

(No Model.)

J. BERKEY.
BOLT.

No. 442,941.

Patented Dec. 16, 1890.

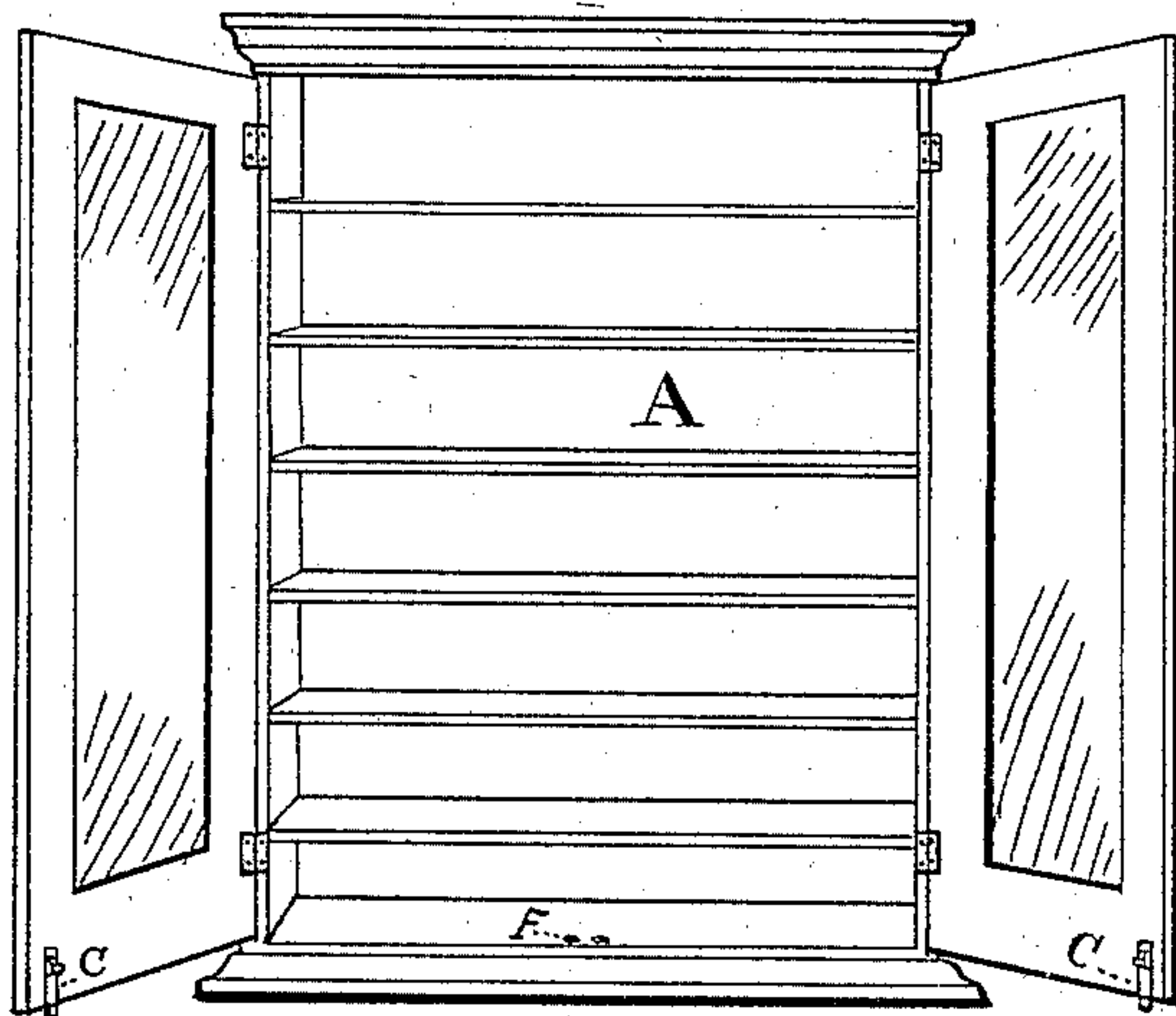


Fig. 1.

