

No. 673,253.

Patented Apr. 30, 1901.

D. W. GOODELL.

LOCK HINGE.

(Application filed Feb. 23, 1901.)

(No Model.)

Fig. 1.

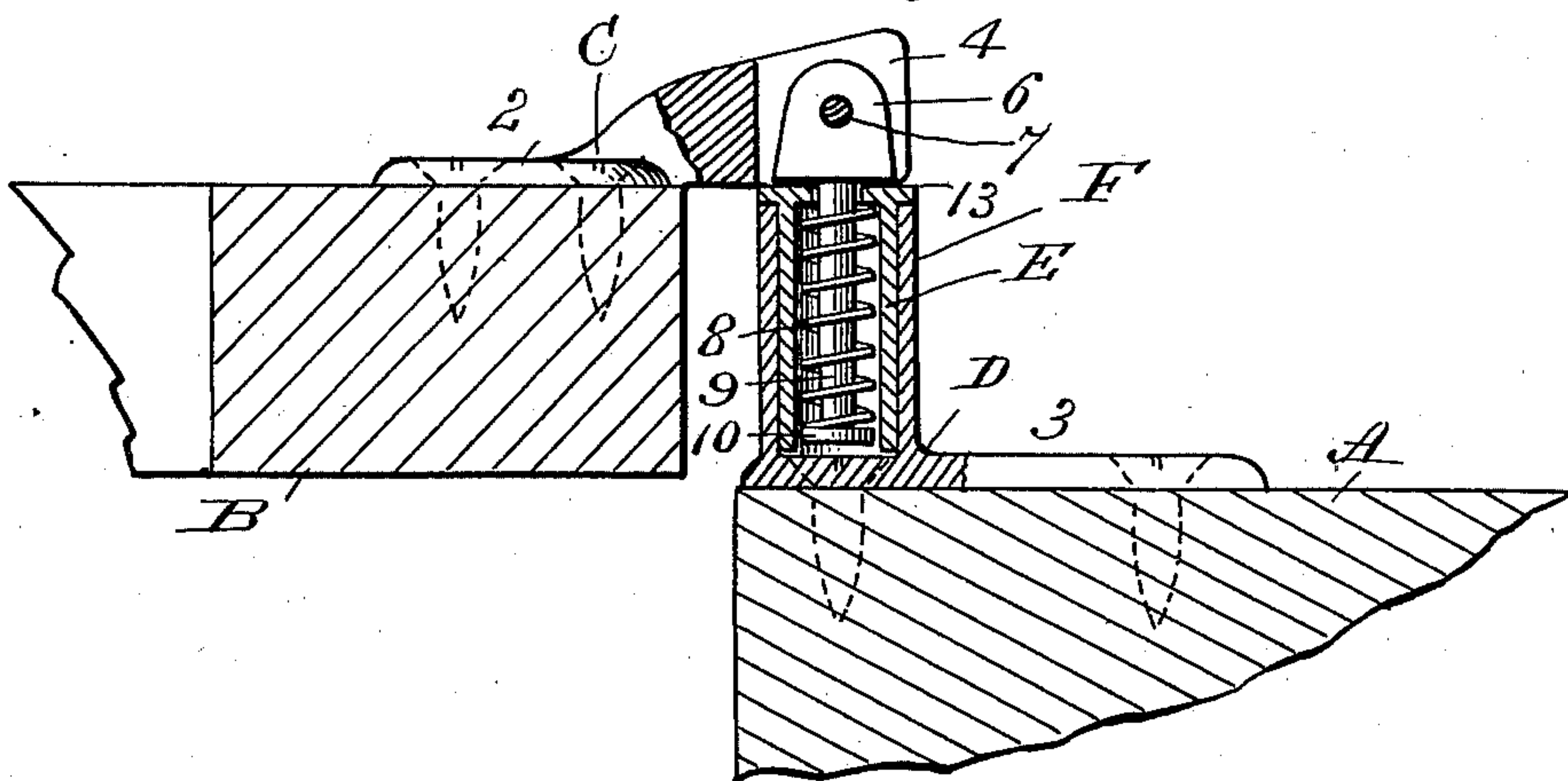


Fig. 2.

