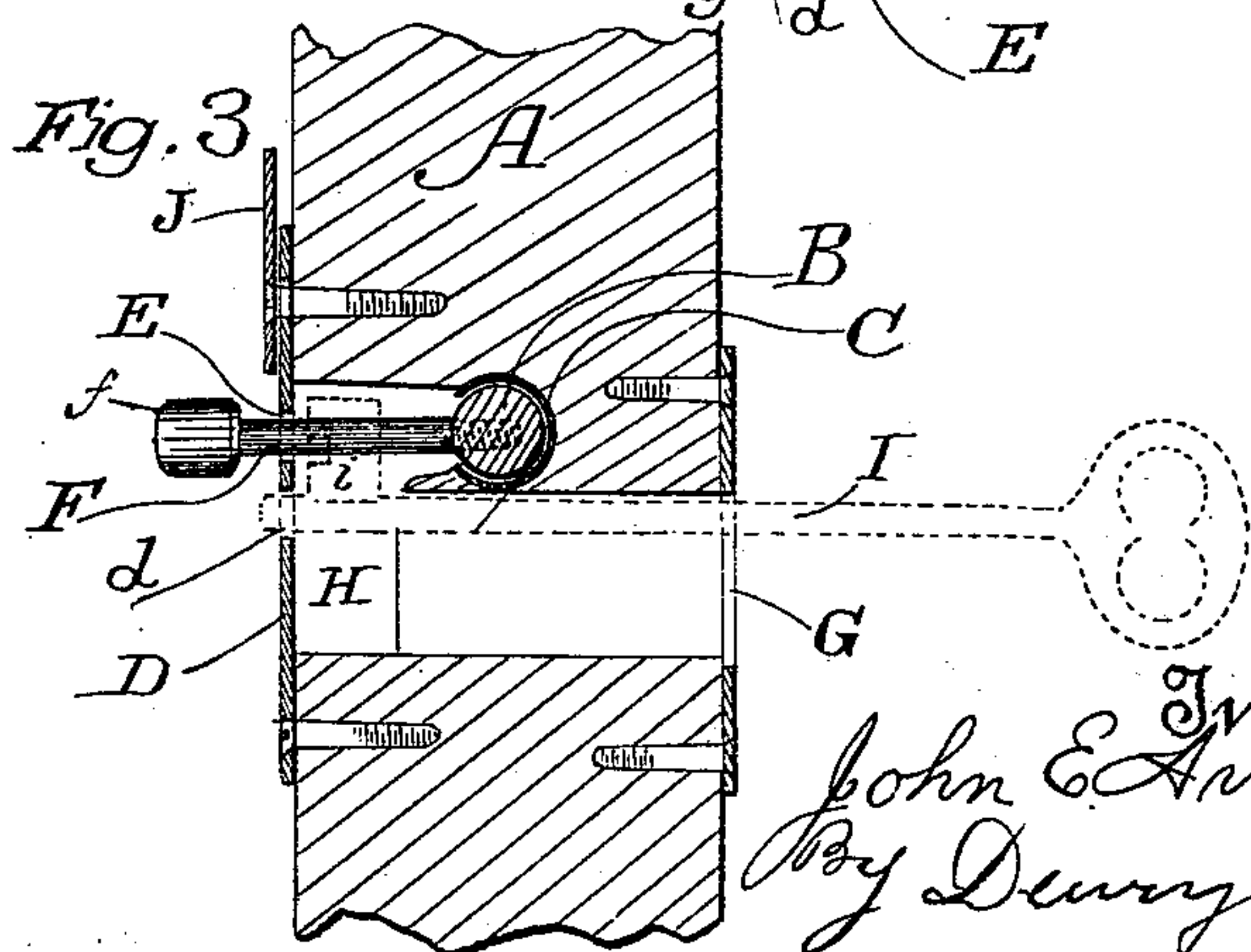
