July 17, 1923.

F. J. GREENE

1,462,278

LOCKING BAR

Filed May 5, 1922

2 Sheets-Sheet 1

Fig. 1.

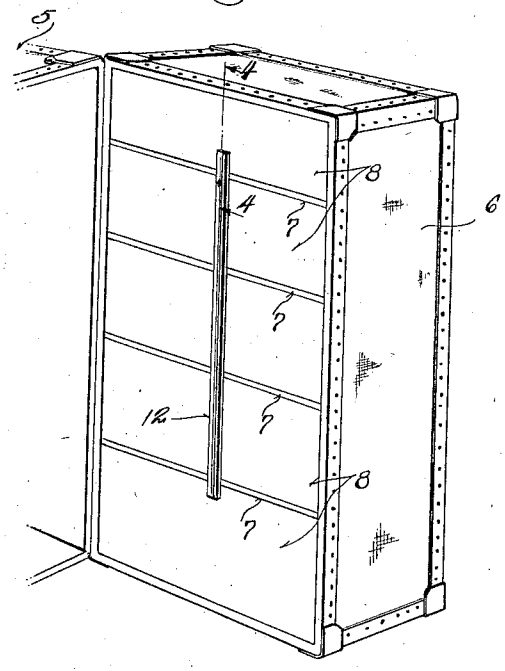


Fig. 2.

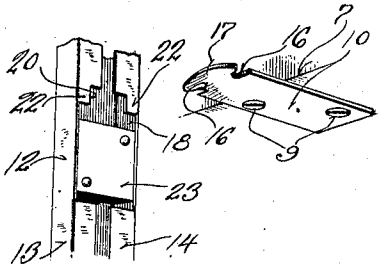


Fig. 3.

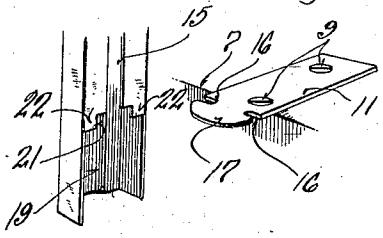
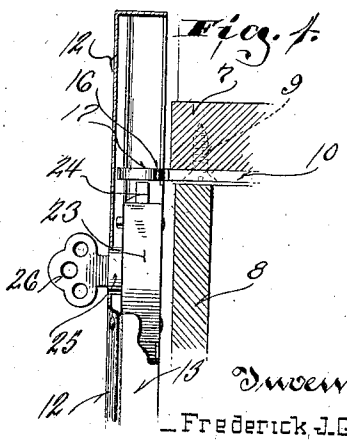


Fig. 4.



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Fig. 5.

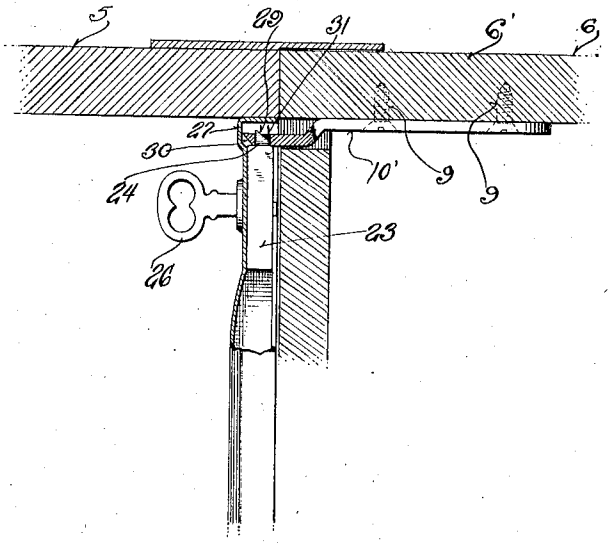


Fig. 7.

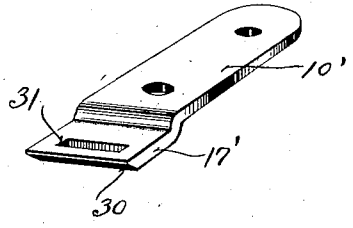
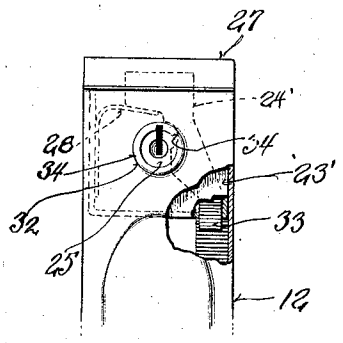


Fig. 6.



Witness:

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By Ira M. Jones.

Attorney

Patented July 17, 1923. 1,462,278

UNITED STATES PATENT OFFICE.

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LOCKING BAR.

Application filed May 5, 1922. Serial No. 558,780.

To all whom it may concern:

Be it known that I, FREDERICK J. GREENE, a citizen of the United States, and resident of Racine, in the county of Racine and State of Wisconsin, have invented new and useful Improvements in Locking Bars, of which the following is a description, reference being had to the accompanying drawing, which is a part of this specification.

This invention relates to certain new and useful improvements in wardrobe trunks and refers more particularly to a locking mechanism for the drawers thereof.

