

(No Model.)

B. L. WRIGHT.
LATCH.

No. 400,814.

Patented Apr. 2, 1889.

Fig. 1.

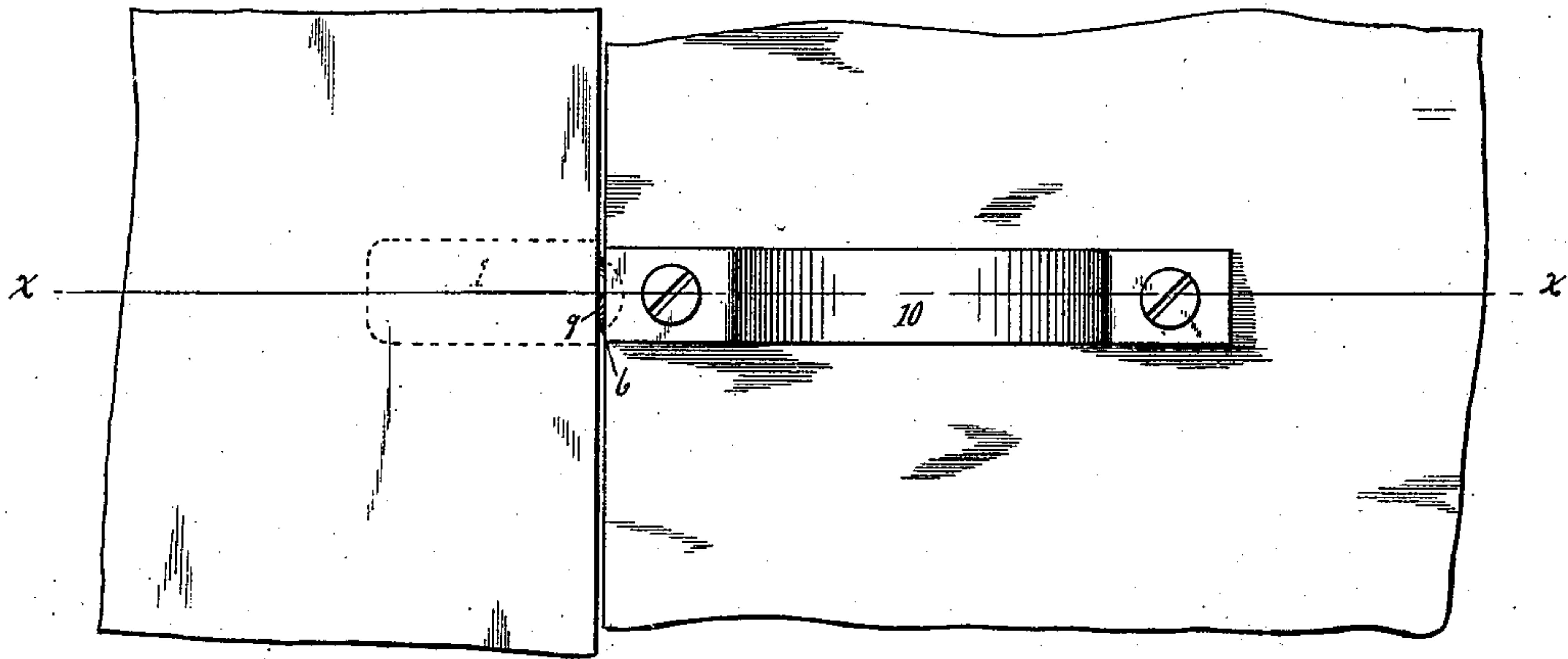


Fig. 2.