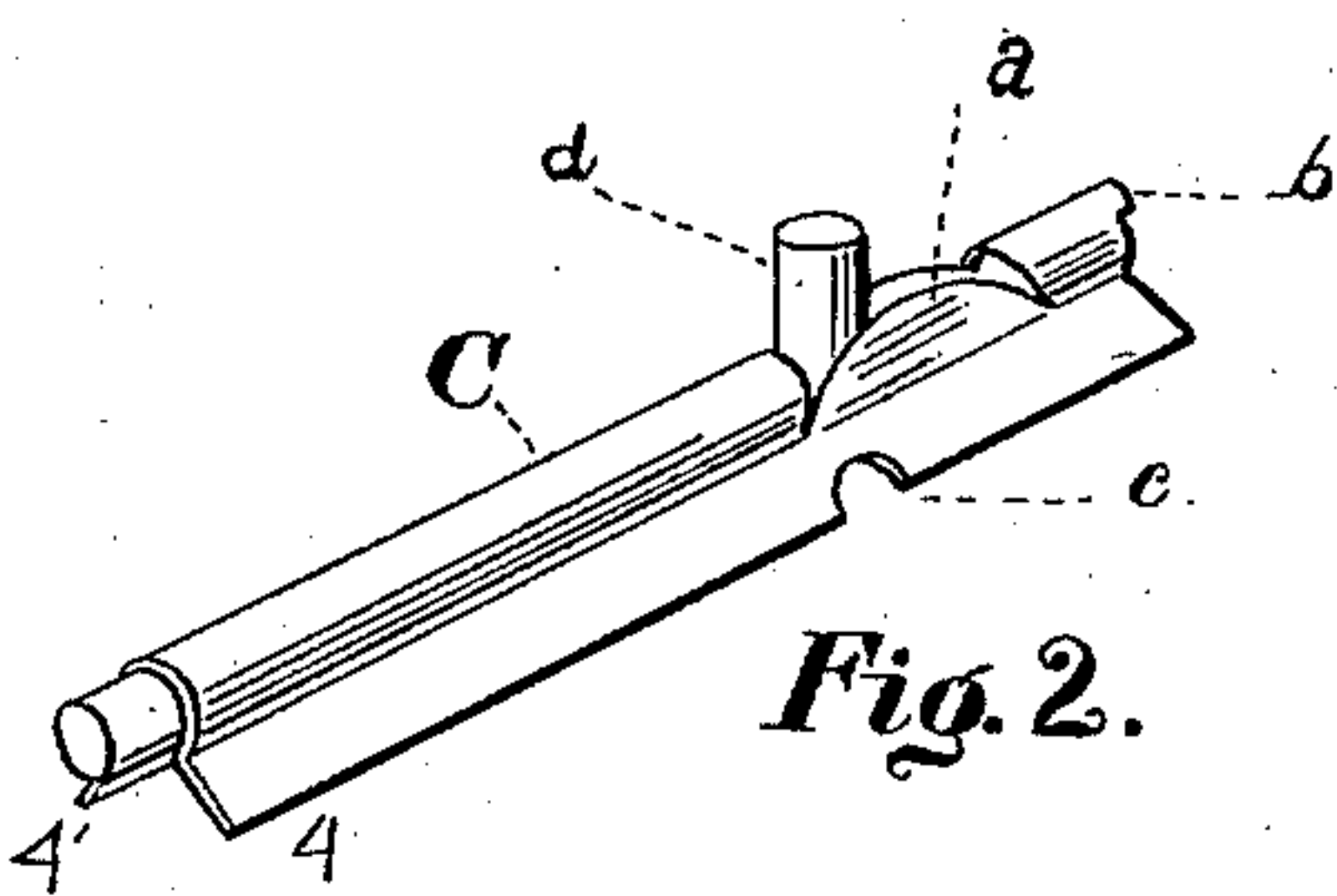


Fig. 2.

