

No. 635,352.

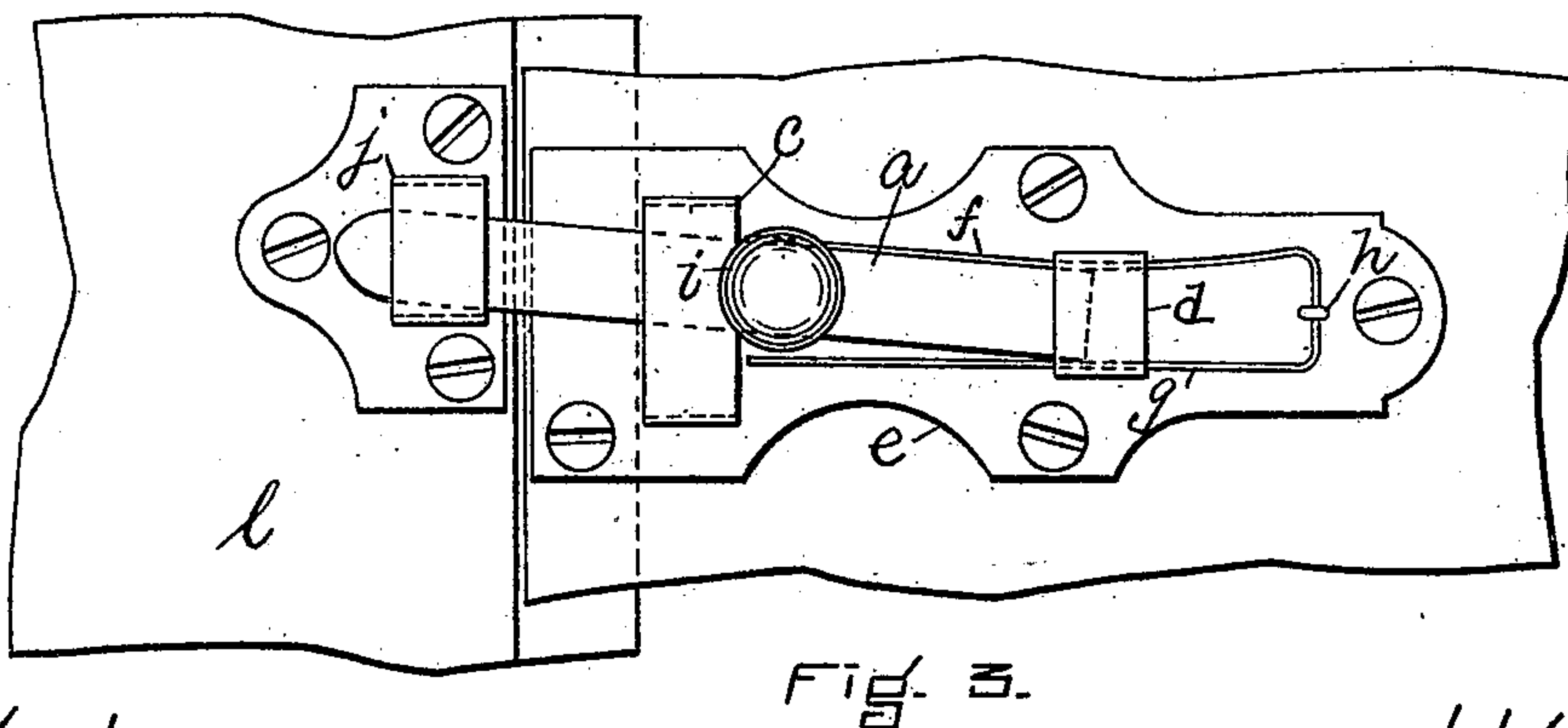
