

No. 621,574.

Patented Mar. 21, 1899.

E. U. KINSEY.
LATCH FOR BOXES, &c.
(Application filed Oct. 31, 1898.)

(No Model.)

Fig. 2.

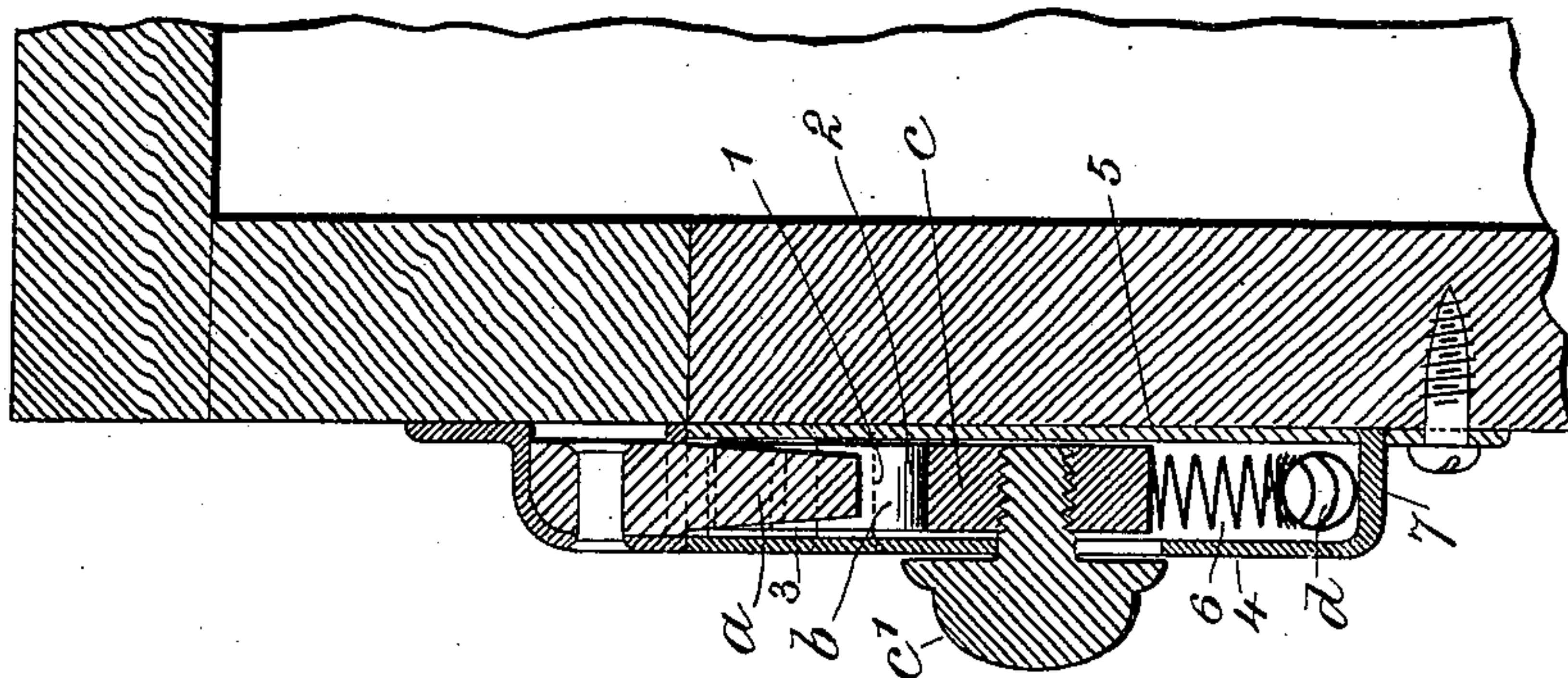


Fig. 1.

