G. H. WHEARY.

LOCKING ROD FOR TRUNK DRAWERS.

APPLICATION FILED JULY 19, 1915.

1,292,550. Patented Jan. 28, 1919.

Fig. 1.

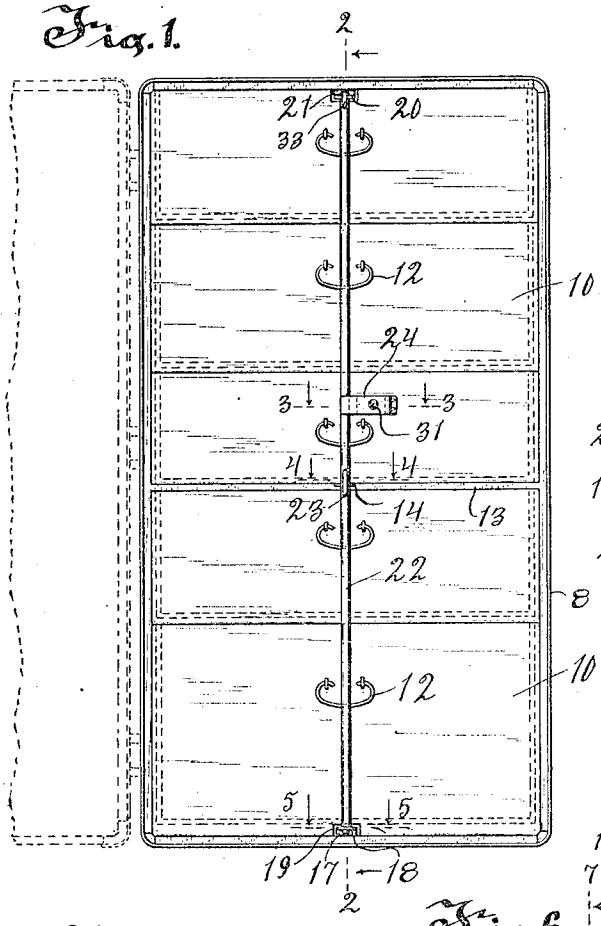


Fig. 2.

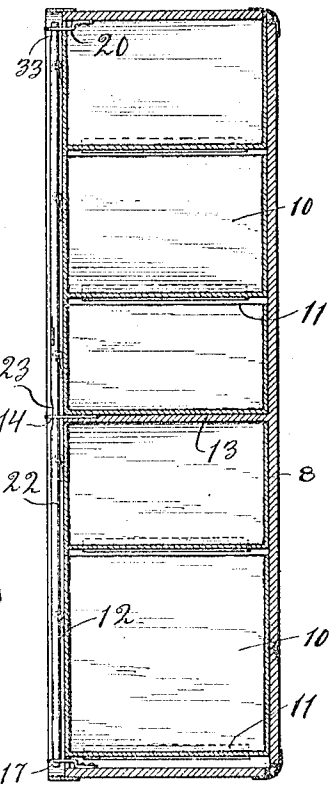


Fig. 3.

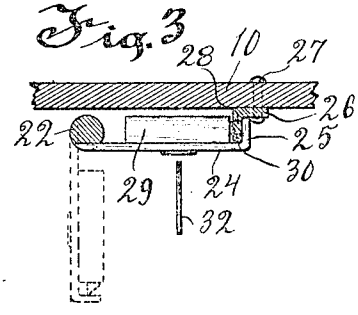


Fig. 6.

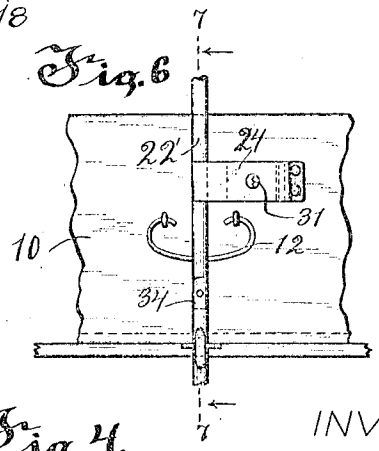


Fig. 7.

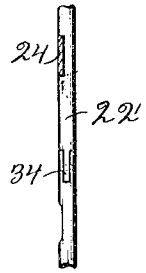


Fig. 5.