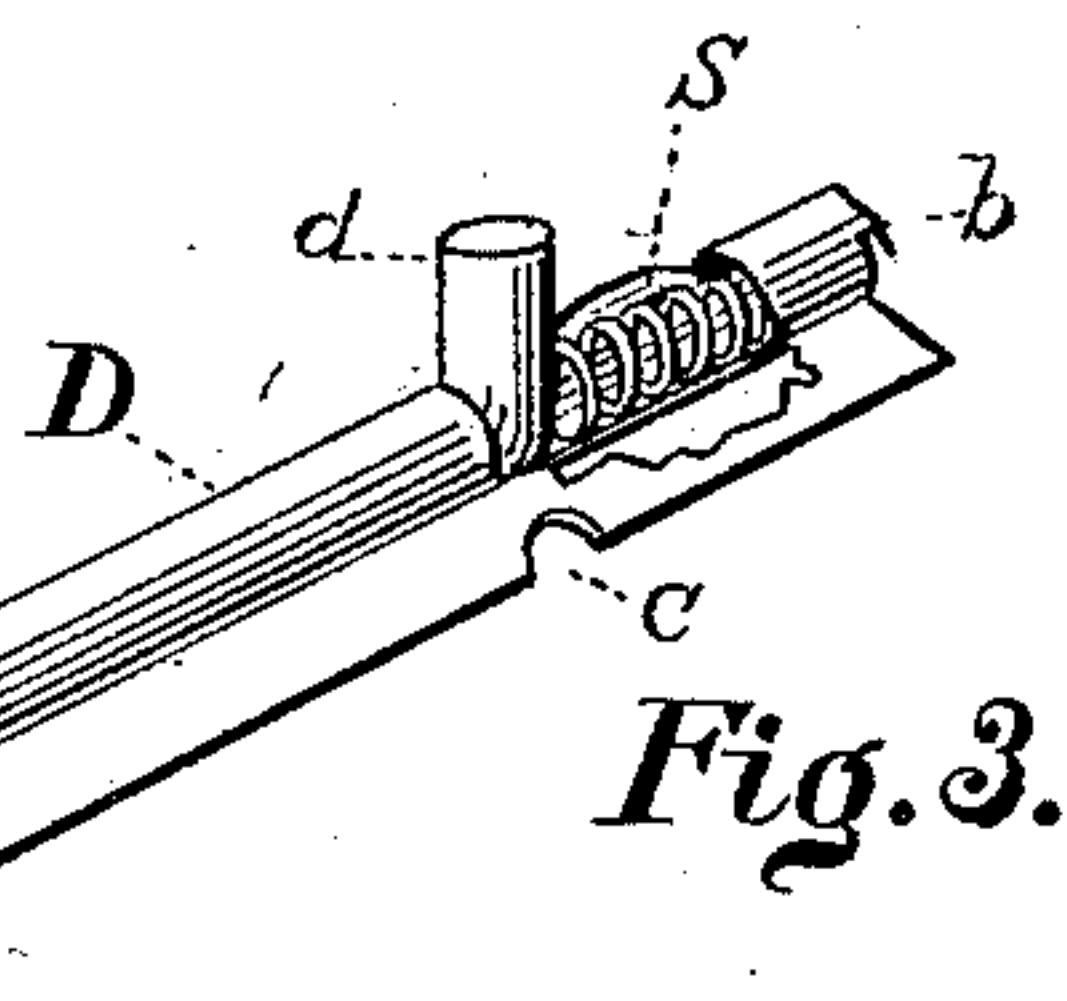


Fig. 3.