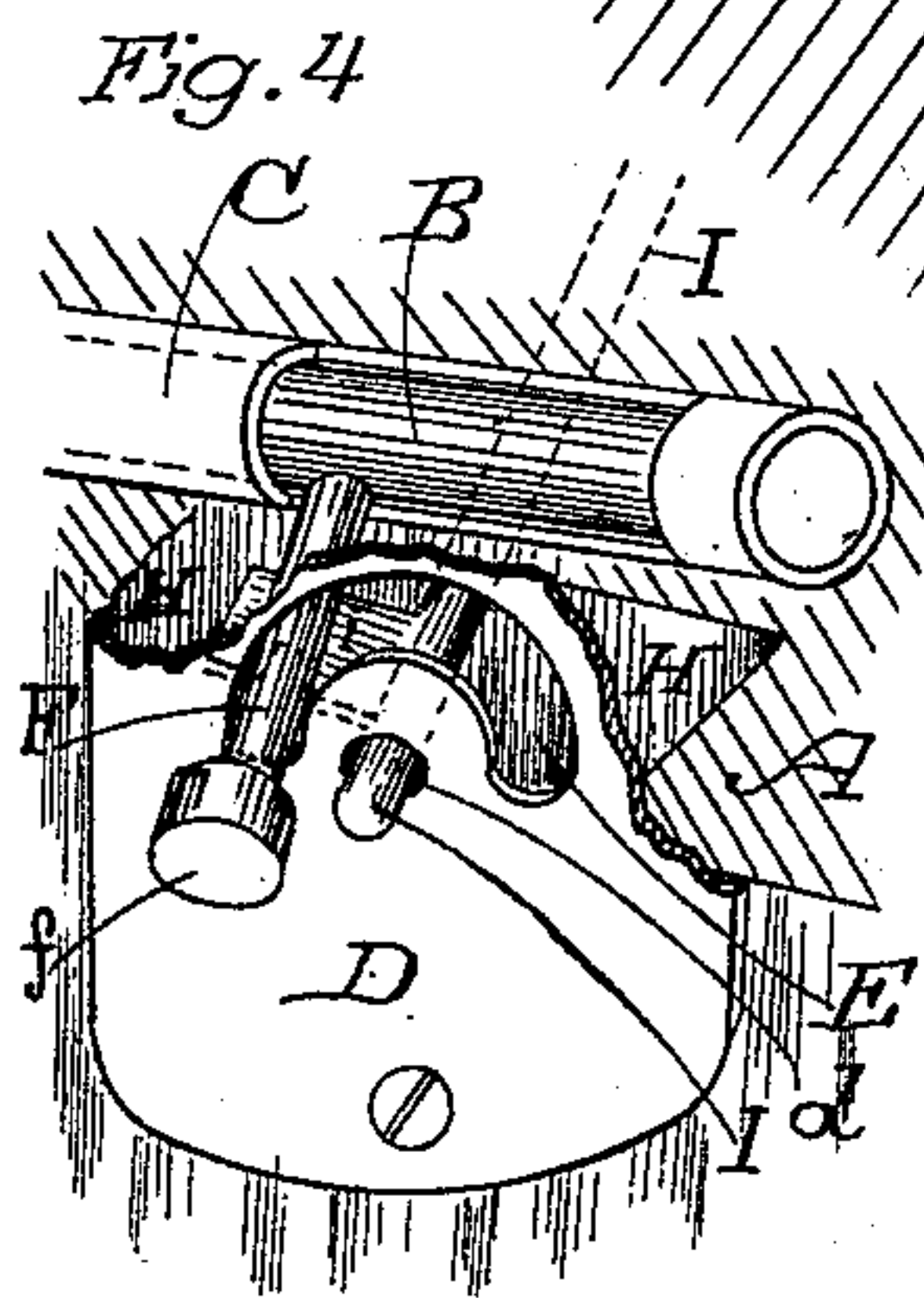