In wardrobe trunks comprising wardrobe and drawer sections it is frequently desirable to allow the trunk to stand open so that the contents of the wardrobe section may be accessible and, at the same time, permit locking of the drawers against unauthorized opening. It is, therefore, one of the objects of this invention to provide means for locking the drawers securely against unauthorized opening.

Special attempts have been made to accomplish this result and Letters Patents Numbers 1,360,448 and 1,378,381 were granted to George Sachnoff, November 30, 1920 and May 17, 1921, respectively, for devices seeking the desired result. However, these structures contain many objectionable features, the most pertinent of which are their expensiveness of construction and ungainly appearance.

Having this in mind, it is another object of my invention to provide a locking mechanism for wardrobe trunks which will be durable, capable of economical construction and which will be ornamental and in nowise mar the appearance thereof.

This invention has for a further object to provide a locking bar for a wardrobe trunk drawer section in which the locking means are entirely concealed from view and the locking bar capable of production in any design whereby the appearance of the trunk will be highly improved.

A still further object of this invention resides in the provision of a locking bar of the character described which is secured in position by being engaged with keepers and then shifted longitudinally and has concealed locking means operable to restrain longitudinal shifting of the bar and prevent unauthorized withdrawal of the same from its keepers.

Another highly desirable feature for wardrobe trunk drawer locking bars is to have the locking means in the form of a spring lock whereby the bar may be snapped into locking position without the necessity of employing a key, and this invention has for still another object to provide spring locking means of this type which means are of extremely simple construction and entirely concealed from view except for the opening for inserting the actuating key.

With the above and other objects in view which will appear as the description proceeds, my invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the hereindisclosed invention may be made as come within the scope of the claims.

In the accompanying drawings, I have illustrated one complete example of the physical embodiment of my invention constructed according to the best mode I have so far devised for the practical application of the principles thereof, and in which:

Figure 1 is a perspective view of a wardrobe trunk with the sections thereof in opened position, but a fragment of the wardrobe section being illustrated;

Figure 2 is a fragmentary perspective view of the upper end portion of the locking bar and the keeper engageable therewith;

Figure 3 is a view similar to Figure 2 of the lower end portion of the locking bar and its keeper;

Figure 4 is an enlarged fragmentary detail view, partly in section and partly in elevation, taken through the upper end of the locking bar on the plane of line 4—4 of Figure 1.

Figure 5 is a view similar to Figure 4 of a slightly modified form of my invention in which a spring locking means is employed;

Figure 6 is a view of the upper end of that type of bar illustrated in Figure 5, parts thereof being broken away and in section to illustrate structural details, and

Figure 7 is a perspective view of the upper locking keeper which I employ in connection with the spring lock means.

Referring now more particularly to the

accompanying drawing, the numeral 5 designates the wardrobe section of a wardrobe trunk and 6 the drawer section of a wardrobe trunk having partitions or drawer supports 7 between which removable drawers 8 are slidable. Rigidly secured to certain partitions 7 by fastening members 9 are upper and lower keepers 10 and 11, respectively, to which is removably secured a locking bar 12.

The locking bar 12 is preferably of tubular construction formed from a single length of material having spaced longitudinal portions bent to form sides 13, the ends thereof being struck inwardly to provide the bar inner face 14, said ends preferably terminating short of each other to provide a longitudinal groove or recess 15, see Figure 2.

The keepers 10 and 11 each have opposed notches or recesses 16 in their outer ends to form substantially T-shaped heads 17 that are disposed beyond the drawers 8 and are engageable in the locking bar through upper and lower openings 18 and 19, respectively, in the rear wall thereof. Openings 18 and 19 are substantially the width of the locking bar and head 17 and have recesses or openings 20 and 21, respectively communicating therewith, of a width substantially equal to the space between the inner ends of notches 16.

With this construction, when the bar is placed on the keepers with their head projecting through openings 18 and 19, a longitudinal shifting of the bar downwardly will engage the parts 22, formed by recesses 20 and 21, in notches 16 and secure the bar in position. As illustrated, the ends of the bar project over the face of the upper and lowermost drawers to secure the same against opening movement when the bar is in position.

To prevent the unauthorized withdrawal of the bar, a lock 23 is secured within the interior thereof and arranged so that when its locking bolt 24 is actuated, it will engage behind head 17 of the adjacent keeper and prevent the longitudinal shifting of the bar to align heads 17 with their recesses 18 and 19. The barrel 25 of the lock registers with an aperture in the outer face of the bar for the insertion of the key 26.

Constructing the bar 12 of tubular material, either by stamping or any other desired method, produces many advantages, in that the locking means, including the keepers and lock, are entirely concealed from view, a more ornamental appearance is obtained and a stronger locking device is provided and the necessity of an intermediate brace to prevent springing of the locking bar is eliminated.

As illustrated in the drawings, the bar is preferably formed from sheet metal by striking the marginal edges of the blank rearwardly and then inwardly providing rear flanges, and the lock is preferably confined, and concealed, between the rear flanges and the front wall of the bar.