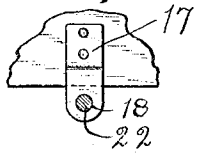
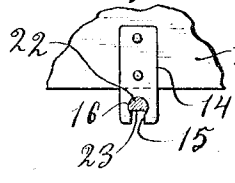


Fig. 4.



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LOCKING-ROD FOR TRUNK-DRAWERS.

1,292,550. Specification of Letters Patent. Patented Jan. 28, 1919.

Application filed July 19, 1915. Serial No. 40,584.

To all whom it may concern:

Be it known that I GEORGE HENRY WHEARY, 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-Rods for Trunk-Drawers, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention has relation to improvements in locking rods for trunk drawers.

In the form of trunks which embody a number of drawers, in order to guard against the drawers moving inwardly and outwardly during transportation to the damage or injury of the drawers, some locking mechanism for holding the drawers against movement is most desirable, if not necessary. Obviously, a separate lock for each drawer would be exceedingly troublesome, involving locking and unlocking each drawer separately, and as a person usually desires access to all of the drawers upon reaching the journey's end, it will be apparent that separate lock mechanism for each one of the drawers would entail labor and trouble which it is desirable to avoid.

It is the primary object of my invention to provide a simple and convenient form of lock, which, when in locking position, will lock all the drawers against movement or withdrawal, and which when out of locking engagement, permits the drawers to be readily drawn outwardly or opened.

A further object resides in providing a form of lock of the above character which will permit of a section of the lock mechanism being thrown out of engagement so as to give free access to some of the drawers.

A further object is to provide a construction of such character that the entire lock mechanism can be readily removed, and as readily readjusted to place.

With the above primary, and other incidental, objects in view, the invention consists of the devices and parts, or the equivalents thereof, as hereinafter more fully set forth.

I have illustrated my invention as applied to the drawer or chiffonnier section of a wardrobe trunk. It will be obvious, however, from the description that follows, that the device is equally applicable to any form of trunk containing one or more drawers.

In the accompanying drawing,

Figure 1 is a front elevation of the drawer section of a wardrobe trunk equipped with my improvements, showing the central horizontal arm 14 sectioned or broken away, and also showing a fragment of the wardrobe section in dotted lines, and as open;

Fig. 2 is a vertical sectional view on the line 2—2 of Fig. 1, looking in the direction of the arrows;

Fig. 3 is a horizontal section on the line 3—3 of Fig. 1, looking downwardly in the direction of the arrows, and showing by dotted lines the locking mechanism as swung outwardly to unlocking position;

Fig. 4 is a horizontal section on line 4—4 of Fig. 1, looking downwardly in the direction of the arrows;

Fig. 5 is a horizontal section on the line 5—5 of Fig. 1, looking downwardly in the direction of the arrows;

Fig. 6 illustrates a fragment of one of the drawers, and also illustrates a fragment of a modified form of the locking rod; and

Fig. 7 is a detail fragmentary view of said modified form of locking rod.

Referring to the drawing, the numeral 8 indicates the drawer section and the dotted line portion adjacent thereto a part of the wardrobe section of an ordinary form of wardrobe trunk, the said drawer section being equipped with a plurality of drawers 10, supported upon and slidable on side rails 11. The drawers are provided with suitable pull handles 12.

Secured to the central partition 13 of the drawer section is a horizontal arm 14, which projects outwardly for a slight distance beyond the plane of the outer sides of the drawers. A slot extends inwardly from the outer edge of this arm, and the outer portion 15 of said slot is narrower than the inner end 16 thereof.

Secured to and projecting outwardly from the bottom piece of the drawer section is another horizontal arm 17. This arm likewise projects outwardly slightly beyond the plane of the front faces of the drawers, and near its outer end is provided with an opening 18. The lower edge of the front side of the lower drawer is provided with a slot or cut-

out portion 19 to permit of the arms 17 projecting outwardly.

Secured to the under side of the top of the drawer section is a horizontal arm 20, which also projects outwardly for a slight distance beyond the plane of the outer sides of the drawers. The upper edge of the front side of the upper drawer is cut out or slotted at 21 to permit of the projecting outwardly of the arm 20. The outer edge of this arm 20 is provided with an inwardly extending slot (not shown) which is identical to the slot 15—16 of the arm 14, that is to say, the outer portion of said slot is narrower than the inner end thereof.