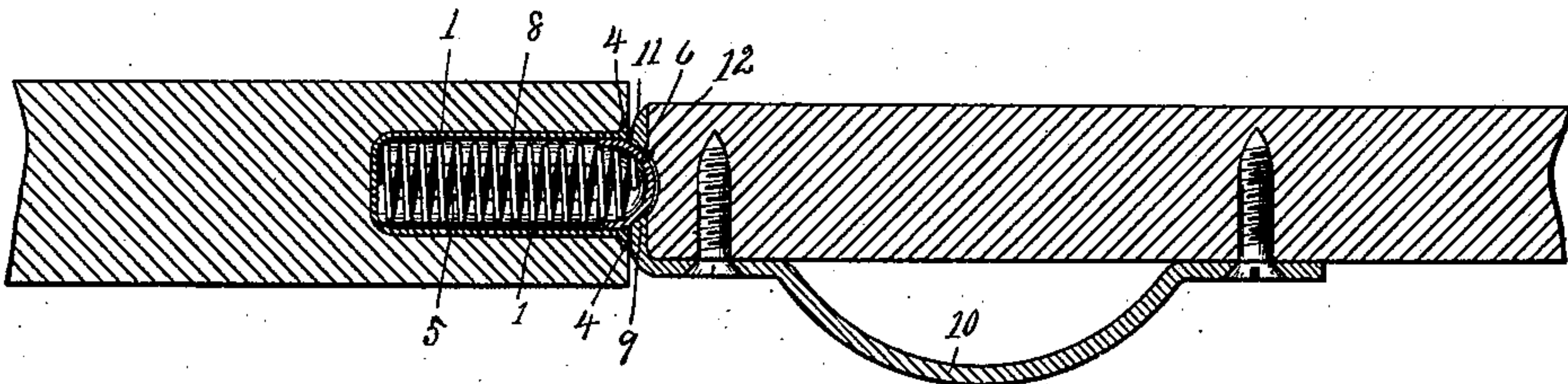


Fig. 3.

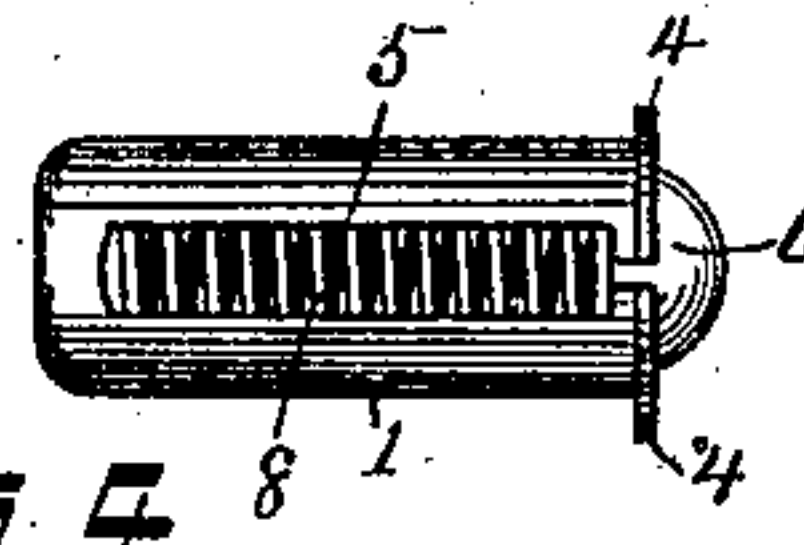


Fig. 4.

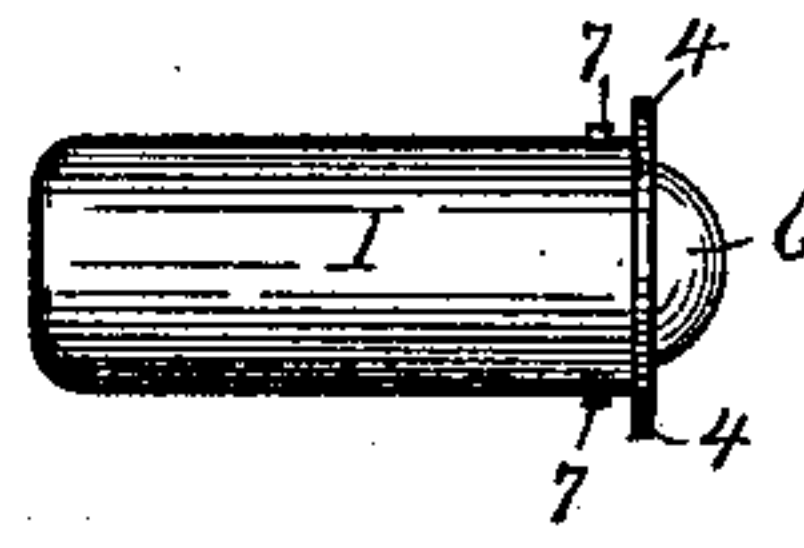


Fig. 5.