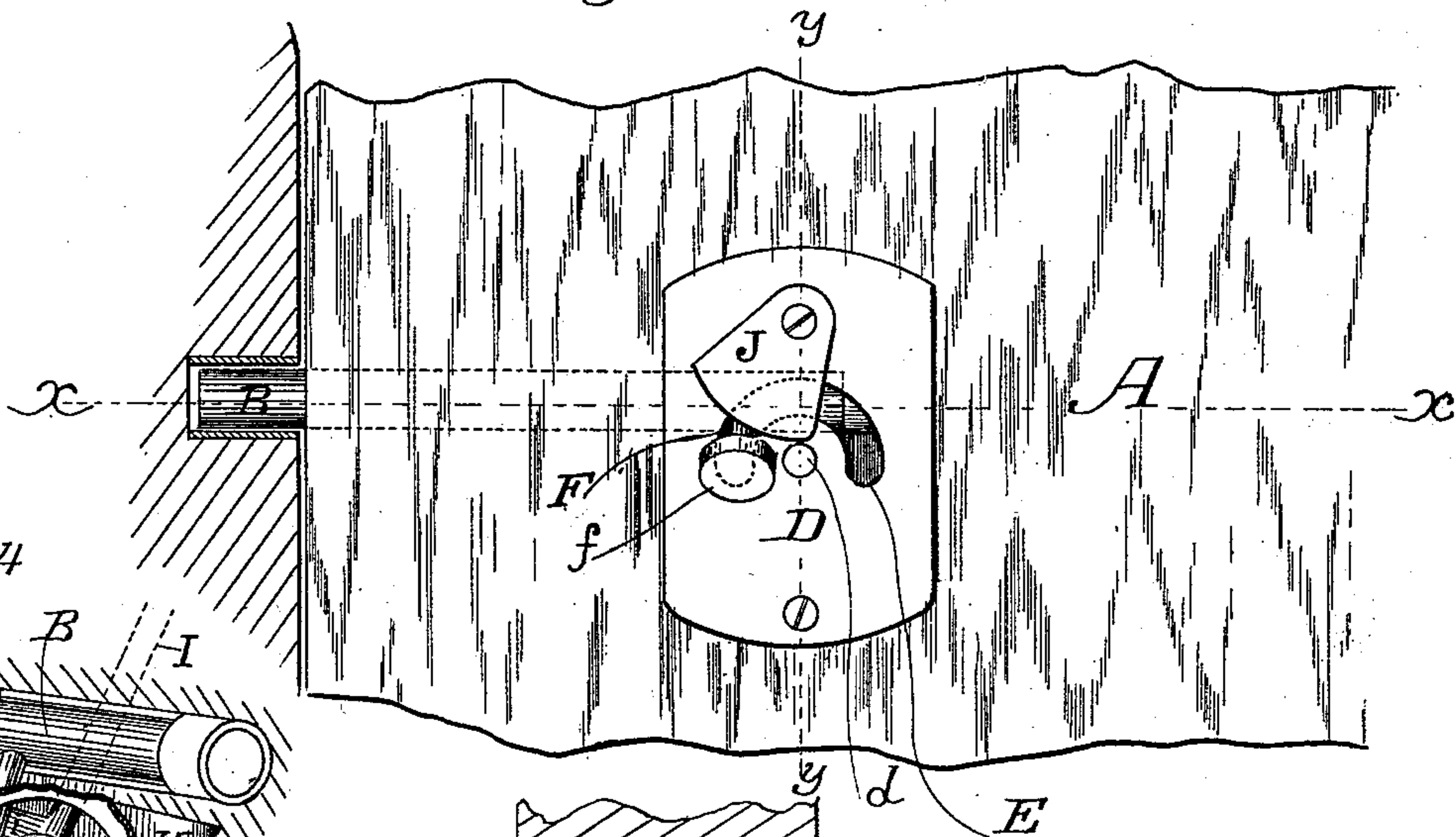


