

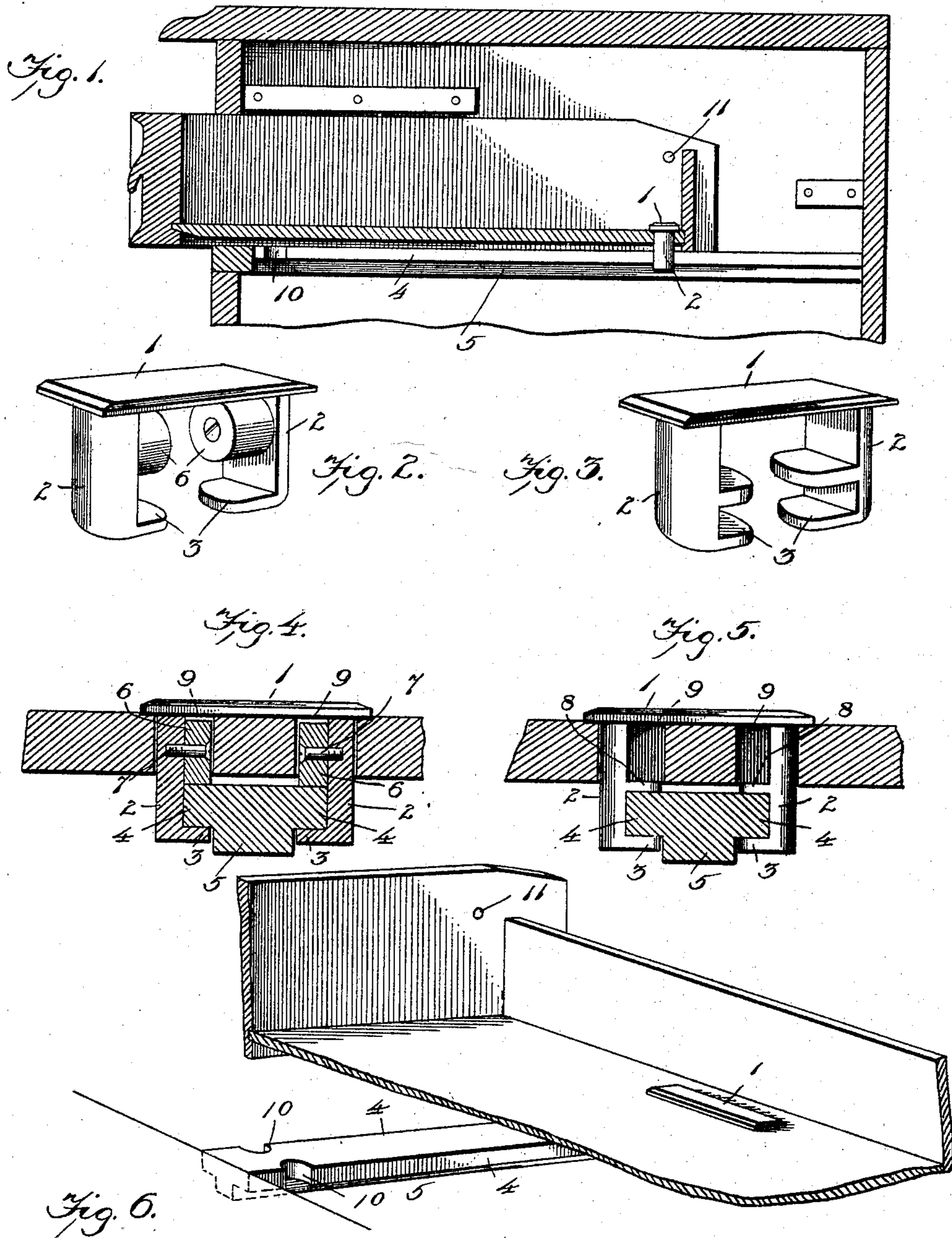
No. 608,130.

Patented July 26, 1898.

F. M. KANDLE.
DRAWER ATTACHMENT.

(Application filed Feb. 9, 1898.)

(No Model.)



Witnesses
T. L. Mockabee
H. L. Amerl.

Inventor
Furman M. Kandle,
by V. S. Stockbridge
his Attorney.

UNITED STATES PATENT OFFICE.

FURMAN M. KANDLE, OF PHILADELPHIA, PENNSYLVANIA.

DRAWER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 608,130, dated July 26, 1898.

Application filed February 9, 1898. Serial No. 669,660. (No model.)

To all whom it may concern:

Be it known that I, FURMAN M. KANDLE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Drawer Attachments; 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.

This invention relates to drawer attachments; and the object in view is to provide means whereby a drawer of ordinary construction may be caused to slide easily and freely in a straight line without binding or being subject to lateral movement or displacement, thereby avoiding jamming of the drawer. By means of the improved construction the drawer is also prevented from tipping or sagging downward at its outer end when partially withdrawn from the casing, and it is also supported in a manner that will adapt it to slide easier as it is pushed inward and drawn outward.

One of the principal aims of the present invention is to provide an attachment for the purpose specified which can be easily and quickly applied to any ordinary drawer, the attachment being adapted to be applied to and held in place with relation to the drawer without requiring screws, bolts, or other fastening means.