The vertical locking rod is indicated by the numeral 22. The lower end of this rod is reduced in diameter, and is adapted to fit in the opening 18 of the lower horizontal arm 17. The rod at a medial point, corresponding in location to the location of the intermediate arm 14, is flattened on one side, as indicated by the numeral 23, so as to make the rod at this point of less width in one direction than in the other. At a point a slight distance above this flattened face, the rod has secured thereto, and projecting at right angles therefrom an arm 24, the outer end of said arm being bent inwardly at an angle, as indicated by the numeral 25. This angled end of arm 24 bears against or overlaps the outstanding member of an angle bracket 26, secured to the outer side of the drawer adjacent thereto by means of rivets 27. The outstanding member of this angle bracket 26 is provided with a bolt-hole 28.

Secured to the back of the arm 24 is lock mechanism 29, the bolt 30 thereof adapted to be thrust into engagement with the bolt-hole 28. The angled end 25 of arm 24 serves as a guard to prevent tampering with bolt 30. A key-hole 31, for the introduction of a key 32, is provided in the arm 24, and leads to or communicates with the casing of the lock mechanism 29.

The upper extremity of the lock rod 22 is also provided with a flat face 33, which is so located that when the rod is in a vertical position, this flattened end of the rod will be in line with the slot of the upper horizontal arm 20.

Figs. 6 and 7 of the drawing illustrate a modified form of the locking rod, the said modified form of locking rod being indicated by the numeral 22′. This modification provides for forming the locking rod in two sections united by hinge.

In use, if it is desired to adjust the locking rod to place, the lower reduced end of said rod is first inserted into the hole 18 of the lower arm 17. The rod is then turned so that the flattened portions 23 and 33 are at right angles to the positions which said flattened portions occupy in Figs. 1 and 2 of the drawing. This will necessarily present the narrowed portions of the rod in line with the narrowed portions of the slots of arms 14 and 20. The locking rod is then pushed inwardly against the drawers and the narrow portions will pass through the narrow portions of the slots of arms 14 and 20, the rod finally seating itself in the inner enlarged ends of said slots. The locking rod is now turned to the position shown in Figs. 1, 2, 4 and 6 of the drawing, that is to say, to such position that the flat faces of the rod intercept or extend transversely of the inner ends of the narrow portions of the slots. When in this position, it is obvious that the rod cannot be withdrawn from engagement with the arms 14 and 20, and this disengagement cannot be secured until the rod is again turned so as to bring the flat faces of the rod into alinement with the narrow portions of the slots. When the locking rod is made to engage the several horizontal arms as just explained, the lock carrying arm 24 is then swung from the dotted line position shown in Fig. 3 to the full line position shown in Figs. 1, 3 and 6 of the drawing. The key is then passed through the key-hole and turned so as to thrust bolt 30 into engagement with the bolt-hole 28. The locking rod is thereby securely locked in its vertical position, and it is obvious that when so locked it is not only impossible to open any of the drawers, but furthermore said drawers are held firmly and securely against outward movement during transportation of the trunk. When one's destination is reached, and it is desired to gain access to any one or more of the drawers, all that is necessary to be done is to insert the key into the key-hole, and then turn said key so as to withdraw bolt 30. The lock carrying arm 24 is then swung to the dotted line position of Fig. 3. The entire locking rod with its attachment is now free to be removed.

The modification shown in Figs. 6 and 7 of the drawing, wherein the locking rod is composed of two hinged sections, provides perhaps a more convenient form, in that the lower half can first be made to engage the lower arm 17 and the intermediate arm 14, and thereafter the upper half can be swung upwardly and made to engage the upper arm 20. Also this form is convenient where it is only desired, for instance, to gain access to one or more of the upper drawers. In that case, it is only necessary to disengage the upper half of the locking rod from the upper arm 20, and then permit said upper half of the locking rod to fall downwardly.

While I have shown and described my improved locking rod mechanism in connection with a plurality of drawers, which of course, is the preferred use, yet I do not wish to be understood as limiting myself thereto, in as much as the mechanical arrangement is

equally adapted to merely one drawer, or device or any number of drawers or devices, for that matter, it being only necessary to regulate the length of the locking rod to suit requirements.