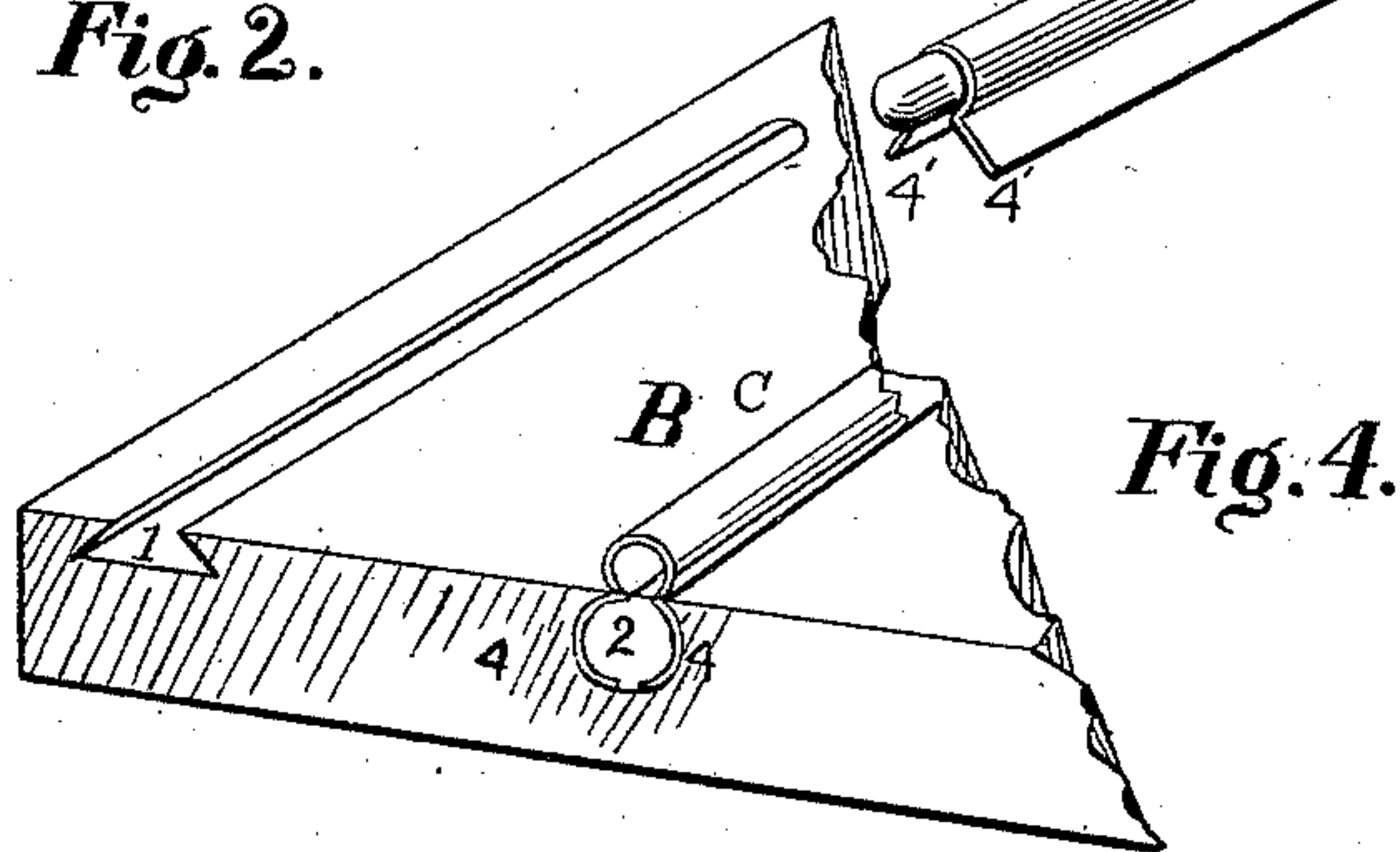


Fig. 4.