Fig. 2



Witnesses,
J. H. Morse
J. A. Bayless

Inventor,
John E. Armstrong
By Dewey & Co. attys

UNITED STATES PATENT OFFICE.

JOHN E. ARMSTRONG, OF SANTA CRUZ, CALIFORNIA.

DOOR-BOLT.

SPECIFICATION forming part of Letters Patent No. 540,532, dated June 4, 1895.

Application filed January 24, 1895. Serial No. 536,132. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. ARMSTRONG, a citizen of the United States, residing at Santa Cruz, county of Santa Cruz, State of California, have invented an Improvement in Door-Bolts; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the general class of door bolts, but especially to those sliding or shooting bolts intended to be used independently of what is commonly called a "door-lock," that is, one which contains, in addition to the usual mechanism for causing the key to project and withdraw the bolt, a latching mechanism for use in connection with a knob spindle and knob.

My invention consists of the constructions and combinations of parts hereinafter described and pointed out in the claims.

The object of my invention is to provide a simple and cheap door bolt which can be readily applied to the door, can be locked and unlocked by means of a key from the outside and can be positively locked against the action of said key, when desired, all of which provisions render the lock effective and useful.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a section on the line $x x$ of Fig. 2. Fig. 2 is an elevation of my door-bolt. Fig. 3 is a section on line $y y$ of Fig. 2. Fig. 4 is a perspective view of my door-bolt mechanism.

A is a portion of a door, in which is mounted and adapted to slide the bolt B. This bolt may be mounted in the door in any suitable manner, and I have here shown, for this purpose, an ordinary sheath C seated in the door.

An opening is made on the inner surface of the door whereby the inner end of the bolt is exposed, and this opening may be in the form of the curved guide, or preferably, and in practice, it is covered by a metallic plate D, in which is made the curved slot or guide E through which projects the handle F, the inner end of which is secured to the inner end of the bolt, and its outer end has a knob f . For simplicity's sake, the connection between the handle and the bolt is a screw one, the former screwing into the latter, whereby it

can be easily inserted and as readily removed, in order to remove the bolt.

The guide E may be of any suitable curve, sharp enough, however, to prevent the accidental movement of the handle therein, under a pressure tending to move the bolt back or forth; and it will be seen that by taking hold of the knob and raising the handle and at the same time moving it forward or back, the bolt, itself, will be turned axially, and will be reciprocated lengthwise as well, thereby projecting and retracting it; and at each end of its movement the handle will drop down into the extremities of the curved guide E and will thereby lock the bolt in that position.

A key-hole G is made from the outer side of the door and extends to the inner side thereof, and the door, immediately behind the plate D is so recessed or cut out to form a chamber or groove at H in which the bit i of the key I is adapted to play, so that said bit may rise up under and come in contact with either side of the handle F, and by its movement raise said handle and move it through out the length of the curved guide, thereby projecting or retracting the bolt, at pleasure. To hold and guide the key with accuracy its inner end may fit a hole d in plate D.

In order to lock the bolt against the action of its own key, I have pivoted on the inside a stop J, which ordinarily is out of the path of the handle, but which, when turned down, will traverse the curved guide and so lie in the path of said handle and keep it from moving, so that the bolt may be locked, either in a projected or a retracted position, from the inside.

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

1. An improved door bolt consisting of a slidable bolt mounted in the door and having a handle connected with the inner end of said bolt, and occupying a chamber or recess in the door which extends through one side of the door, a plate D secured to the door and closing the said chamber or recess, and having a curved slot or guide in which the handle of the bolt plays in reciprocating and locking the bolt, and a stop pivotally secured to said plate above the slot therein and adapted to

be swung down into the path of the said handle whereby the bolt may be locked, either in a projected or a retracted position, from the inside, all constructed and arranged to operate as herein described.

2. A door bolt structure consisting of a slidable bolt having a handle, a recess or chamber formed in the door and leading from the recess in which the bolt works out through the inner side of said door, a plate D covering the recess and having a curved guide in which the handle of the bolt works, said recess or chamber extending below the handle of the

bolt and adapted to receive the bit of a key whereby said bit in rising up on either side of the handle causes the reciprocation of the bolt, and a pivoted stop on the plate adapted to be turned into and out of the path of the handle whereby the bolt is locked against the action of its own key and is again released.

In witness whereof I have hereunto set my hand.

JOHN E. ARMSTRONG.

Witnesses:

S. S. JOHNSON,
LULU FRASER.