The detailed objects and advantages of the invention will be pointed out in the subjoined description.

The invention consists in certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and incorporated in the claims hereto appended.

In the accompanying drawings, Figure 1 is a longitudinal section through a piece of furniture, showing a drawer and the improved attachment. Fig. 2 is a detail perspective view of the attachment. Fig. 3 is a similar view showing a slightly-modified form. Fig. 4 is an enlarged detail section taken at right angles to Fig. 1 adjacent to the attachment. Fig. 5 is a similar view showing a modified form. Fig. 6 is a detail broken perspective view showing a portion of a drawer with the

attachment applied thereto and a section of the T-rail having the notches to receive the retaining-lips of the attachment.

Similar numerals of reference designate corresponding parts in all the figures of the drawings.

The attachment contemplated in this invention consists of an upper or top plate 1, designed to rest upon the upper surface of the drawer-bottom, immediately adjacent to the rear end thereof. Depending from said plate 1, adjacent to but slightly removed from the opposite ends thereof, are two arms 2, substantially semicylindrical in cross-section and provided at their lower ends with inturned retaining-lips 3, designed to engage under the side flanges 4 of a T-rail 5, which extends longitudinally beneath the drawer and is secured at its opposite ends to the casing or furniture in which the drawer slides.

The inner sides of the arms 2 are flat, and at the points intermediate the plate 1 and lips 3 each of the arms has an inwardly-projecting runner. In one form of the attachment the runner is in the form of a roller 6, journaled upon a stud or projection 7, and these rollers are designed to run upon the upper surface of the T-rail 5, adjacent to the opposite edges thereof. The space between the rollers 6 and lips 3 is sufficient to receive the side flanges 4 of the T-rail 5, with slight room to spare.

In the modified form of attachment the runner may consist simply of an inwardly-projecting lug 8, set the same distance from the underlying retaining-lip 3, so as to admit one of the side flanges 4 between it and said lip.

In order to equip the drawer with the attachment, two holes are bored through the bottom of the drawer adjacent to the back thereof, the said holes being of sufficient size to admit of the passage of the arms 2 and lips 3. Said arms and lips are then forced downward through the openings in the bottom of the drawer, and by reason of the runners 6 or 8, as the case may be, being located entirely within the vertical planes of the retaining-lips 3 the said runners will enter and lie within the openings formed in the bottom of the drawer, the said openings being indicated at 9. The attachment is forced downward until the top plate 1 rests upon the bot-

tom of the drawer and until the runners 8 or runners 6 project a slight distance below the lower surface of the bottom, whereby they may ride upon the upper surface of the T-rail.

Near its forward end the T-rail 5 is provided in its side flanges with notches 10, adapted to permit the downward passage of the retaining-lips 3, so that the latter may be engaged beneath said side flanges in the sliding movement of the drawer. In placing the drawer in position the inner end is first inserted partially into the drawer-opening, so as to bring the openings 9 above the notches 10. The arms of the attachment are then pushed downward through the openings 9, so as to cause the lips 3 to pass through the notches 10. The drawer is then slid inward, whereupon the lips will engage under the flanges of the rail and remain in engagement therewith as the drawer is reciprocated. After the drawer is in position stops in the form of pins 11 may be inserted through the side portions of the drawer, so as to engage the front of the drawer-opening and prevent the entire withdrawal of the drawer from the casing in which it slides.

From the foregoing description it will be seen that I have provided a simple attachment for drawers, which will render sliding of the same much easier, which will prevent lateral movement and jamming of the drawer, and which will also prevent the drawer from tipping or sagging when partially withdrawn. The rollers 6 decrease the friction due to the sliding of the drawer, and thus render the same much easier in operation.

If desired, the ends of the plate 1 may be extended and provided with holes to receive fasteners, such as screws, for permanently securing the attachment to the drawer. The holes 9 may also be set near enough together to cause the arms 2 to bind tightly therein

when driven down in order to obviate any play or looseness of the attachment with respect to the drawer-bottom.

I do not desire to limit myself to the specific details of construction hereinabove described, but reserve to myself the right to change, modify, and vary the construction within the scope of the invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The combination with a drawer and underlying rail, of a drawer attachment consisting of a plate, pendent arms thereon spaced apart and located at short distances from the ends of said plate and having inward turned lips at their lower ends, and independent rollers located intermediate the lips and plate and journaled on horizontal axes upon the inner surfaces of the pendent arms, whereby the attachment is made self-retaining in both an upward and downward direction when in its applied position, substantially as described.

2. The combination with a drawer having a pair of openings in the bottom thereof spaced a short distance apart, of an attachment consisting of a plate designed to rest upon the upper surface of the drawer-bottom, pendent arms on said plate adapted to be inserted through the openings in the drawer-bottom, retaining-lips at the lower ends of said arms, and a supporting-rail extending longitudinally beneath the drawer and having side flanges beneath which said lips engage, substantially as described.

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

FURMAN M. KANDLE.

Witnesses:

GEO. M. VICKERS, Jr.,
H. J. PRESTON.