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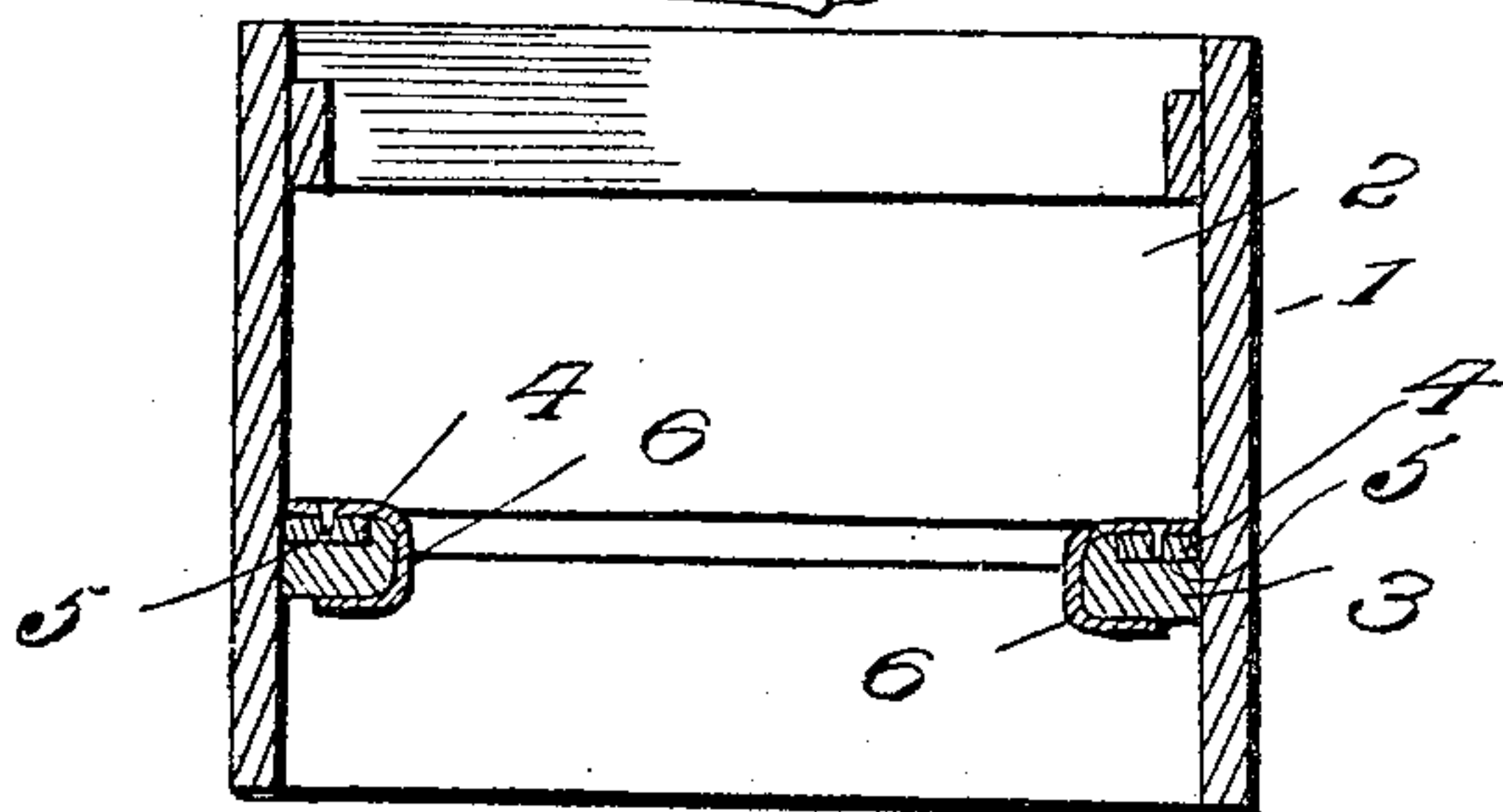