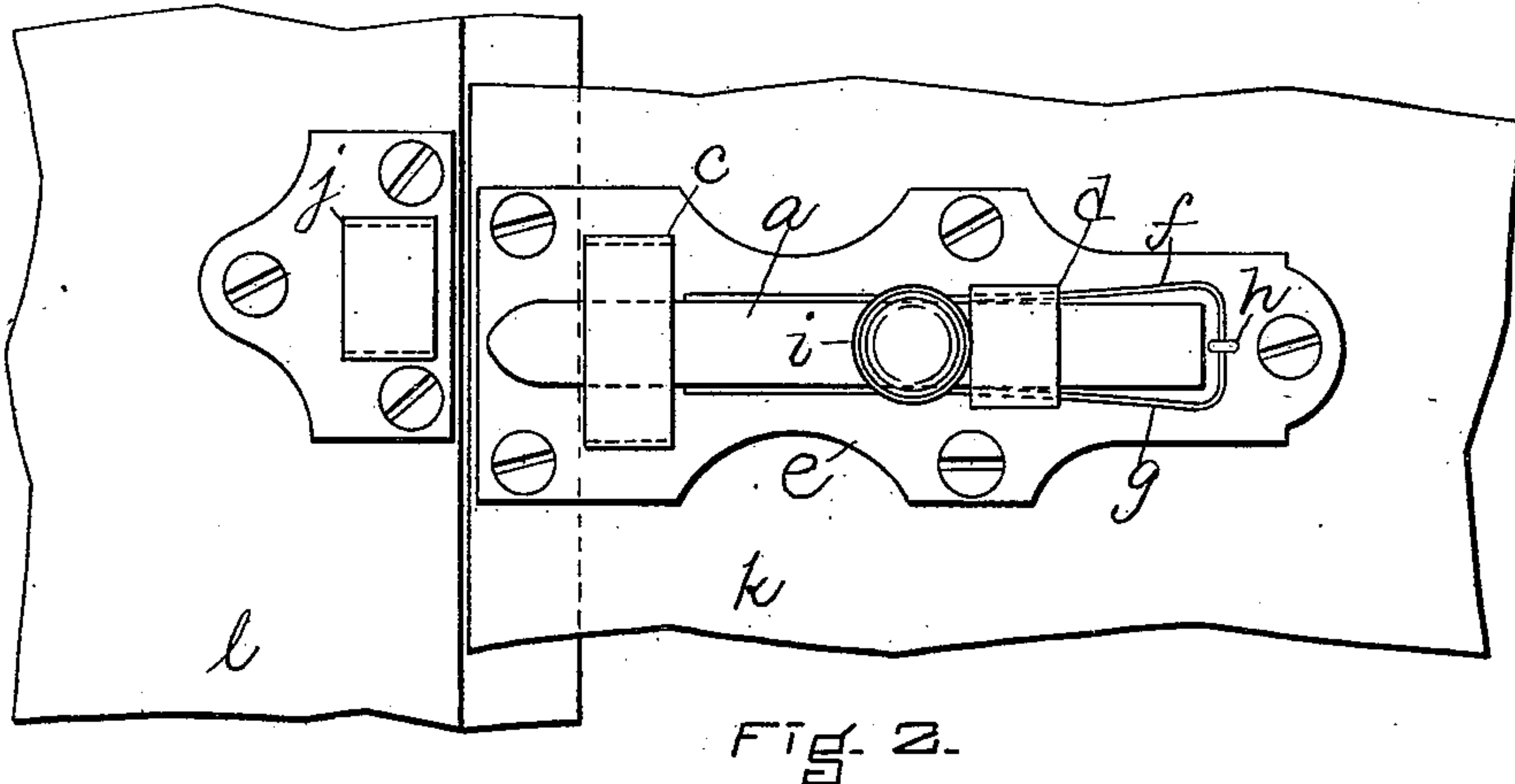