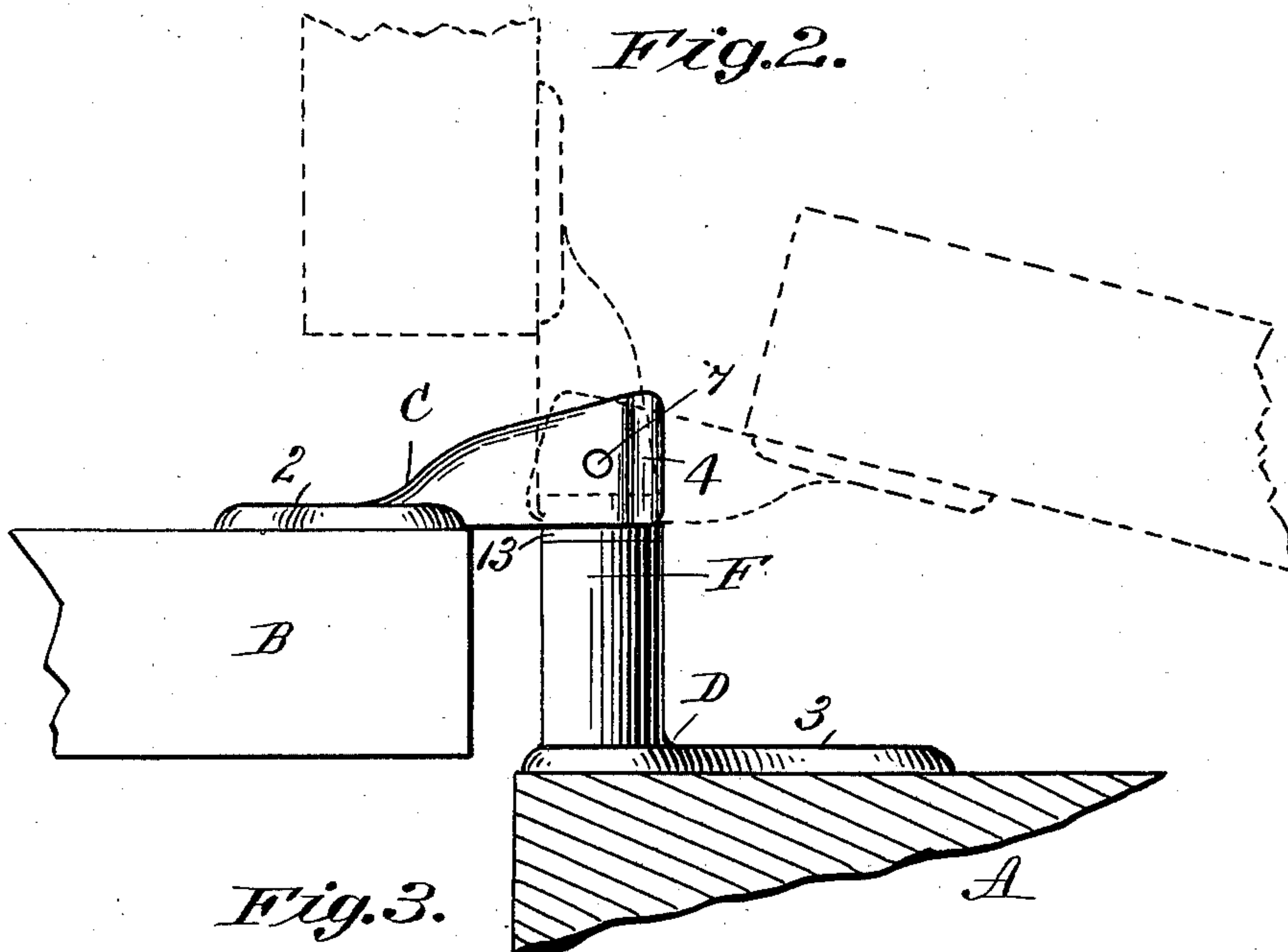