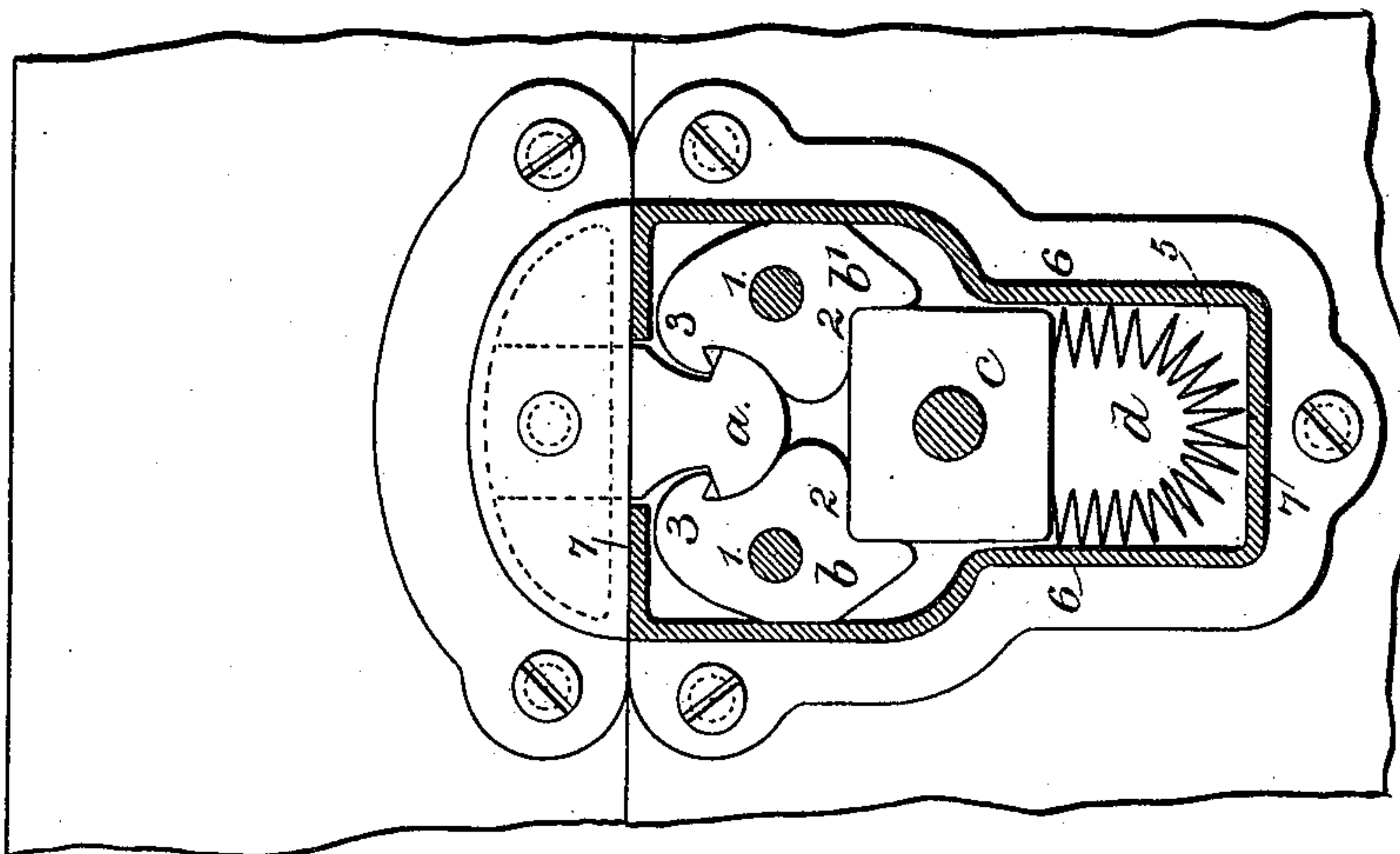