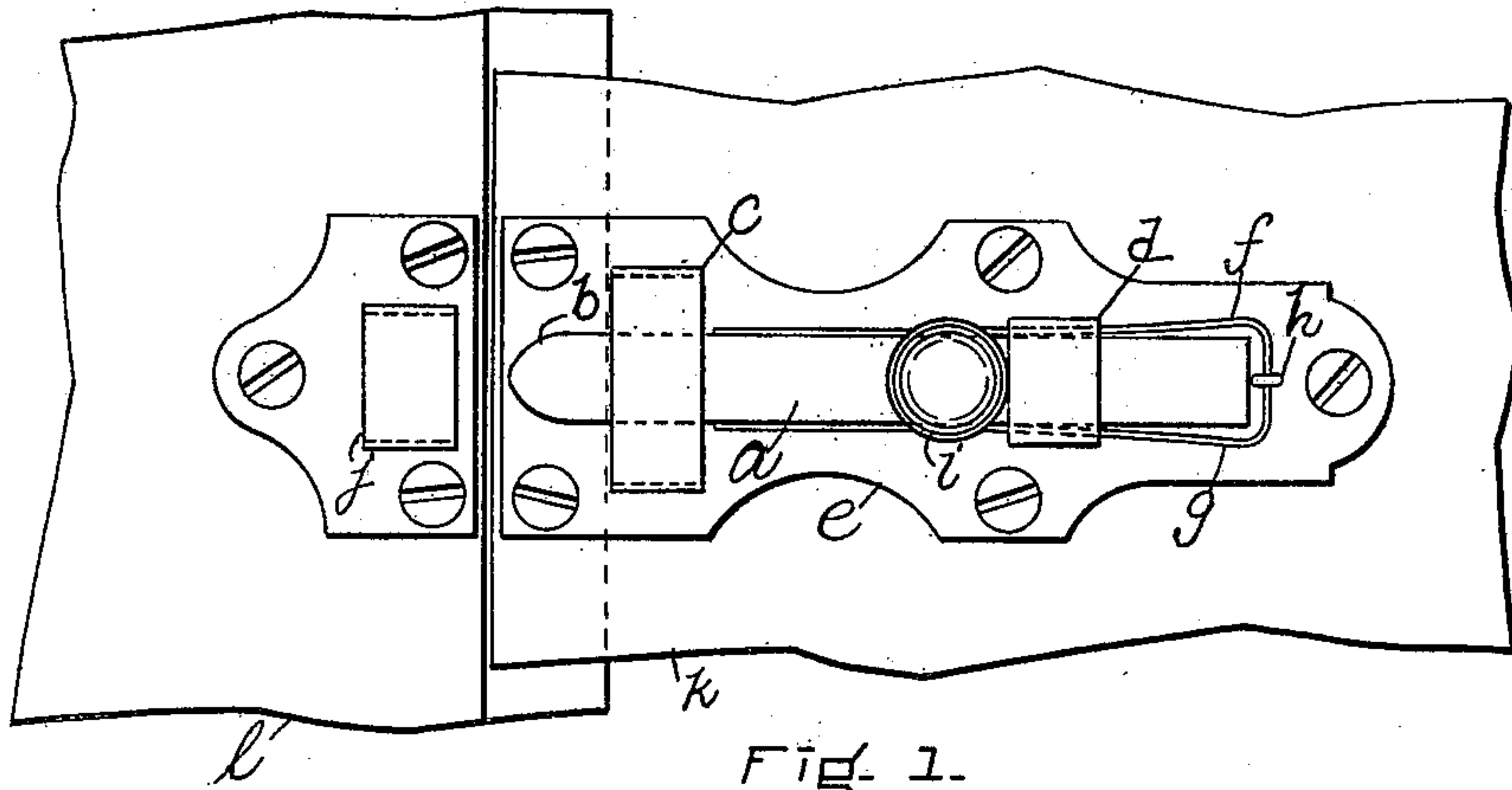
Patented Oct. 24, 1899.