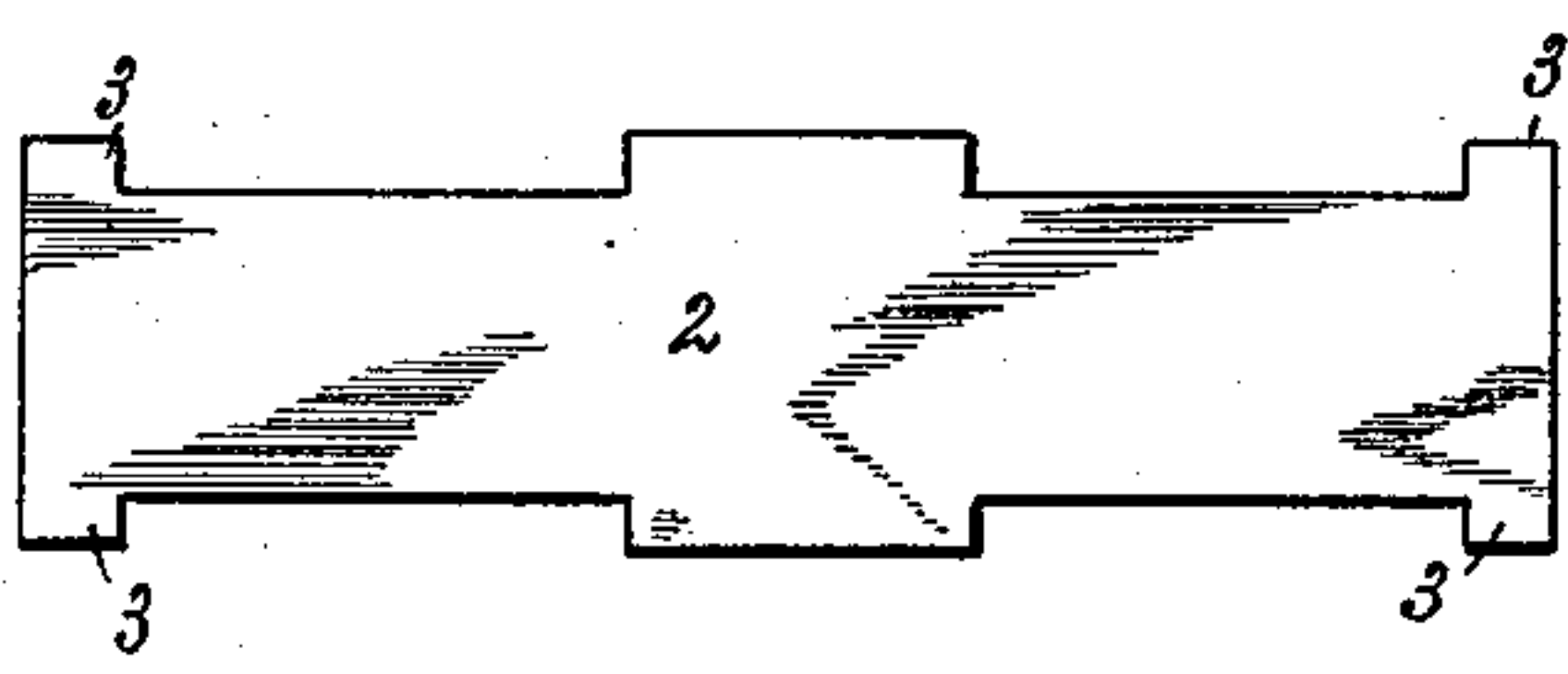
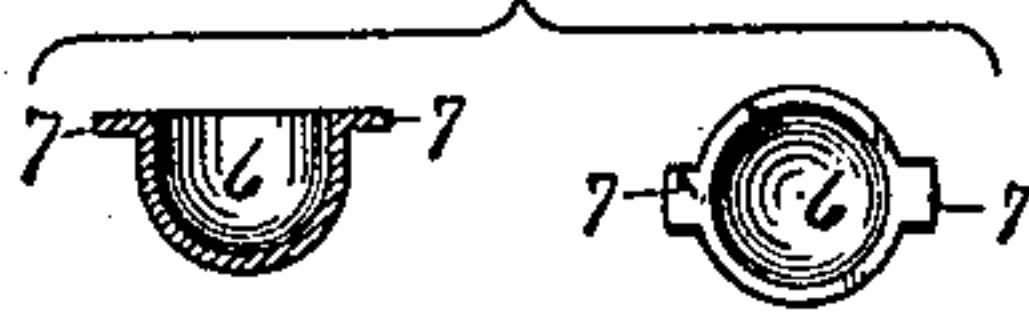


Fig. 6.



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LATCH.

SPECIFICATION forming part of Letters Patent No. 400,814, dated April 2, 1889.

Application filed December 26, 1888. Serial No. 294,620. (No model.)