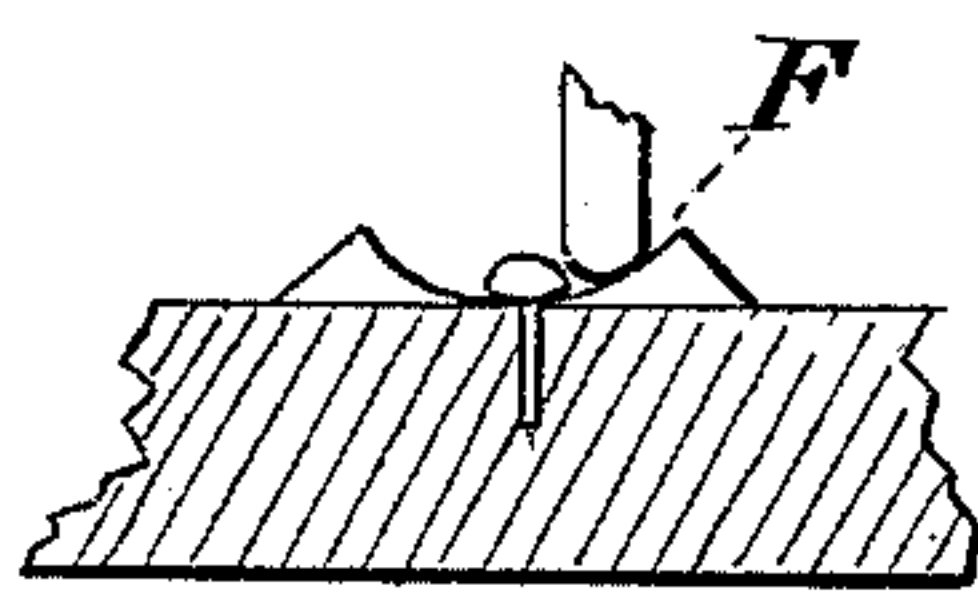


Fig. 5.

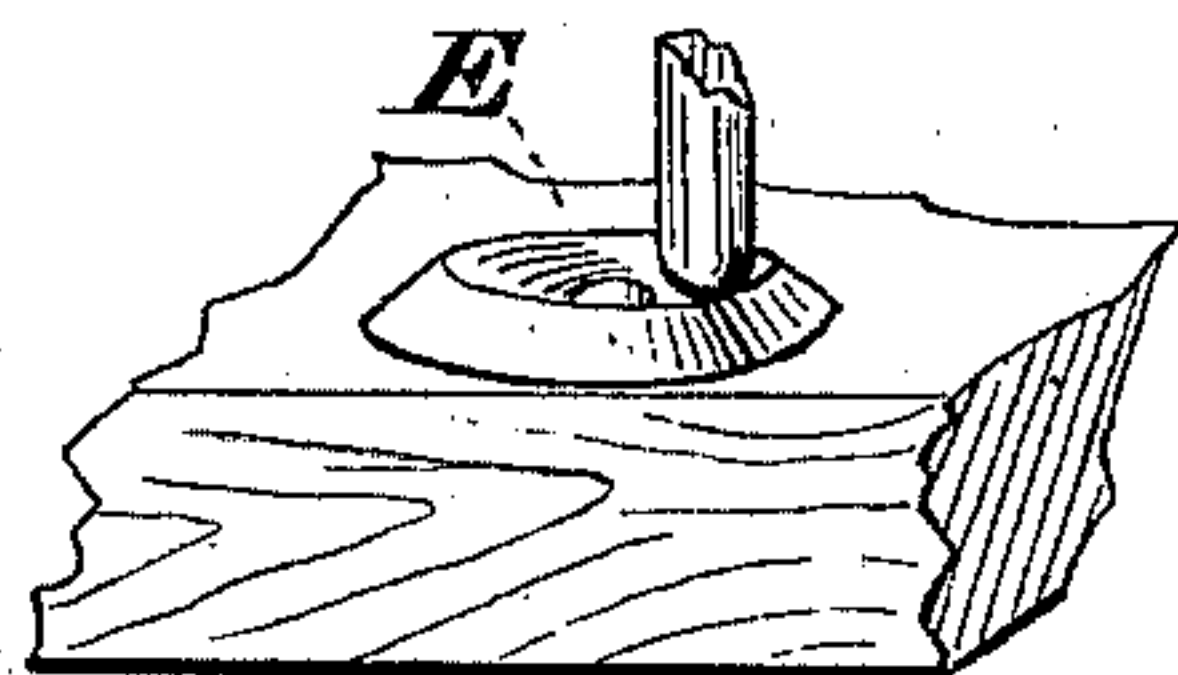


Fig. 6.

