(No Model.)

S. J. FRASER.

DRAWER CHECK AND SUPPORT.

No. 345,227. Patented July 6, 1886.

Fig. 1

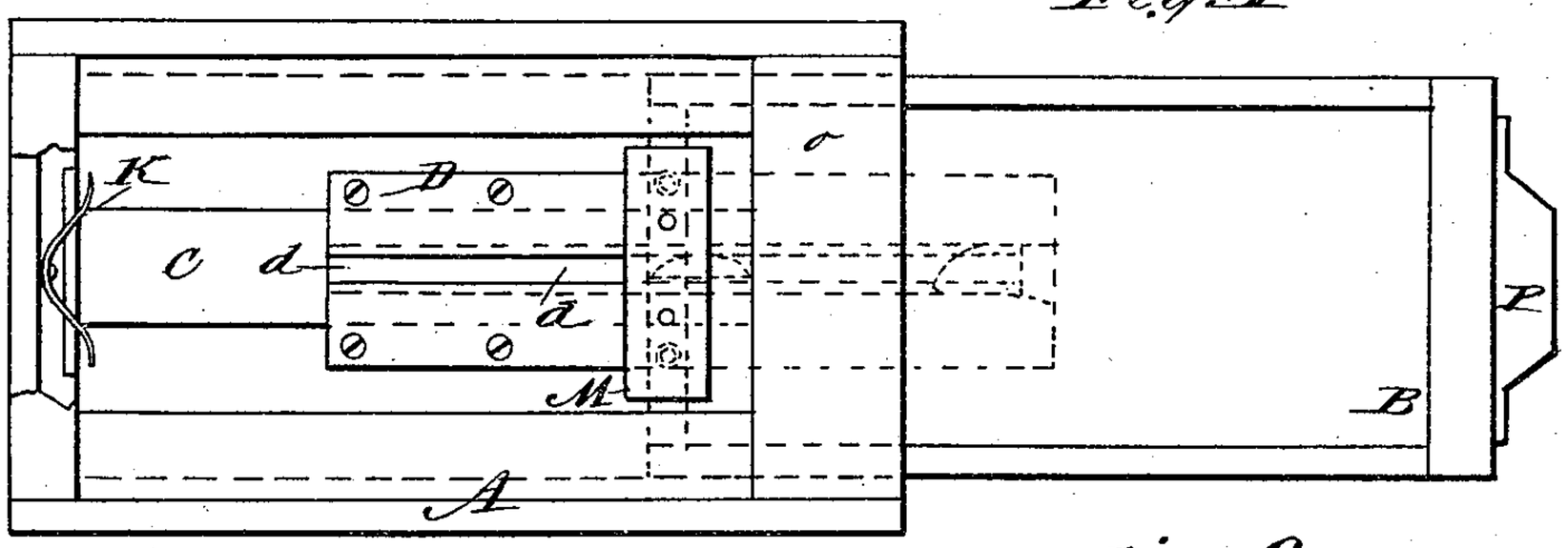

Fig. 2

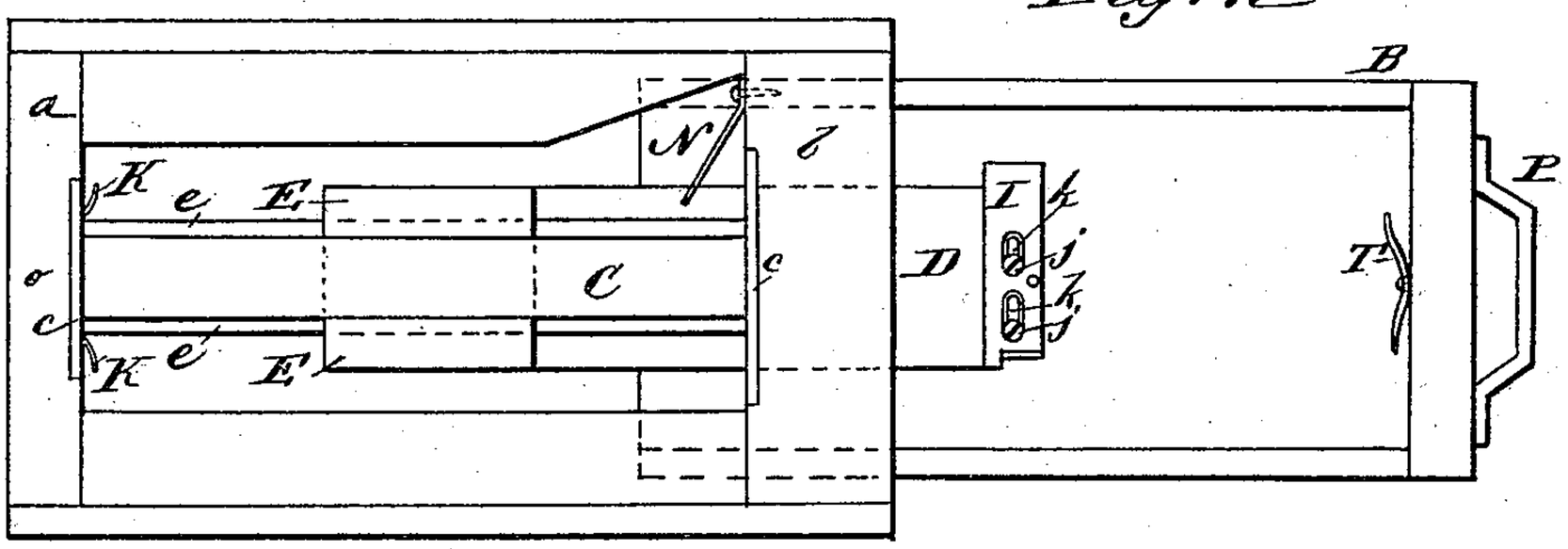

Fig. 3

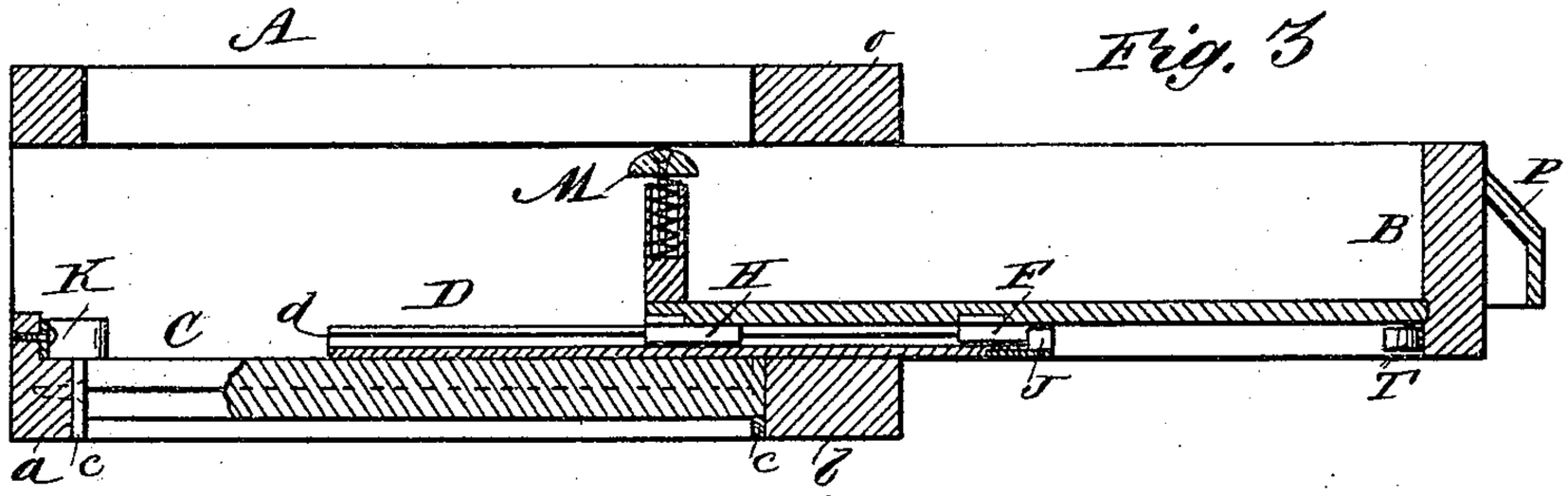

Fig. 4

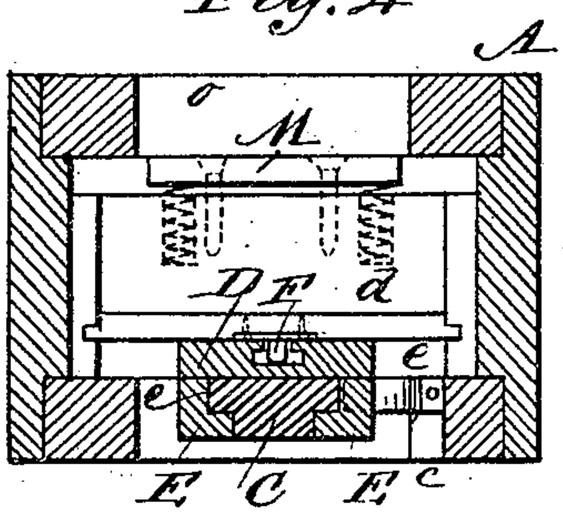

Fig. 5

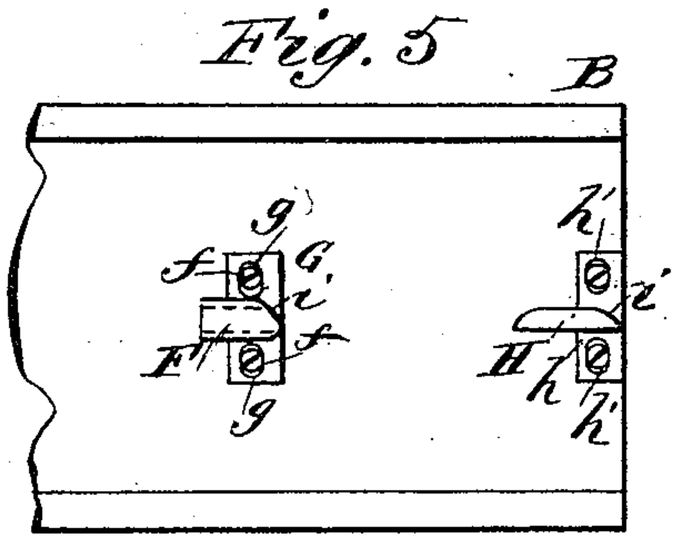

Fig. 6

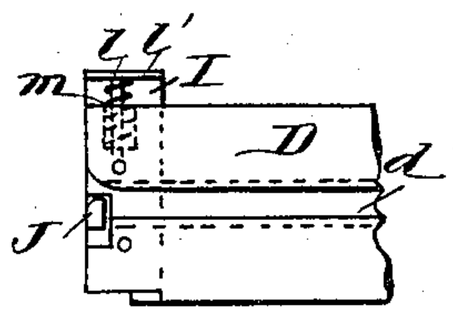

Fig. 7

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DRAWER CHECK AND SUPPORT.

SPECIFICATION forming part of Letters Patent No. 345,227, dated July 6, 1886.

Application filed February 12, 1886. Serial No. 191,758. (No model.)

To all whom it may concern:

Be it known that I, SIMON JAMES FRASER, of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Drawer Check and Support, of which the following is a full, clear, and exact description.