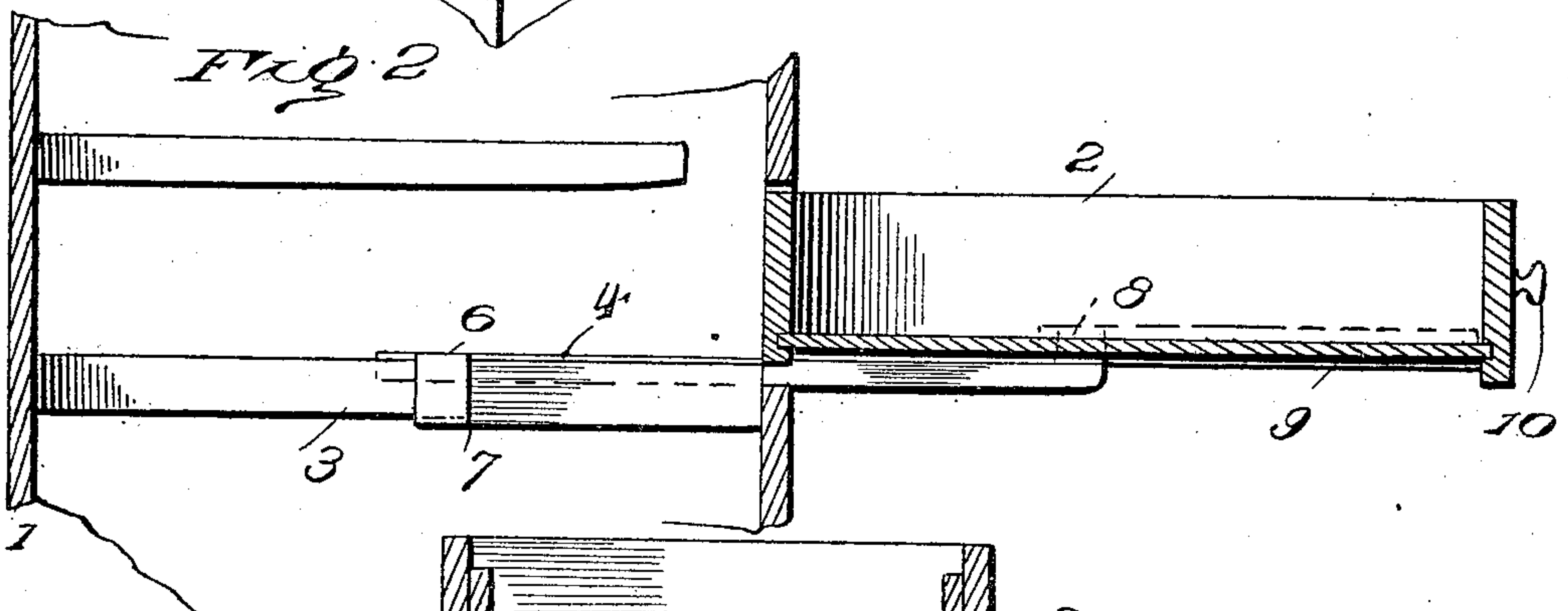
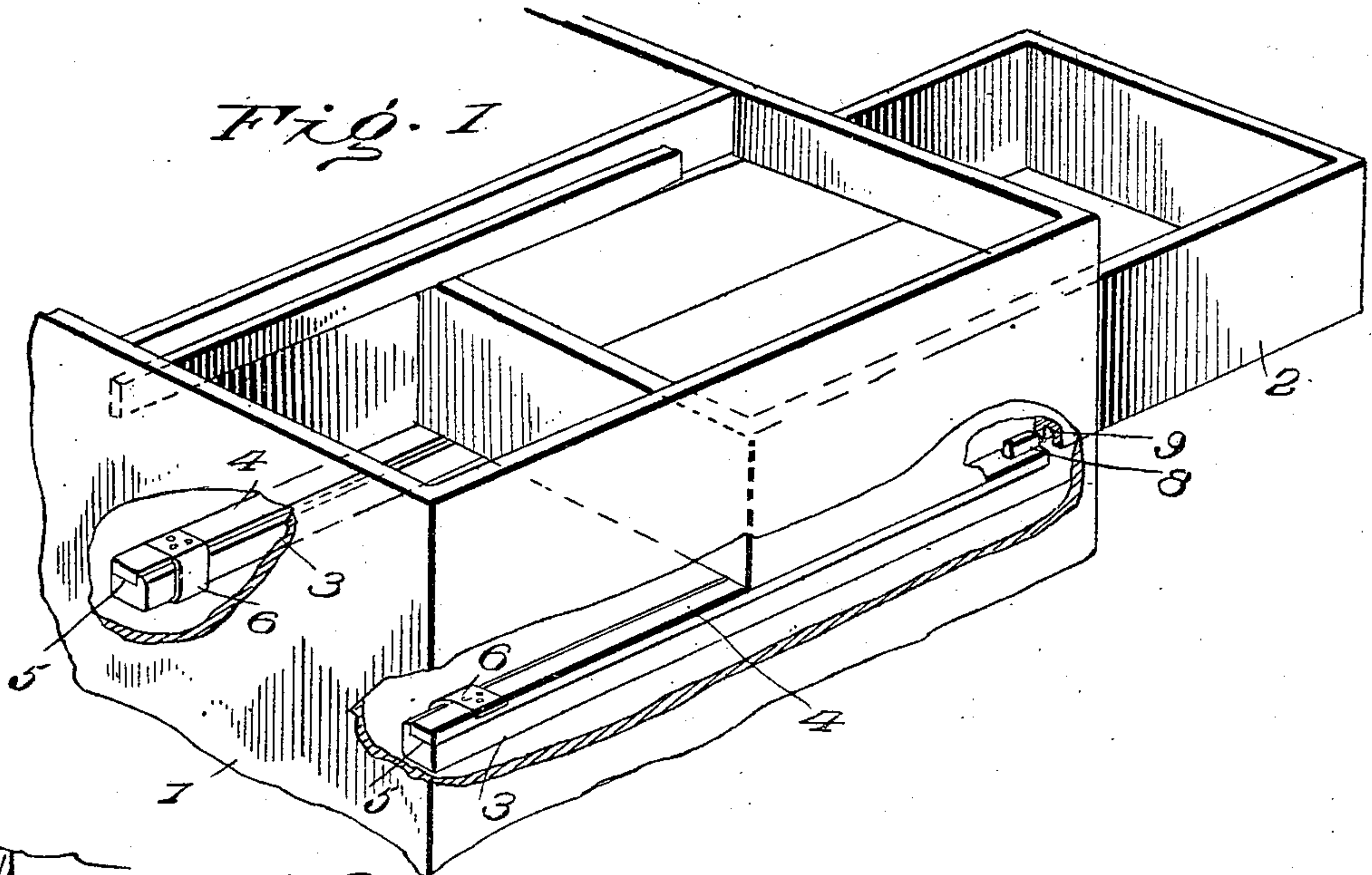
PATENTED JULY 23, 1907.