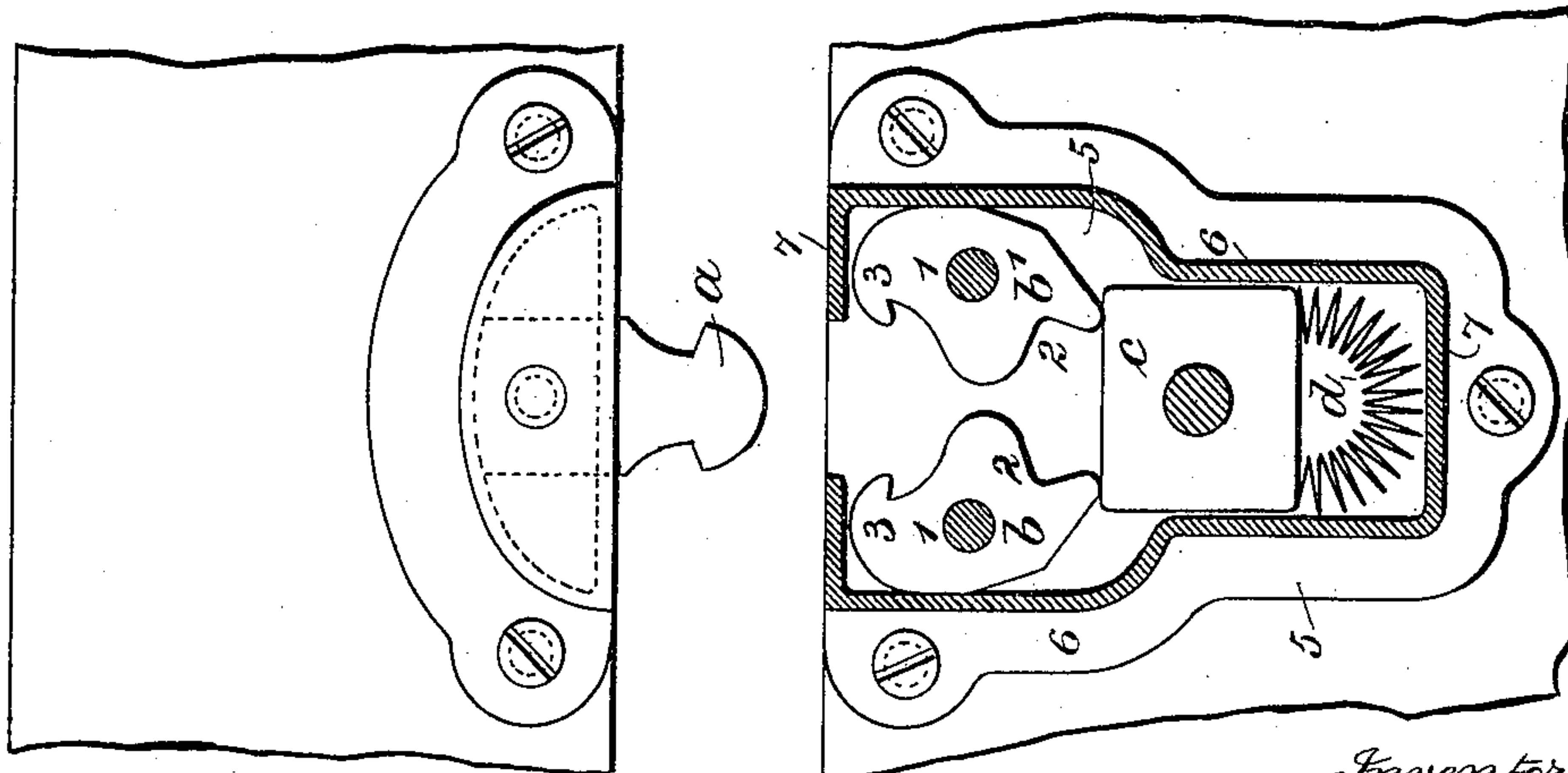