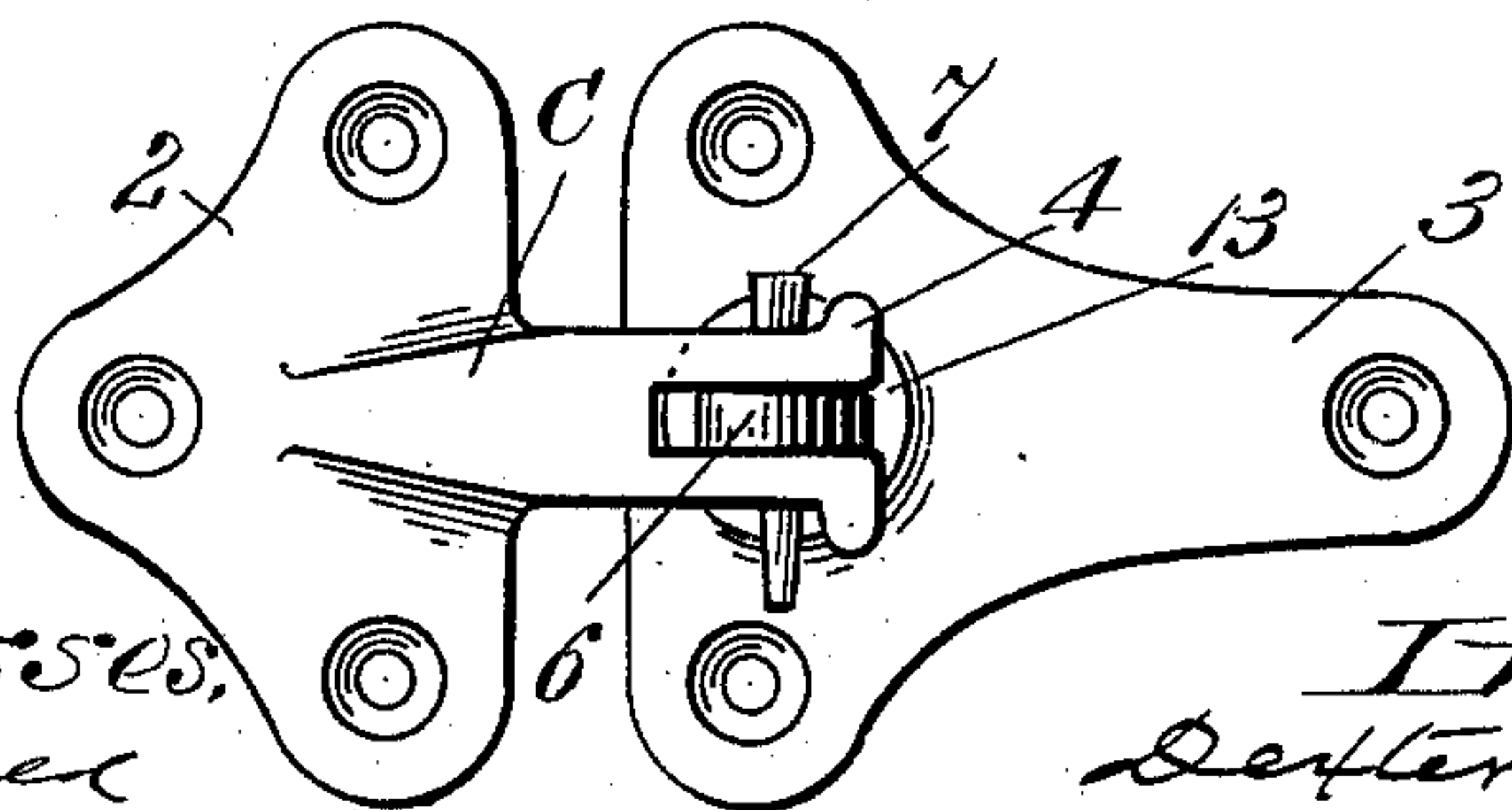