C. W. SAWTELLE.

DOOR BOLT.

(Application filed July 18, 1899.)

(No Model.)



WITNESSES.

A. D. Grover.  
Fred E. Dorr.

INVENTOR.  
Clarence W. Sawtelle  
By Jas. F. Churchill  
Atty.

# UNITED STATES PATENT OFFICE.

CLARENCE W. SAWTELLE, OF WINCHENDON, MASSACHUSETTS, ASSIGNOR  
TO LEVI R. SAWTELLE, OF BROCKTON, MASSACHUSETTS.

## DOOR-BOLT.

SPECIFICATION forming part of Letters Patent No. 635,352, dated October 24, 1899.

Application filed July 18, 1899. Serial No. 724,225. (No model.)

*To all whom it may concern:*

Be it known that I, CLARENCE W. SAWTELLE, a citizen of the United States, residing in Winchendon, in the county of Worcester and State of Massachusetts, have invented an Improvement in Door-Bolts, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to a novel construction of bolt especially designed and adapted for use on doors of houses.

The invention has for its object to provide a bolt by which settling of the house or shrinking of the door or its casing may be compensated for and the bolt easily operated to lock the door in such cases. For this purpose I employ a bar or bolt proper which is laterally movable on its plate and preferably is engaged by a spring or springs which act on opposite sides of the bolt to center the same when withdrawn from its striker. The plate is provided with guides for the bolt, preferably of unequal widths, as will be described. These and other features of this invention will be pointed out in the claims at the end of this specification.

Figure 1 is an elevation of a sufficient portion of a door provided with a bolt embodying this invention to enable it to be understood; Fig. 2, a like view with the door in its settled position, and Fig. 3 a view like Fig. 2 with the bolt in its locked position.

The bolt herein shown as embodying this invention consists of a bar or rod *a*, provided with a rounded or cam-shaped front end *b* and movable longitudinally in guide-bars *c d*, affixed to or forming part of a plate *e*. The guide-bars *c d* are made wider than the bolt or bar *a*, so as to permit the latter to move laterally therein, as will be described, the front guide-bar *c* being made wider than the guide-bar *d*. The bolt or bar *a* has its opposite sides engaged by springs *f g*, preferably made as herein shown and forming part of a metal strip bent at or near its center and fastened to the plate *e* in any suitable manner, as by a staple or hook *h*. The springs *f g* extend through the guide *d* and preferably to near the front guide *c*.

The bolt or bar *a* is provided with a knob or handle *i*. In its normal position the bolt or bar *a* is held by its springs *f g* in a substantially central position with relation to the guides *c d*, and the plate *e* and striker *j* are secured to the door *k* and casing *l* in line with each other, as represented in Fig. 1.

In order to enable the door to be locked with ease in case the bolt *a* is moved out of line with the striker, as occurs from various causes—such, for instance, as the settling of the house—the bolt or bar *a* is made laterally movable, so that it may be moved into its striker when the said striker and bolt are out of line with each other, as shown in Figs. 2 and 3, Fig. 2 showing the bolt in its unlocked position and Fig. 3 in its locked position. The front end of the bolt or bar *a* is preferably made rounded, so that it may act as a cam to guide the bolt into its socket when the latter is moved longitudinally.

When the bolt *a* is moved backward out of its socket, it is returned from the position shown in Fig. 3 to its normal central position shown in Figs. 1 and 2 by the spring *f*.

It is evident that it is immaterial whether the door or the casing settles—that is, whether the plate *e* or the striker *j* is lower—as the bolt will work equally well in both cases.

The invention herein described avoids changing the striker and plate to overcome settling of the house, and in many instances the said striker and plate are carried out of line such a small distance as to prevent them being changed, as sufficient material is not afforded for making new screw-holes.

I have herein shown the bolt or bar *a* as flat in form; but I do not desire to limit my invention in this respect, as it may be made round or of other shape.

I claim—

1. A door-bolt comprising a plate provided with guides of unequal widths, and a bar or rod normally movable longitudinally in said guides in a central position and free to be moved laterally in opposite directions from said normal central path of movement, substantially as described.

2. A door-bolt comprising a plate adapted to be affixed to the door, a bar or rod movable longitudinally on said plate and free to



be moved laterally on said plate in opposite directions from said normal path of movement, and a spring engaging the opposite sides of said bar or rod to resist said lateral movement, substantially as described.

3. A door-bolt comprising a plate adapted to be affixed to the door, a bar or rod normally movable longitudinally on said plate in a central path and free to be moved laterally on said plate in opposite directions from said normal path of movement and provided with a cam-shaped front end adapted to direct said bar from either lateral position of the same, and springs engaging the opposite sides of said bar or rod to resist said lateral movement, substantially as described.

4. A door-bolt comprising a plate adapted to be secured to a door and provided with guides of unequal widths, the front guide being wider than the rear guide, a bar or rod movable longitudinally and laterally in said guides, and springs acting on the opposite sides of said bar or rod, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CLARENCE W. SAWTELLE.

Witnesses:

J. B. ELDREDGE,  
W. I. CHADWICK.