What I claim is:

1. The combination with a casing having an arm or support connected thereto, said arm or support having a slot extending from its edge inwardly, the outer end of said slot being narrower than the inner end thereof, of a rod provided with a portion which is narrower in one direction than in the opposite direction, said portion being so located on the rod that the narrow width thereof will engage the narrow portion of the slot, when the rod is turned in one direction, and the augmented width of said portion will seat itself in the wide portion of the slot, and, when so seated and the rod is turned in the opposite direction, will intercept the narrow portion of the slot and lock the parts together, and means for locking the rod against being turned when said rod is in its intercepting position.

2. The combination with a casing having an arm or support connected thereto, said arm or support having a slot extending from its edge inwardly, the outer end of said slot being narrower than the inner end thereof, of a rod having a detachable connection at one end with the casing, and said rod provided at another point of its length with a portion which is narrower in one direction than in the opposite direction, said rod, when turned so as to bring its narrow portion in line with the narrow portion of the slot, is adapted to be passed through said slot and into the wider portion thereof, and when seated in the wider portion of the slot and turned in the opposite direction, to bring this wide portion across the narrow slot, and be thereby held against withdrawal from the slot.

3. The combination with a casing having arms or supports connected thereto, each arm or support having a slot extending from its edge inwardly, the outer end of said slot being narrower than the inner end thereof, of a rod provided at a plurality of points of its length with portions which are narrower in one direction than in the opposite direction, said portions being so located on the rod that the narrow widths thereof will engage the narrow portions of the slot, when the rod is turned in one direction, and the augmented widths of said portions will seat themselves in the wide portions of the slot, and will, when the rod is turned in the opposite direction, intercept the narrow portions of the slots and lock the parts together, and means for locking the rod against being turned when said rod is in its intercepting position.

4. The combination with a casing having arms projecting therefrom, one of said arms positioned intermediate of the other arms, and one of the outer arms having an opening therethrough, and the other outer arm and the intermediate arm each having a slot extending from the edge thereof inwardly, the outer portion of each slot being narrower than the inner portion thereof, of a rod removably fitting in the opening of one of the outer arms, said rod provided at a plurality of points of its length with portions which are narrower in one direction than in the opposite direction, said portions being so located on the rod that the narrow widths thereof will engage the narrow portions of the slots, when the rod is turned in one direction, and the augmented widths of said portion will seat themselves in the wide portions of the slots, and will intercept the narrow portions of said slots, when the rod is turned in the opposite direction.

5. The combination of a casing having an arm or support connected thereto, said arm or support having a slot extending from its edge inwardly, the outer end of said slot being narrower than the inner end thereof, a rod provided with a portion, which is narrower in one direction than in the opposite direction, said portion being so located on the rod that the narrow width thereof will engage the narrow portion of the slot, when the rod is turned in one direction, and the augmented width of said portion will seat itself in the wide portion of the slot, and when so seated, and the rod is turned in the opposite direction, will intercept the narrow portion of the slot, an arm secured to and extending from the rod, locking mechanism carried by the arm, and a member with which the locking mechanism is adapted to engage.

6. The combination of a trunk casing having an arm or support connected thereto, said arm or support having a slot extending from its edge inwardly, the outer end of said slot being narrower than the inner end thereof, a series of drawers, slidably mounted in the trunk casing, a rod adapted to extend across, and against the outside of said drawers, said rod provided with a portion which is narrower in one direction than in the opposite direction, said portion being so located on the rod that the narrower width thereof will engage the narrower portion of the slot, when the rod is turned in one direction, and the augmented width of said portion will seat itself in the wide portion of the slot, and when so seated and the rod is turned in the opposite direction, will intercept the narrow portion of the slot and lock the parts together, and means for locking the rod against being turned when said rod is in its intercepting position.

7. The combination of a trunk casing having an arm or support connected thereto,

said arm or support having a slot extending from its edge inwardly, the outer end of said slot being narrower than the inner end thereof, a series of drawers slidably mounted in the trunk casing, an arm extending from one of said drawers, and provided with a bolt opening, a rod adapted to extend across and against the outside of the drawers, said rod provided with a portion which is narrower in one direction than in the opposite direction, said portion being so located on the rod that the narrower width thereof will engage the narrower portion of the slot, when the rod is turned in one direction, and the augmented width of said portion will seat itself in the wide portion of the slot, and when so seated, and the rod is turned in the opposite direction, will intercept the narrow portion of the slot, an arm extending from the rod and provided with a key-hole, and lock mechanism carried by the rod-arm, and having the key-hole through the rod-arm extending thereto, the said locking mechanism when operated by a key adapted to have its bolt thrust into engagement with the bolt-hole of the drawer arm.