Fig. 3.



Witnesses

Chas H Smith
J. Staib

Inventor

Ernest U. Kinsey.
per L. W. Ferrell & Son
attys

UNITED STATES PATENT OFFICE.

ERNEST U. KINSEY, OF NEW YORK, N. Y.

LATCH FOR BOXES, &c.

SPECIFICATION forming part of Letters Patent No. 621,574, dated March 21, 1899.

Application filed October 31, 1898. Serial No. 694,993. (No model.)

To all whom it may concern:

Be it known that I, ERNEST U. KINSEY, a citizen of the United States, residing in the city, county, and State of New York, have
5 invented a new and useful Improvement in Latches for Cabinets, Boxes, &c., of which the following is a specification.

My invention relates to latches for cabinets, boxes, trunks, satchels, &c., and especially to cabinets for holding phonograph
10 cylinders or records, in connection with which my improvement holds the lid in a fixed relation to the body of the cabinet to prevent the endwise movement of the records, which
15 movement is injurious to their preservation. The device also holds the lid of a box, trunk, or other similar article in a fixed relation to the body, so as to prevent the movement of the one in relation to the other.

20 In carrying out my invention I provide a case having front, back, and edge plates, within which are pivoted tumblers of peculiar form, and a spring-actuated bolt for engaging and holding the tumblers in a fixed
25 position. This case is connected to one part of the cabinet or box, and secured to the other part is a latch-bar adapted to pass between and engage the tumblers. The pivoted tumblers are each made with a shoulder at one
30 end and with a hook at the other end, and the tumblers are placed so that said shoulders and the hooks are in opposition and move in opposite directions toward or from one another. When the latch-bar is in engagement
35 with the tumblers, the bolt is also in engagement with the tumblers to prevent motion and the withdrawal of the latch-bar, and when the bolt is moved endwise by finger-pressure upon a knob connected therewith
40 or otherwise the latch-bar is moved away from the tumblers and in said movement sets the tumblers ready for reengaging the edge notches of the latch-bar, and the released bolt is returned by the spring and holds
45 the tumblers in a fixed position ready for engagement with the latch-bar.

50 In the drawings, Figure 1 is an elevation representing my improvement with the parts in engagement. Fig. 2 is a vertical section of the same, and Fig. 3 is an elevation representing the parts separated.

The latch-bar is represented at *a*. It has notches with inclined bases on its opposite edges and is connected to one part, either the lid or the body of a cabinet, box, trunk,
55 satchel, or similar article.

b b' represent the pivoted tumblers, each made with a shoulder 2 at one end and a hook 3 at the other end. These tumblers are oppositely placed, so that the shoulders and
60 the hooks are in opposite positions.

The pivots 1 of the tumblers pass through or are secured to the front and back plates 4
5 of a case, the said case also having sides 6 and ends 7 and being of any desired configuration and adapted to be fastened either to
65 the outer or inner face of one part of a cabinet, box, trunk, satchel, &c., in any desired manner.

The bolt *c* is between the case sides 6 and
70 is movable longitudinally of the case. The spring *d* is a helix bent into U form within the case. I have adopted this form as insuring the greatest elasticity in a confined space; but any form of spring may be employed.
75

The knob *c'* has a stem passing through a mortise in the front or surface plate, and it is connected to the bolt, so that finger-pressure upon the knob will move the bolt against
80 the action of the spring and away from the tumblers. This bolt is received between the shoulders of the tumblers when the parts are in the position Fig. 1.

If the latch mechanism is connected upon the inner surface of the box or cabinet, the
85 stem of the knob will extend through the body of the same and the knob be outside, or the case may be made so as to connect the knob upon either side.