To all whom it may concern:

Be it known that I, BERTON L. WRIGHT, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Latches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the class of latches used upon wardrobe, cupboard, and other doors which it is desired to have remain in the closed position when slammed or pushed shut, but which may be readily opened by a slight pull without the necessity of operating supplemental devices of any sort, and has for its object to simplify and cheapen the construction, while at the same time the operation in use shall be greatly improved. With these ends in view I have devised the novel improvements in the details of construction, of which the following description, in connection with the accompanying drawings, is a specification, numbers being used to denote the several parts.

Figure 1 is an elevation illustrating my novel latch in use, the position of the bolt-case being indicated by dotted lines; Fig. 2, a section on the line *xx*, in Fig. 1; Figs. 3 and 4, elevations of the bolt-case and bolt, the assembled case being turned a quarter around; Fig. 5, a view of the blank from which the bolt-case is formed, and Fig. 6 a plan view and section of the bolt detached.

My novel latch consists of four parts only—viz., the bolt-case, the bolt, the striker, and the spring—all of the parts except the spring being struck up from sheet metal.

1 denotes the bolt-case, which is formed from a blank denoted by 2. This blank is ordinarily formed with enlargements, substantially as shown, at the center, and has on its sides at the ends lugs or projections 3, the purpose of which will presently be explained, the ends of the blank being parallel, as shown. In the manufacture this blank is formed in dies into cylindrical form, the bottom of the cylinder being formed from the metal at the center of the blank, and the ends of the blank are turned outward, forming a circular flange, 4, at the

outer end of the bolt-case. In the opposite sides of the bolt-case are slots 5, the inner ends of which are formed by the enlargement at the center of the blank, and the outer ends by lugs or projections 3. The bolt (denoted by 4) is simply a cup struck out from sheet metal and having at its opposite sides lugs or projections 7, which when the parts are assembled engage slots 5 in the bolt-case. Within the bolt-case is a spring, 8, one end of which bears against the bottom of the case and the other against the bottom of the cup which constitutes the bolt. The outer ends of slots 5 are engaged by lugs or projections 7 and serve as stops to limit the outward movement of the bolt.

In assembling, the springs simply have to be dropped into the bolt-cases and the bolts sprung into place, the sides of the case yielding readily to allow lugs 7 to be sprung into slots 5, and then closing together and holding the parts securely in place.

9 denotes the striker, which I preferably make integral with an operating-handle, 10. The inner end of the striker is beveled or inclined, as at 11, so as to permit the bolt to ride up the incline without shock or unnecessary friction in the act of closing, and is provided with a beveled opening, 12, to receive the end of the bolt in the locked position, as is clearly shown in Fig. 2. A slight socket is preferably made in the wood of the door concentric with opening 12 to receive the extreme end of the bolt.

As already stated, the striker is simply blanked out from sheet metal, any ornamental form being adopted, if desired, that being a matter wholly within the taste of the manufacturer and likely to be regulated solely by the requirements of the trade. The handle portion of the striker is bent at right angles to the portion containing opening 12, is then curved outward, then inward again, and terminates in a second straight portion in line with the first straight portion, the part being secured to the door by screws passing through holes in the straight portion. These details of construction may of course be varied to an almost unlimited extent without departing from the spirit of my invention. The bolt-case does not require se-

curing in the jamb or casing in any way. The hole is bored of just sufficient size and depth to receive it, and the bolt-case simply has to be pressed in, flange 4 serving as a neat finish for the outer end thereof.

The operation is so simple as hardly to require explanation. When the door is pushed or thrown to the closed position, the bevel or incline at the inner edge of the striker first comes in contact with the bolt and forces it back into the case slightly. As soon as the beveled opening in the striker registers with the bolt the spring forces the bolt into it and locks the door lightly but securely in position—that is, securely enough to hold it against anything but a decided pull. To open the door, it is simply necessary to give it a slight pull by means of the handle. This causes the end of the bolt to ride up the inner side of the bevel of opening 12, the bolt being forced back slightly into the case, and leaves the door free again.

Having thus described my invention, I claim—

1. The combination, with a cup-shaped bolt having lugs; of a sheet-metal case having slots engaged by said lugs, and a spring acting to force the bolt outward.

2. A cylindrical bolt-case formed from a blank of sheet metal having an enlargement at the center and projections at its opposite ends, said blank being doubled upon itself, so that the enlargement forms the closed inner end of the case and the inner ends of the slots, the projections forming a flange, 4, at the outer end of the case and the outer ends of the slots.

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

BERTON L. WRIGHT.

Witnesses:

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