

Nov. 9, 1926.

1,606,178

J. H. RAND, JR., ET AL

RECORD CABINET

Filed June 29, 1923

Fig. 1.

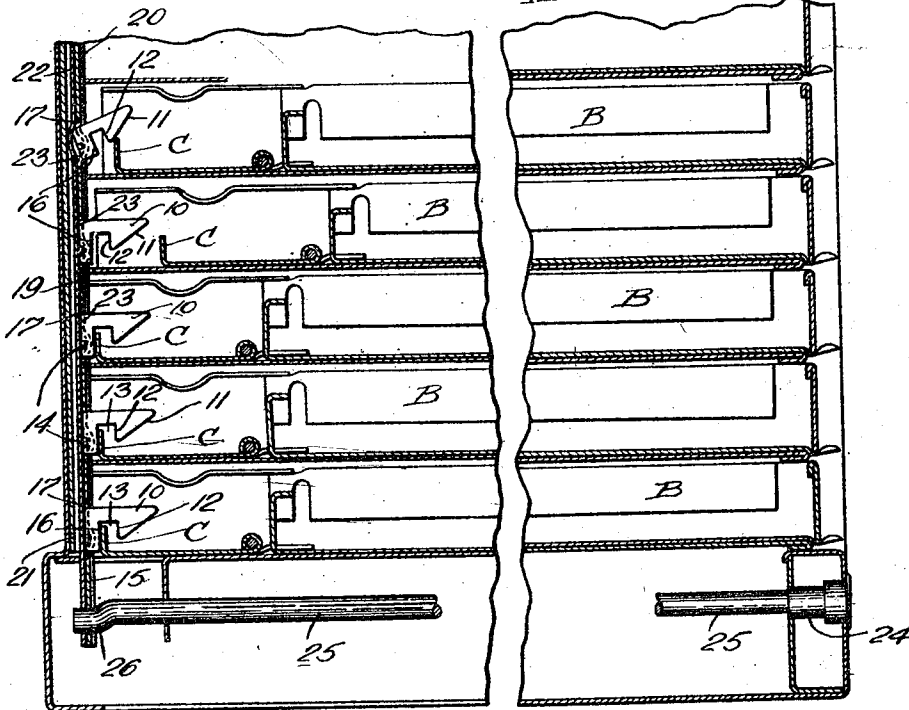


Fig. 2.

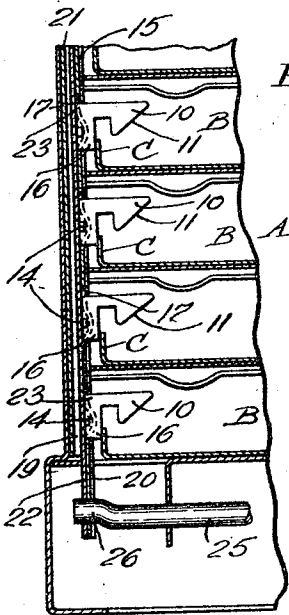


Fig. 3.

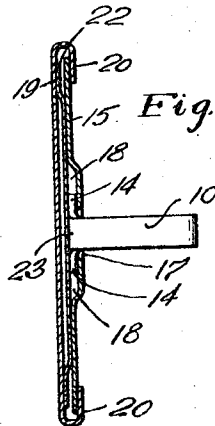
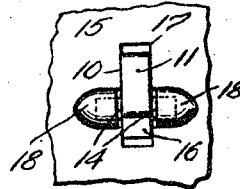


Fig. 4.



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UNITED STATES PATENT OFFICE.

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RECORD CABINET.

Application filed June 29, 1923. Serial No. 648,446.

This invention relates to locking devices for drawers or slides of cabinets or the like.

The invention is illustrated in connection with a record or index cabinet. Heretofore, in devices of this kind, locking means have been provided for holding the several drawers or slides in closed position in the cabinet, but these devices have possessed the disadvantage that if the cabinet is locked while one or more of the drawers are partially pulled out, it is necessary to insert the key in the lock and unlock the device, and move the drawers or slides to closed position, and again lock the device to completely close the slides or drawers. Such operations take time and in case of emergencies, such as fire, the users of the cabinet cannot take the time to insure that all of the slides or drawers of the cabinets are in closed position and locked, whereby the contents may be maintained uninjured. Again, locking devices for installations of this type have heretofore been relatively complicated and expensive to manufacture and assemble and have been liable to get out of order.