G. D. BARR & O. L. COFFIN.

DRAWER GUIDE.

APPLICATION FILED JULY 18, 1906.

2 SHEETS—SHEET 1.



Witnesses
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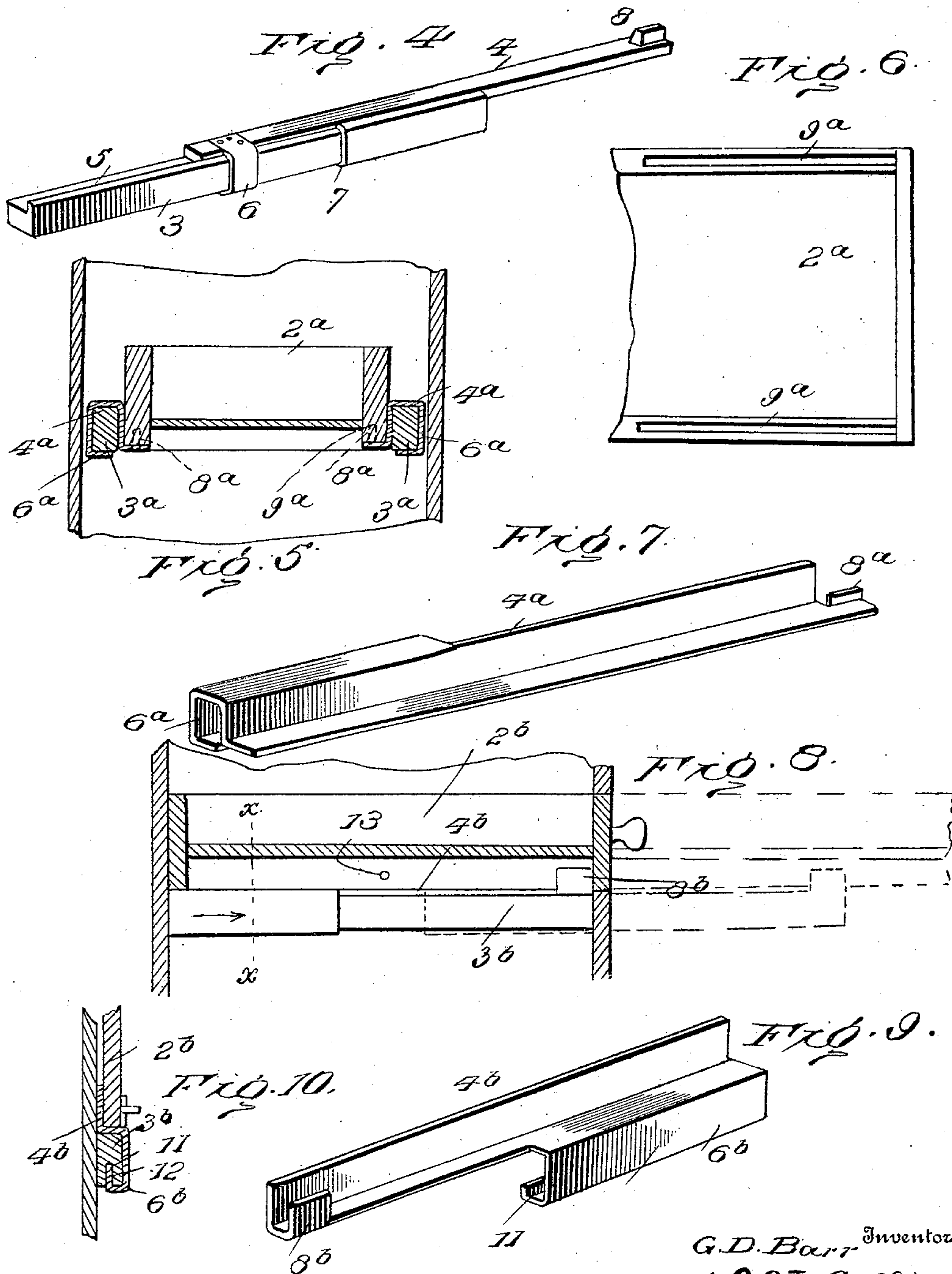
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UNITED STATES PATENT OFFICE.