Referring to Figs. 1 and 2, the operation
90 of the parts is as follows: Finger-pressure upon the knob *c'* against the action of the spring *d* moves the bolt *c* away from the tumblers, relieving the tumblers and permitting the latch-bar *a* to be withdrawn from the case,
95 the withdrawal of the latch-bar causing its inclines to act against the hooks and swing the tumblers *b b'* apart on their pivots and leave them in the position Fig. 3, with the
100 back edges resting against the case, and the release by the finger of the bolt permits the spring to press the same against the ends of

the tumblers to hold them in the position shown in Fig. 3 ready for the reëntance of the latch-bar. When the cabinet, box, or similar article is closed, the latch-bar again
 5 enters the case and comes in contact with the curved surfaces of the tumblers *b b'*, compelling them to swing on their pivots and in the motion of swinging to bring the hooked ends into engagement with the edge notches of the
 10 latch-bar and simultaneously to slide the opposite ends off the face of the bolt, so that the same is projected by the action of the spring into engagement with the shouldered ends of the tumblers, the parts assuming the position
 15 shown in Fig. 1, where the latch-bar is securely held in place, the respective parts being of such coinciding configuration that a movement of the latch-bar is prevented.

With my improvement the mechanism contained in the case may be connected to either
 20 part of a cabinet, box, or similar article, the latch-bar being connected to the other part, and the operation is effected by the simple movement of the bolt by the fingers engaging the knob or otherwise, and the locking
 25 action is automatic when the parts are returned to a normal engagement.

I claim as my invention—

1. The combination with the case and the
 30 latch-bar having notches on opposite edges and an end projecting beyond the notches, of a pair of pivoted tumblers standing in opposite directions and having hook ends to engage the edge notches of the latch-bar and
 35 side projections that extend toward each other and against which the latch-bar acts to swing the tumblers and bring the hooks into engagement with the latch-bar and a bolt adapted to pass between and hold the tum-
 40 blers and means for moving the bolt, substantially as set forth.

2. The combination with the case and the latch-bar, of pivoted tumblers standing in opposite directions and having hook ends to en-
 45 gage the latch-bar, and projections that extend toward each other and against which the latch-bar acts to swing the tumblers and bring the hooks into engagement with the latch-bar, there being shoulders at the rear
 50 ends of the tumblers, a bolt and means for

moving the same between the shoulders to hold the tumblers, substantially as set forth.

3. In a latch, the combination with an inclosing case, of tumblers pivoted in the case, each having a hook at the forward end, a bolt
 55 for holding the tumblers, and means for operating the same, and a latch-bar having edge notches with inclines to be engaged by the hook ends of the tumblers, the inclines acting when the tumblers are released and
 60 the latch-bar is withdrawn to swing the pivoted tumblers out of the way, substantially as specified.

4. In a latch, the combination with an inclosing case, of tumblers, each having a
 65 shoulder at one end and a hook at the other end, and pivoted in said case in opposite positions, a bolt adapted to engage the shoulders of the tumblers, a spring for moving the said bolt in one direction, a knob to be en-
 70 gaged by the fingers for moving said bolt in the opposite direction and a latch-bar having edge notches and inclines adapted to be received between the hook ends of the tumblers and to be held thereby when the bolt
 75 is in engagement with the shoulders of the tumblers or to be released and withdrawn from the tumblers with the retraction of the bolt, substantially as and for the purposes set forth.
 80

5. In a latch, the combination with an inclosing case, of tumblers, each having a shoulder at one end and a hook at the other end and pivoted in said case in opposite positions, a bolt adapted to engage the shoul-
 85 ders of the tumblers, a spring for moving the said bolt in one direction, means for moving the said bolt in the opposite direction and a latch-bar having edge notches and inclines adapted to be received between the hook ends
 90 of the tumblers and to be held thereby, the bolt holding the tumblers in either of their positions, substantially as and for the purposes set forth.

Signed by me this 25th day of October, 1898. 95

E. U. KINSEY.

Witnesses:

GEO. T. PINCKNEY,
 HAROLD SERRELL.