My invention relates to certain improvements in drawer supports and checks; and it consists of a novel arrangement of slides, upon which the under side of the drawer rests, said slides being combined with stops so arranged that the drawer is prevented from displacement, as will be hereinafter more fully described, and specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the drawer, part of the case being broken away to disclose the arrangement of the buffer-spring. Fig. 2 is an inverted plan view of the drawer. Fig. 3 is a view taken in longitudinal vertical section. Fig. 4 is a cross-sectional view. Fig. 5 is a view of the under side of the rear portion of the drawer. Fig. 6 is a view of the upper side of the forward portion of the slide, and Fig. 7 is a view of the spring-actuated stop.

In the drawings referred to, A represents the frame in which the drawer is mounted, which frame may constitute a part of any piece of furniture—such as a desk, bureau, or chiffonier—and in which frame the drawer B is mounted in a manner to be hereinafter specifically described.

A longitudinal T-shaped strip, C, is secured between the front and rear lower cross-bars, *a b*, of the frame A, either by being framed directly into said bars or by means of metallic plates *c c*, that are arranged to be secured to said bars *a* and *b*. A movable slide, D, having an inverted T-shaped groove, *d*, formed on its upper side, is arranged above the strip C and held thereto by L-shaped blocks E E, that are engaged by the projecting flanges *e e* of the strip C, said blocks E being secured to the slide D upon either side of the strip C, and at the rear end of the slide.