GEORGE D. BARR AND ORLAND L. COFFIN, OF PLEASANTON, KANSAS.

DRAWER-GUIDE.

No. 860,623.

Specification of Letters Patent.

Patented July 23, 1907.

Application filed July 18, 1906. Serial No. 326,762.

To all whom it may concern:

Be it known that we, GEORGE D. BARR and ORLAND L. COFFIN, citizens of the United States, residing at Pleasanton, in the county of Linn and State of Kansas, have invented certain new and useful Improvements in Drawer-Guides, of which the following is a specification.

This invention embodies improvements in guide means for drawers of cabinets, casings, or the like and is designed to promote the free working or movement of the drawers in closing and opening the same, to support the drawers when open, and to generally subserve the operation of the drawers under all conditions of service.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view showing a drawer applied to a casing and embodying the invention. Fig. 2 is a sectional view showing the drawer extended as well as the guide bars and at its outer limit of movement. Fig. 3 is a vertical section of the construction shown in Figs. 1 and 2. Fig. 4 is a perspective view of the guide strip, guide bar and adjacent parts as shown in the first three figures of the drawing. Fig. 5 is a vertical sectional view of a modification of the invention. Fig. 6 is a bottom plan view of the drawer, partially broken away, in the construction shown in Fig. 5. Fig. 7 is a perspective view of the guide bar used in the constructions shown in Figs. 5 and 6. Fig. 8 is a vertical sectional view showing another modification of the invention, dotted lines showing the drawer opened. Fig. 9 is a perspective view of the guide bars shown in Fig. 8. Fig. 10 is a broken vertical sectional view on the line $x-x$ of Fig. 8, looking in the direction of the arrow.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Specifically describing one of the preferred embodiments of the invention, the numeral 1 designates a casing which may represent the body of a cabinet, case or similar support in which are mounted one or more drawers embodying the present invention. The drawer 2 is mounted in the casing so as to slide longitudinally of guide strips 3 which are of the usual form, being permanently and substantially secured to the sides of the casing 1 in any suitable way. The drawer 2 is connected with the guide strips 3 of the casing 1 by means of guide bars 4, which in the preferred embodiment of the invention now being described, are mounted above the strips 3 in longitudinal grooves 5 formed in the upper sides of said strips. The bars 4 are freely