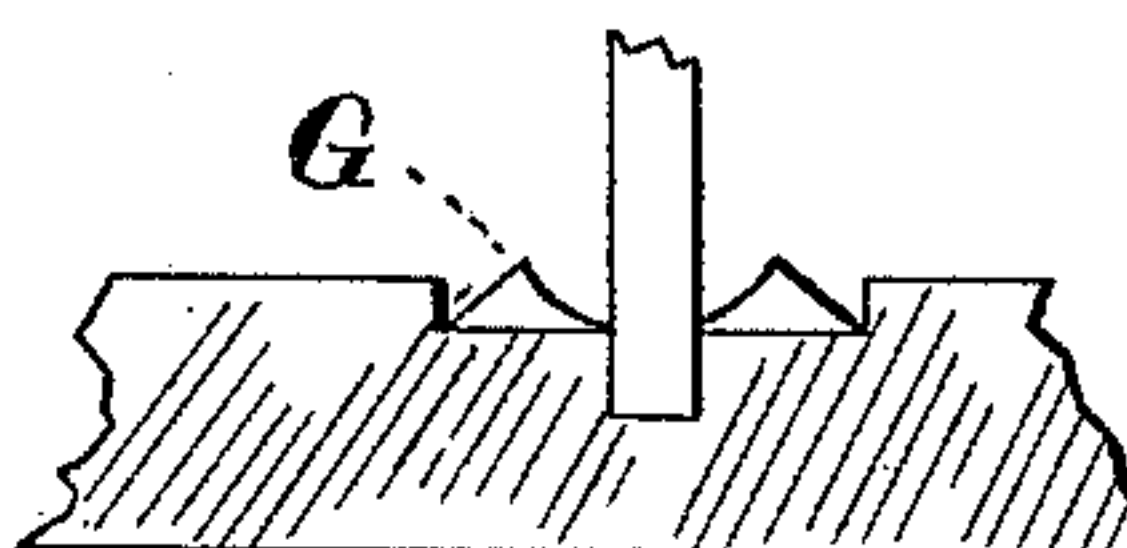


Fig. 7.

WITNESSES:

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His ATTORNEY.

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JULIUS BERKEY, OF GRAND RAPIDS, MICHIGAN.

BOLT.

SPECIFICATION forming part of Letters Patent No. 442,941, dated December 16, 1890.

Application filed May 10, 1890. Serial No. 351,291. (No model.)

To all whom it may concern:

Be it known that I, JULIUS BERKEY, a citizen of the United States, residing at the city of Grand Rapids, in the county of Kent and State of Michigan, have invented a certain new and useful Mortise-Bolt Attachment, of which the following is a specification.

This invention relates to a bolt or spring catch in combination with a case or shell for holding the same, and also relates to the peculiar form and construction of the case or sheath for holding the spring bolt or catch, which bolt or catch is adapted to move in a receptacle provided in the sheath, said sheath provided with diverging wings, forming a dovetailed projection, which interlocks with a dovetailed groove in the door of an article of furniture.