In that form of my invention illustrated in Figures 5 to 7, the upper keeper 10′ is secured to the inner face of the top wall 6′ of the wardrobe section, thus bringing the upper end of locking bar 12 close to the top of the trunk section. The outer end 17′ of keeper 10′ is on a slightly lower plane than its shank to permit the engagement thereover of the upper end 27 of the locking bar.

In this form of my invention, lock 23′ is positioned adjacent the extreme upper end of bar 12 and has its locking bolt 24′ yieldably urged, at all times, to locking position by a spring 28. The outer end of bolt 24′ is tapered, as at 29, to cooperate with the tapered end 30 of keeper 10′ to move the locking bolt against its spring when the bar is engaged over end 17′, the locking bolt engaging in an opening 31 in end 17′. The rear inwardly directed flanges of the locking bar terminate inwardly of the end 27 to provide the recess for receiving the keeper and the upper end of the bar front face is preferably bulged outwardly to accommodate the keeper.

The lock 23′ is of special construction to permit its securement in the upper end of the locking bar without increasing the size thereof and to permit its complete concealment, with the exception of its key receiving barrel 25′, which registers with an opening 32 in the outer wall of the locking bar. The bolt 24′ is of special construction being formed of one piece with its rear end forming a guide 33 slidably mounted in an opening in the lock casing and having an intermediate recess 34 in which key 26 engages to move the bolt against the action of spring 28. The wall of the lock casing surrounding barrel 25′ is beaded, as at 34, and extends through opening 32 whereby a neat appearance is obtained.

From the above description it will be readily apparent that the locking bar can be brought close to the top part of the trunk section and a spring lock is provided which is entirely concealed.

What I claim as my invention is:

1. A locking device for a removable drawer, comprising spaced keepers rigidly mounted independent of the drawer at opposite sides thereof, a tubular locking bar extending across the face of the drawer and engaging the keepers, and locking means mounted in the interior of the tubular locking bar for preventing unauthorized withdrawal of the bar.

2. A trunk having a tier of drawers and locking mechanism therefor, comprising upper and lower keepers rigidly secured to upper and lower portions of the trunk and ex-

posed outwardly beyond the drawers, a tubular locking bar extending across the faces of the drawers, the outer ends of the keepers being engageable in the locking bar and concealed from view, and means securing the bar to the keepers.

3. A locking device for a removable drawer, comprising a tubular locking bar adapted to be extended across the face of the drawer, a keeper engageable with one end of the locking bar, a second keeper having its outer end extended beyond the drawer face and engageable in, and concealed by the other end of the locking bar, and spring lock means concealed in the other end of the locking bar and engageable with the end of the other keeper concealed therein to releasably secure the locking bar in position.

4. A locking device for a removable drawer, comprising a locking bar having rearwardly and inwardly struck flanges defining a lock receiving recess, a lock secured within the recess and concealed by the front face of the bar and the rearwardly and inwardly struck flanges, the outer end of the lock being spaced from the adjacent end of the locking bar. said end of the locking bar being closed over to provide a keeper receiving recess, and a keeper adapted to be inserted in said keeper receiving recess and engaged by the bolt of said lock to secure the bar in position.

5. A locking device for a removable drawer, comprising a substantially tubular locking bar formed of sheet metal with rearwardly extended flanges and inwardly directed flanges spaced from the front of the bar, an end flange closing one end of the bar, the inwardly directed flanges terminating inwardly of the end flange to provide a keeper receiving recess, a lock secured in the bar between the front and inwardly directed flanges thereof and having a locking bolt projectable into the keeper receiving recess, and a keeper adapted to be inserted in the recess and engaged by the lock bolt to secure the locking bar in position.

6. A locking device for a removable drawer, comprising a substantially tubular sheet metal locking bar having rearwardly extended flanges and inwardly directed flanges, the inwardly directed flanges being spaced from the front of the bar and terminating at a point slightly inwardly of one end of the bar, a part projected over the top of the bar end to form a keeper receiving recess, the front of the bar at the keeper receiving recess being bulged outwardly to accommodate a keeper, a lock concealed within the bar and confined between the front face thereof and the rearwardly and inwardly directed flanges, said lock having a bolt projectable into the keeper receiving recess, and a keeper adapted to have its outer end concealed in said recess and engaged by the lock bolt to secure the locking bar in position.

7. A locking device for a removable drawer, comprising a locking bar having a closed pocket, a lock entirely concealed within said pocket and spaced from one end thereof to provide a keeper receiving recess, a keeper adapted to be inserted in said recess, and a bolt carried by said lock and movable into the keeper receiving recess to engage the keeper and secure the bar in position.

8. A locking device for a removable drawer, comprising a locking bar having a closed pocket adjacent one end, a lock entirely concealed within the pocket and spaced over one end thereof to provide a keeper receiving recess, a keeper adapted to be inserted in said recess, a bolt carried by the lock and engageable in an opening in said keeper to releasably secure the same in said recess and lock the bar in position, and spring means normally urging said bolt into the keeper engaging recess, said bolt being depressed upon insertion of the keeper into said recess and engageable in the keeper opening by said spring means upon registering of the opening and bolt.

In testimony whereof I affix my signature.

FREDERICK J. GREENE.