Fig. 3.



Witnesses,
J. W. Garfield
H. L. Clemons

Inventor
Dexter W. Goodell
by *Chapman & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

DEXTER W. GOODELL, OF GREENFIELD, MASSACHUSETTS, ASSIGNOR TO
HALE & BENJAMIN, OF SAME PLACE.

LOCK-HINGE.

SPECIFICATION forming part of Letters Patent No. 673,253, dated April 30, 1901.

Application filed February 23, 1901. Serial No. 48,608. (No model.)

To all whom it may concern:

Be it known that I, DEXTER W. GOODELL, a citizen of the United States, residing at Greenfield, in the county of Franklin and State of Massachusetts, have invented new and useful Improvements in Lock-Hinges, of which the following is a specification.

This invention relates to lock-hinges for window and other blinds, the object being to provide an improved construction of that part of the hinge which is secured to the fixed frame of a window or door frame whereby the boring of large holes in said frame to receive parts of the hinge is avoided and improved means for securing the body of the hinge thereto are provided; and the invention consists in the peculiar construction of said body of the hinge and of the parts thereof having operative connection with said part of the hinge which is attached to the blind or door, all as hereinafter fully described, and more particularly pointed out in the claim.

In the drawings forming part of this specification, Figure 1 illustrates in section portions of a door-frame and of a blind or door and shows a blind-hinge uniting said frame and blind parts, partly in section, embodying my improvements. Fig. 2 is a side elevation of the blind-hinge and shows a portion of a blind in side elevation and a part of a window-frame in section connected thereto. Fig. 3 is a top plan view of the blind-hinge.

In the drawings, A indicates a part of a fixed window-frame, and B a part of a blind-frame. The leaf of the hinge connected to said blind-frame B is indicated by C, said leaf having a bifurcated head 4 and a flat base 2 on the end thereof opposite to said head, through which screws pass for connecting the leaf to a blind as aforesaid and as shown in Fig. 1.

The hinge-body D comprises the flat base 3, which is adapted to be secured to the face of the part A (which, as aforesaid, represents a portion of a window or door frame) by screws, as indicated in Fig. 1, or by other suitable means. Said hinge-body comprises a tubular barrel F, integral with its said base 3, standing at right angles to the latter, which is adapted to receive the below-described devices, which constitute connections between said leaf and hinge-body, whereby said parts

are operatively united, and the leaf and the blind connected therewith are spring-actuated for swinging said blind from an open to a shut position, and vice versa, and for retaining said blind in either a shut or open position. Said connections between said leaf and body comprise the cylindrical plunger 9, having the flat head 6 on its outer end perforated to receive a pin 7, which pivotally unites the head 4 of the leaf C thereto. Said plunger has also a circular head 10 on the lower end thereof, which is preferably secured thereon by riveting the end of the plunger thereagainst after placing thereon the spring 8, or said head 10 may be otherwise secured if preferred. The plunger 9 and its spring 8 are contained in the cylinder E, as shown, which has a perforated head, as shown, through which said plunger extends, an inner surface against which the upper end of said spring abuts, and a projecting rim 13, which covers the upper end of said barrel F, as shown.

In assembling all of the parts of the hinge, whereby they are caused to occupy the relative positions shown in Fig. 1, the cylinder E, the plunger 9, and spring 8 are united, as described, and said cylinder is then forced into the barrel F of the hinge-body D, said barrel having an internal diameter slightly less than the outside diameter of said cylinder E, whereby said cylinder is frictionally held firmly therein in the position shown. The leaf C of the hinge is then connected to the head 6 of the plunger 9 by the pin 7.

The operation of the within-described devices when connected between a frame part of a structure and a hinged or other swinging part is as follows: Figs. 1 and 2 indicate the positions of the hinge parts when holding a blind in closed position by the action of the spring 8 against the circular head 10 of the plunger 9, whereby the head 6 of said plunger and the head 4 of the leaf C are firmly drawn and held against the outer end of the cylinder E, thereby holding said blind in the position stated. Upon swinging said blind to open the same the angular head 4 of the leaf C acts as a lever against said outer end of the cylinder E and draws the said plunger outward against the resistance of said spring,

and the blind may then be retained in half or a fully open position by the engagement of the borders of the head 4, said spring being under tension in the several positions.

5 Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

In a blind-hinge, the hinge-body comprising a base, and a barrel integral therewith
10 projecting from the outer side of said base, the leaf of the hinge, a plunger pivotally con-

nected to said leaf, a cylinder having a perforated head, through which said plunger extends, fixed within and to said barrel, a spring on said plunger compressed between said perforated head, and a head secured on the free
15 end of said plunger, substantially as described.

DEXTER W. GOODELL.

Witnesses:

H. A. CHAPIN,

K. I. CLEMONS.