The objects of the present invention are to provide a cabinet having improved locking means, whereby any of the trays or drawers may be locked merely by shoving them into the cabinet; also to provide locking means for devices of this type which are of relatively simple construction and inexpensive to manufacture, which may be readily assembled and consist of few parts. Further objects are to provide improvements in drawer or slide cabinets and locking means therefor in the other respects hereinafter set forth and claimed.

In the accompanying drawings:

Fig. 1 is a fragmentary sectional elevation of a cabinet having locking means embodying this invention applied thereto for holding the slides or drawers of the cabinet in locked position.

Fig. 2 is a similar view of the rear part of the cabinet showing the locking means moved to a position in which the slides are free to be shoved into and withdrawn from the cabinet.

Fig. 3 is a horizontal sectional view, on an enlarged scale, of the locking device removed from the cabinet.

Fig. 4 is a face view of one of the locking dogs in position on the locking strip.

In the drawings there is illustrated a cabinet A having slides or drawers B, the slides or drawers B being provided with flanges or projecting parts C adapted to be engaged by the locking devices for holding the slides or drawers in locked position. Any suitable type of cabinet or slides may be used, as desired.

The locking device of the present invention, generally stated, includes one or more members connected to a part of the cabinet, such member, when in locking position, being adapted to automatically engage a part or portion on the drawer or slide when the drawer or slide is shoved into the cabinet to prevent removal of the drawer or slide until it is unlocked.

In the embodiment shown, there are provided a plurality of projecting parts or lock dogs 10 suitably connected to the cabinet and which engage and releasably hold the flanges C on the drawers or slides. These lock dogs 10 are preferably provided with cam faces 11 so arranged that they will be moved when engaged by the flanges of the drawers or slides to permit the flanges C to pass rearwardly beyond the cam portions 11. The lock dogs 10 are also provided with shoulders 12 behind which the flanges of the drawers or slides engage after they have been shoved past the cam faces 11. As illustrated, shoulders 12 may be formed by notching out portions of the dogs, as indicated at 13. The dogs 10 are pivotally mounted in any suitable manner, as, for example, by the lugs 14 on the dogs which engage a carrier or lock strip 15 connected by suitable means to the cabinet. The dogs are also preferably provided with tail pieces 16 which are engaged by the flanges as the drawers are shoved into the cabinet in case the dogs do not fall by gravity to their proper locking positions with the shoulders 12 in front of the flanges C of the drawers. The engagement of the flanges C with the tail pieces 16 of the dogs insures positive movements of the dogs to locking position.

The locking strip 15 may be readily formed from a strip of sheet metal by punching out portions to provide apertures or openings 17 and pressing outwardly, the portions of the strip adjacent the openings 17 thus providing pockets 18 which receive the lugs or pivots of the dogs, see Figs. 3

and 4. The locking strip is mounted on the cabinet so that it may slide to move the dogs to and from locking positions. The sleeve or channel 19 preferably has side flanges or portions 20 which engage one face of the locking strip and a body portion 21 which covers the opposite or inner side of the locking strip. The dogs may be readily positioned on the locking strip by dropping the dogs into the apertures 17 in the strip from the rear. In this way the pivot lugs 14 on the dogs will seat in the pockets 18 and prevent the dogs from passing entirely through the apertures 17. After the dogs have been dropped into position through the apertures in the locking strip, the channel member may be readily slipped endwise over the locking strip, whereupon the body portion of the channel will prevent disengagement of the dogs from the locking strip.

In order to prevent unauthorized opening of the cabinet while the drawers or slides are locked, as by jarring the cabinet to cause the dogs to release the drawers or slides or by inverting the cabinet to cause the dogs to fall to non-locking position, means are provided for releasably maintaining the dogs in their locking positions, comprising, generally, resilient or movable means normally acting upon the dogs to urge them to locking positions. For this purpose, in the embodiment shown, there is illustrated a resilient strip 22 of suitable spring metal or the like, which is interposed in the channel 19 behind the dogs 10. This resilient strip bears upon the heels 23 of the dogs and tends to hold the dogs in the positions shown in Fig. 2, but at the same time permitting the dogs to swing when the flange or other part of the drawer engages the cam faces of the dogs. As the dogs swing, the spring strip 22 is bent or flexed as shown in Fig. 1, and upon release of the pressure of the flange or part of the drawer upon the cam faces of the dogs, the spring acts to return the dogs to locking positions. The locking device may be secured in the cabinet by any suitable means. In the embodiment shown, the channel member 19 is welded or otherwise secured to the rear wall of the cabinet.