The object of the invention is to provide a cheap and efficient means for applying to any article of furniture having a door or doors a means of locking the same in any required position by means of a sliding bolt or spring-catch, which object is attained by means of the mechanism illustrated and described in this specification, and is shown in the drawings hereto attached, in which—

Figure 1 shows a front elevation of a case provided with my improved catch and bolt. Fig. 2 shows a preferred form of shell or case with a sliding bolt therein. Fig. 3 shows the same form of case or shell with a spring-bolt or a spring arranged so as to automatically move the bolt into locking position. Fig. 4 shows a portion of a door with two forms of aperture, also a modified form of shell. Figs. 5 and 6 show a sectional view of the stop with the end of the bolt in position; and Fig. 7 shows a sectional view of the stop when used in connection with a bolt which drops into a position which locks it securely, so that it cannot be moved out without moving the bolt.

Similar letters and figures refer to similar parts throughout the several views.

Ordinarily bolts are attached to the door at the bottom and sometimes at the top, so as to hold the door securely in position, and in many cases it is not desirable to lock the door, so that it may be opened by simply pulling on it. In such cases the form of catch shown in Figs. 5 and 6 is desirable; but when it is

desirable to lock the door, so that in order to open it the bolt must be raised or lowered, the form shown in Fig. 7 is preferable. In Fig. 1 I have shown the bolt as attached only at the lower end of the door; but it is evident that the same construction may be applied to the upper end.

The sheath is shown by C in Fig. 2 and by D in Fig. 3. This sheath is preferably made from a single piece of sheet metal having a cylindrical portion or nearly cylindrical portion for the reception of the bolt *d*. This bolt may be constructed in any suitable manner; but for cheapness I prefer to construct it from a single piece of metal bent inward, forming a handle, by means of which it may be raised or lowered, as shown in Figs. 1 and 2. This sheath, in addition to its cylindrical part, is extended at the rear into a divergent projection, (shown by 44.) In Figs. 2 and 3 these projections are adapted to fit into a dovetailed groove, which may be cut into the door in the form shown by 1 in Fig. 4.

In Fig. 4 I have shown another form by 2, in which the divergent projections 44 are recurved, as therein shown. Whenever it is desired to have the bolt D act automatically, a coiled spring S or any other suitable spring may be placed so as to exert an outward pressure upon the bolt. Whenever it is desirable to move the bolt up and down by the operator, the lips *a* in Fig. 2 may be used. These lips will preferably be made integral with the shell. Ordinarily I have found by experiment that the projections 44 in the case are sufficient to retain the sheath in the aperture cut in the door; but, if desired, small notches *cc* may be provided, so that a nail, screw, or brad may be driven to hold the sheath more securely in position.

In case a spring is used I provide a projection on the shell, (shown by *b*,) against which the spring abuts.

In Fig. 2 the lips *a* will press against the bolt so as to prevent it from dropping down when it has been raised, and have a tendency to increase the friction on the bolt in raising it.

F E show the form of stop which I prefer to use in connection with the bolt shown in Fig. 3, and G shows the form of stop which I prefer to use in connection with the bolt in Fig. 2. In the form of stop shown in Figs. 5

and 6 a single screw or nail will prove sufficient to hold the catch in position, while in the form shown in Fig. 7 the catch may be sunk into the wood and fastened in any suitable manner, or it might be fastened flush with the wood and a hole bored or sunk into the center for the purpose of receiving the lower end of the bolt.

In the bolt attachment constructed in accordance with my invention the dovetailed groove for the reception of the dovetailed projection formed by the divergent wings on the bolt case or sheath may be milled or bored by any suitable instrument into the door or plate where it is to be applied.

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

1. The sheet-metal bolt-casing having lateral flanges bent at an angle greater than a

right angle for adapting the casing to be held in a dovetailed mortise, in combination with a slide-bolt having a handle portion extending laterally from the bolt-casing, substantially as described.

2. The cylindrical bolt-case C, extended at the rear into divergent wings $\pm \pm$, forming a dovetailed projection fitting a dovetailed groove and having at one end the projection b, in combination with the cylindrical bolt having a handle extending therefrom between the case and the end projection thereon, and a spring between the handle and said end projection, substantially as described.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

JULIUS BERKEY. [L. S.]

Witnesses:

HUGH E. WILSON,
HARRY P. VAN WAGNER.