8. The combination of a trunk casing having an arm or support connected thereto, said arm or support having a slot extending from its edge inwardly, the outer end of said slot being narrower than the inner end thereof, a series of drawers slidably mounted in the trunk casing, an arm extending from one of said drawers, and provided with a bolt opening, a rod adapted to extend across and against the outside of the drawers, said rod provided with a portion which is narrower in one direction than in the opposite direction, said portion being so located on the rod that the narrower width thereof will engage the narrow portion of the slot, when the rod is turned in one direction, and the augmented width of said portion will seat itself in the wide portion of the slot, and when so seated and the rod is turned in the opposite direction, will intercept the narrow portion of the slot, an arm extending from the rod and provided with a key-hole and having its outer end bent at an angle to overlap the outer side of the arm which extends from one of the drawers, and locking mechanism carried by the rod and arm, and having the key-hole through the rod-arm extending thereto, the said locking mechanism, when operated by a key, adapted to have its bolt thrust into engagement with the bolt-hole of the drawer arm.

9. The combination with a trunk casing having arms extending therefrom, one of said arms positioned intermediate of the other arms, and one of the other arms having an opening therethrough, and the other outer arm and the intermediate arm each having a slot extending from the edge thereof inwardly, the outer portion of each slot being narrower than the inner portion thereof, a series of drawers slidably mounted in the trunk casing, a rod adapted to removably fit the opening in one of the outer arms, and to extend across and against the outside of the drawers, said rod provided with a plurality of portions which are narrower in one direction than in the opposite direction, said portions being so located on the rod that the narrow widths thereof will engage the narrow portions of the slots of the arms when the rod is turned in one direction, and the augmented widths of said portions will seat themselves in the wide portions of the slots, and when so seated and the rod is turned in the opposite direction, will intercept the narrow portions of the slots, and an arm extending from the rod, said arm carrying locking mechanism, which locking mechanism, when operated, is adapted to effect locking engagement with one of the drawers.

10. The combination with a casing, an arm extending therefrom, said arm provided with a slot extending from its outer edge inwardly, the outer portion of said slot being narrower than the inner portion thereof, a device or member within said casing, a rod bearing against said inner device or member, said rod provided with a portion which is narrower in one direction than in the opposite direction, said portion being so located on the rod that the narrow width thereof will engage the narrow portion of the slot, when the rod is turned in one direction, and the augmented width of said portion will seat itself in the wide portion of the slot, and when so seated and the rod is turned in the opposite direction, will intercept the narrow portion of the slot and lock the parts together, and means for locking the rod against being turned when said rod is in its intercepting position.

11. The combination of a casing, an arm extending from said casing, said arm provided with a slot extending from its outer edge inwardly, the outer portion of said slot being narrower than the inner portion thereof, a device or member within said casing, a rod bearing against said inner device or member, said rod provided with a portion which is narrower in one direction than in the opposite direction, said portion being so located on the rod that the narrower width thereof will engage the narrow portion of the slot, when the rod is turned in one direction, and the augmented width of said portion will seat itself in the wide portion of the slot, and when so seated, and the rod is turned in the opposite direction, will intercept the narrow portion of the slot, an arm extending from the rod, and a locking mechanism carried by said arm, and adapt-

ed to effect locking engagement with the inner device or member.

12. The combination with a casing for holding movable elements, of a means for locking said elements in closed position, consisting of a rod formed of two hinged together sections, said rod having means for detachable connection with the casing and movable to a locking position therewith by an axially turning movement, and means for locking the rod against being turned.

13. The combination with a casing having arms extending therefrom, each arm having a slot extending inwardly from its edge, the outer portion of each slot being narrower than the inner portion thereof, of a rod consisting of two sections hinged together, each section of the rod provided with a portion which is narrower in one direction than in the opposite direction, said portions being so located on the respective sections of the rod that the narrow widths will engage the narrow portions of the slots, when the rod is turned in one direction, and the augmented widths of said portions will seat themselves in the wide portions of the slot, and when so seated and the rod is turned in the opposite direction, will intercept the narrow portions of the slots.

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

GEORGE HENRY WHEARY.

Witnesses:
FRANK J. MITCHELL,
A. R. EDDINGTON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."