Means are provided for moving the locking dogs to normal locking or unlocking positions. In the form shown, the cabinet is provided with a lock 24 which has a locking rod 25 connected to the turn bolt of the lock. This rod 25 is provided at its rear end with a crank or offset portion 26 which is inserted in an end of the locking strip 15 and of the spring strip 22. It will thus be seen that when the lock and turn rod are in the position shown in Fig. 1, the dogs are in position to engage the parts on the drawers or slides and lock them in place, but when the lock has been manipulated to turn the crank 26 of the rod 25 to the position shown in Fig. 2,

the locking strip 15 and spring strip 22 will be elevated to place the dogs 10 in a position in which the cam faces 11 and shoulders 12 thereof are clear of the flanges C of the drawers, so that the drawers may be readily moved into and out of the cabinet.

In the use of this device, when the index installation is opened, as at the beginning of a business day, the key may be used to unlock the cabinet and the drawers or slides may then be withdrawn or partially pulled out and the key again turned to lock the device. With the locking device in such locking position, it is only necessary then to push the drawers into the cabinet in order to have them secured against removal. In locking the drawers in position in the cabinet, the dogs will normally fall by gravity to proper locking positions, provided the device is set for such positions, but if for any reason they should bind or stick, the part on the drawer engaging the tail pieces of the locking dogs insures positive movement of the dogs to locking positions, and the resilient strip in addition to normally urging the dogs to locking position, prevents any swinging or movement of the dogs from such position, as when the cabinet or device is inverted.

We claim as our invention:—

1. In a locking device for drawers or slides and a support on which said drawers are adapted to slide, the combination of a movable locking member, a plurality of locking dogs having pivoted portions, said locking member having depressed portions forming seats for the reception of said pivot portions whereby said dogs are removably pivoted on said locking member, and a retaining member secured to said support and having a part extending across said depressed portions of said locking member and obstructing removal of said dogs from said locking member.

2. In a locking device for drawers or slides and a support on which said drawers are adapted to slide, the combination of a movable locking member, a locking dog removably pivoted on said locking member, and a retaining channel connected to the support and in which said locking member is movable, said channel having a part normally obstructing removal of said dog from said locking member, and means for moving said locking member to and from locking position in said channel.

3. In a locking device for drawers or slides and a support on which said drawers are adapted to slide, the combination of a movable carrier member, said carrier having an opening therethrough, a dog having pivot portions removably engaging in bearing portions in said carrier adjacent said opening and a part extending through said opening, means for slidably connecting said carrier to the support, means for moving said carrier

to and from locking positions, and means for normally preventing the disconnection of said dogs from said carrier members.

4. In a locking device for drawers or slides and a support on which said drawers are adapted to slide, the combination of a movable carrier member, said carrier having an opening therethrough, a dog having pivot portions removably engaging in open seats said carrier and a part extending through said opening, means for slidably connecting said carrier to the support and having a part for preventing removal of said dog from said carrier, and means for moving said carrier and dog to and from locking position.

5. In a locking device for drawers or slides and a support on which said drawers are adapted to slide, the combination of a movable carrier member, said carrier having an opening therethrough, a dog having pivot portions engaging said carrier and a part extending through said opening, a retaining member connected to said support and in which said carrier is movable, a part on said retaining member normally obstructing withdrawal of said dog from said carrier, and means for moving said carrier and dog to and from locking position.

6. In a locking device for drawers or slides movable on a support, the combination of a carrier member having a plurality of

openings therethrough, said carrier member having depressions adjacent said openings, a plurality of dogs having portions projecting through said openings and oppositely disposed parts engaging the depressed portions of said carrier, retaining means having a part for connection to said support and in which said carrier is movable, said retaining means having a part normally obstructing removal of said dog parts from said depressions, and means for moving said carrier and dogs to and from locking positions.

7. In a locking device for drawers or slides movable on a support, the combination of a carrier member having a plurality of openings therethrough, said carrier member having depressions adjacent said openings, a plurality of dogs having portions projecting through said openings and oppositely disposed parts engaging the depressed portions of said carrier, retaining means having a part for connection to said support and in which said carrier is movable, said retaining means having a part normally obstructing removal of said dog parts from said depressions, and a resilient member interposed behind said dogs between said retaining means and said carrier.

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Certificate of Correction.

It is hereby certified that in Letters Patent No. 1,606,178, granted November 9, 1926, upon the application of James H. Rand, jr., of Tonawanda, and Louis C. Broecker, of Buffalo, New York, for an improvement in "Record Cabinets," an error appears in the printed specification requiring correction as follows; Page 3, line 9, claim 4, after the word "seats" insert the word *in*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 14th day of December, A. D. 1926.

[SEAL.]

M. J. MOORE,
Acting Commissioner of Patents.