slidable in the grooves 5 and the inner ends of said bars are formed with offstanding guide members 6 which embrace and engage the guide strips 3. The guide members 6 are adapted to abut with shoulders 7 adjacent to the outer end portions of the strips 3 whereby the guide bars 4 will be prevented from further longitudinal movement outwardly with the drawer as the latter opens. The opposite sides of the drawer 2 have the lower edge portions thereof resting on and in contact with the upper edge portions of the guide bars 4 and at the outer ends of the bars 4 are located upwardly projecting lugs 8 which enter grooves 9 formed in the lower edge portions of the sides of the drawer 2. The grooves 9 terminate intermediate of the outer and inner ends of the drawer 2 so that the inner extremities of the grooves 9 form shoulders with which the lugs 8 are adapted to engage at a predetermined point in the outward movement of the drawer 2, thus limiting such movement. A suitable handle 10 may be provided at the outer end of the drawer 2.

In actual operation, it will be apparent that on the initial opening movement of the drawer 2, said drawer may freely move slidably on the guide bars 4 until the lugs 8 engage the sides of the drawer 2 at the inner extremities of the grooves 9, whereupon the drawer and the bars 4 will move together. The simultaneous outward movement of the drawer 2 and the bars 4 as above described, will be limited, however, as soon as the guide members 6 abut with the shoulders 7 of the guide strips 3, but at such time the drawer 2 will have been fully opened. When fully opened, the drawer 2 will of course be supported by the bars 4 which are extended and the limit of the opening movement of the drawer 2 is such that the inner end of the drawer can if desired, be disengaged from the drawer opening and the drawer may thus be removed. In closing the drawer 2 the same moves freely on the bars 4 until the lugs 8 abut with the front or outer end of the drawer, whereupon the drawer and bars 4 move together until the inner limit of movement of the drawer is reached.

The invention is susceptible of various modifications and in Figs. 5, 6 and 7 is illustrated one of such modifications. In this instance the guide bars 4^a are preferably made of sheet metal and are of L-shape in cross section. The vertical portions of the guide bars 4^a are formed with integral offstanding guide members 6^a which embrace the guide strips 3^a of the casing and perform the same function as the guide members 6 before described. In this instance, however, the guide bars 4^a do not rest upon the strips 3^a, but operate at the inner sides of said strips. The outer extremities of the guide bars 4^a furthermore, are formed with upturned lugs 8^a adapted to enter grooves 9^a in the lower edges of the sides of the drawer 2^a. The operation of the parts in the

modification is substantially the same as that in the construction of the invention as first described.

A further modification of the invention is illustrated in Figs. 8, 9 and 10 in which the guide bars are indicated at 4^b and are of somewhat L-form in cross section as are the guide bars 4^a. The guide bars 4^b, however, rest directly upon the guide strips 3^b and are movable longitudinally thereof in an obvious way. Downwardly extending guide members 6^b project from the inner extremities of the guide bars 4^b at the lower edge portions of the guide members 6^b and are bent upwardly to form guide flanges 11 operating in grooves 12 formed in the undersides of the guide strips 3^b. The horizontal portions of the guide bars 4^b are formed with upwardly projecting lugs 8^b which extend so as to operate in contact with the inner side portions of the sides of the drawer 2^b, which sides project a short distance below the bottom of the drawer. The lugs 8^b are adapted to engage stops 13 which project from the sides of the drawer 2^b and the said stops 13 cooperate with the lugs 8^b to accomplish the same result as is accomplished by the cooperation of the lugs 8 and grooves 9, and of the lugs 8^a and grooves 9^a.

Having thus described the invention, what is claimed as new is:

1. In means of the class described, the combination of a casing, spaced guide strips applied thereto, a drawer mounted in the casing, guide bars, guide members projecting from the inner end portions of the guide bars and embracing the guide strips aforesaid to connect the bars therewith, and lugs projecting from the outer end portions of the guide bars and cooperating with the drawer to limit the opening movement of the latter.

2. In means of the class described, the combination of a casing, a drawer mounted therein, guide strips attached to opposite sides of the casing, guide bars mounted for movement longitudinally of the guide strips, offstanding guide members extending from the inner ends of the guide bars and embracing the guide strips to connect the guide bars therewith, said guide members cooperating to limit the outward longitudinal movement of the guide bars, and lugs projecting from the outer extremities of the guide bars for cooperation with the drawer to limit the outward movement of the drawer relatively to the guide bars.

In testimony whereof we affix our signatures in presence of two witnesses.

GEORGE D. BARR. [L. S.]
ORLAND L. COFFIN. [L. S.]

Witnesses:

J. W. PHILLIPS,
J. R. MCLELAND.