Upon the bottom of the drawer, just back of the center, is secured a T-shaped lug, F, connection being effected with said bottom by means of screws *f f*, passed through elongated apertures *g g* in the horizontal or top plate, G, of said lug and entering said drawer-bottom. At the extreme rear end of the drawer-bottom is also secured a lug, H, the connection being made with said bottom by screws passed through elongated apertures *h' h'* in a horizontal plate, *h*, of said lug H and entering the drawer-bottom. The rear ends of both F and H are rounded off at *i i*. The lugs F and H are inserted within the groove *d*, and being so inserted the drawer may be shoved back within its case formed by the frame A.

After the drawer B has been inserted within the case it is desirable that it should be held against accidental displacement caused by its being drawn out too far. To accomplish this end, I fix a sliding plate, I, upon the under side of the forward end of slide D, said plate being held to the slide by screws *j j*, which pass through elongated slots *k k*. The plate I carries a stop or lug, J, which is normally held in front of the groove *d* by the action of a spring, *l*, arranged as best shown in Fig. 6—that is to say, the spring is coiled about a pin projecting from the upwardly bent end, *l'*, of the plate I, a recess, *m*, being formed in the slide D for the reception of the pin and spring.

At the rear of the case I arrange a spring, K, while at the front of the case there is a spring, N, the two springs being so arranged as to lessen the shock and consequently decrease the noise incident to opening and closing the drawer.

Above the rear end of the drawer I arrange a spring-pressed strip, M, so arranged that when the drawer is drawn out it will press against the under side of the upper cross-bar, *o*, of the frame A, as clearly indicated in Figs. 1, 3, and 4.

The operation is as follows: The drawer having been grasped by its handle P and pulled forward, the T-shaped lug F, riding in the groove *d*, will strike against the stop J, so that any continued forward movement of the drawer will cause the slide D to be drawn forward until one of the blocks E strikes

against the spring N. In closing the drawer the shock will be taken up by the spring K. If it is at any time desired to remove the drawer from its casing, the plate I is pressed back against the tension of the spring *l*, whereby the lug J is carried from the front of the groove *d*, thus clearing the passage for the lugs F and H. When the drawer is to be again inserted within the casing, the slide D is shoved back against the spring K and the drawer put in in the same manner as it would be if not provided with the means above described, for, as the rear faces of the lugs F and H are rounded off, they will act to clear the way for themselves to permit of their entrance to the groove *d*.

The plates *c c* are held by screws that are passed through elongated slots formed in said plates, the idea being to provide for a proper alignment of the strip C.

If desired, a buffer-spring, T, may be fixed to the forward portion of the drawer, as shown in Figs. 2 and 3.

The spring-strip M is more especially intended for use with badly fitted or worn drawers, and can be dispensed with where the drawer fits snugly.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a drawer and its case, of a T-shaped strip, C, a slide, D, provided with blocks E E, that are formed to engage with the flanges of the strip C, and a T-shaped lug, F, secured to the bottom of the drawer and arranged to ride in a longitudinal groove formed in the slide D, substantially as described.

2. The combination, with a drawer and its case, of a T-shaped strip, C, secured to the case by plates *c c*, a slide, D, provided with blocks E E, and lugs F H, secured to the bottom of the drawer and arranged to ride in a longitudinal groove formed in the top of the slide D, substantially as described.

3. The combination, with a drawer and its case, of a T-shaped strip, C, a slide, D, held to and arranged to slide upon the strip C, a lug, F, fixed to the under side of the drawer and arranged to ride in a longitudinal groove formed in the slide D, and a stop, J, all substantially as described.

4. The combination, with a drawer and its case, of the following elements: strip C, slide D, formed with groove *d*, blocks E, lugs F and H, and plate I, carrying stop J, all arranged and combined substantially as described.

5. The combination, with a drawer and its case, of the following elements: strip C, slide D, formed with groove *d*, blocks E E, lugs F and H, rounded off at *i i*, plate I, spring *l*, and lug J, substantially as described.

6. The combination, with a drawer and its casing, of the slide connected to the drawer, and having blocks and springs, one arranged at the forward end of the drawer-casing and the other arranged at the rear end of the said casing, substantially as and for the purpose set forth.

SIMON JAMES FRASER.

Witnesses:
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