March 12, 1935. M. J. HELLER 1,994,021

LOCKING DEVICE FOR HINGED APPARATUS

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FIG. -1-

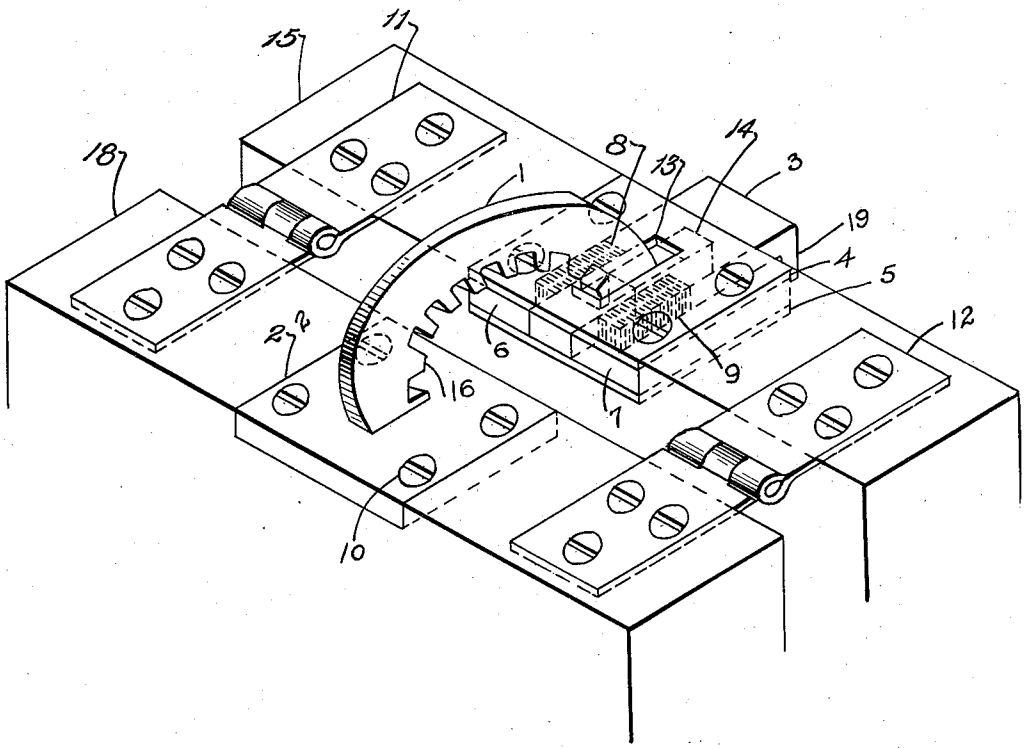


FIG. 6.

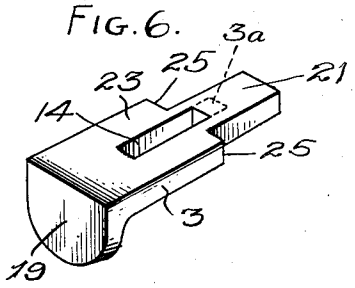
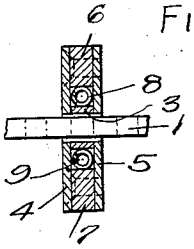


FIG. 7



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FIG. -4-

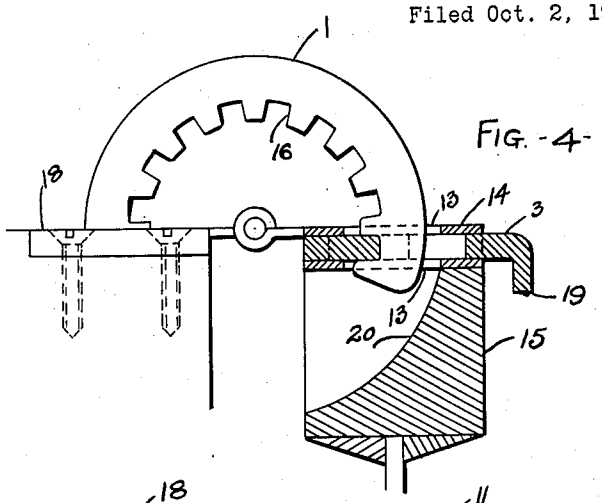


FIG. -5-

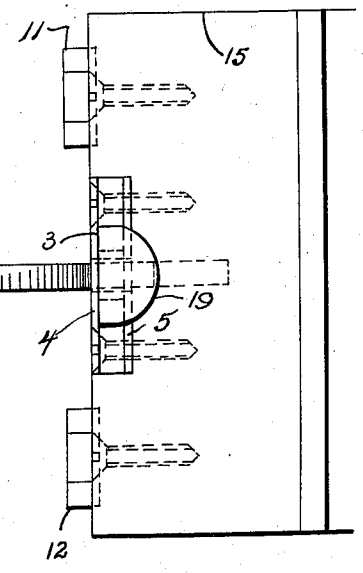


FIG. - 2-

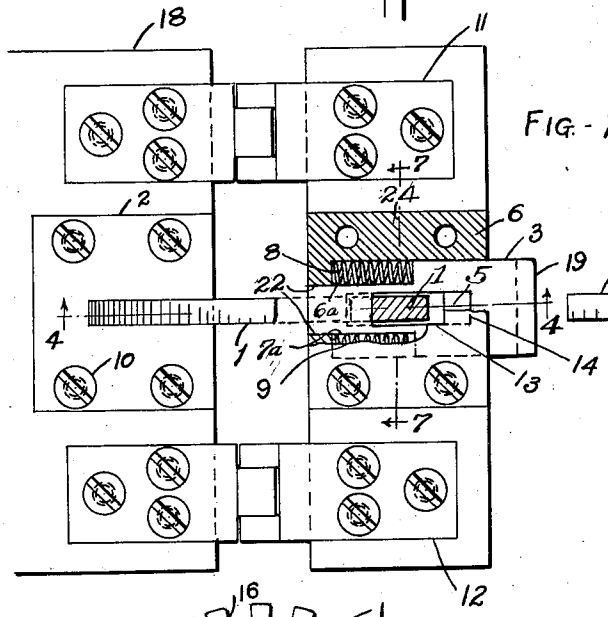
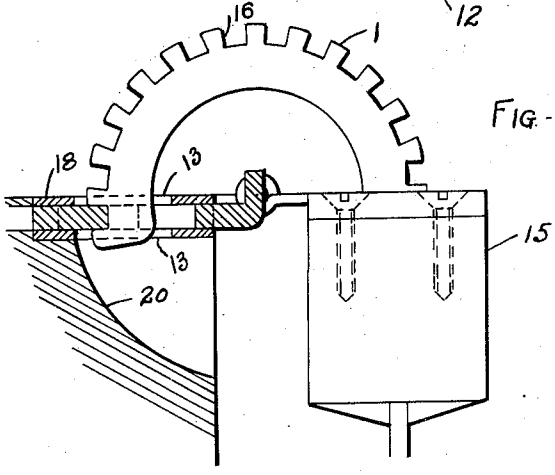


FIG. - 3-



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Patented Mar. 12, 1935 1,994,021

UNITED STATES PATENT OFFICE

1,994,021

LOCKING DEVICE FOR HINGED APPARATUS

Michael J. Heller, Los Angeles, Calif.

Application October 2, 1933, Serial No. 691,778

2 Claims. (Cl. 292—266)

This invention has to do with the art of locks for "French" doors and other hinged apparatus where it is desired to lock or control the position of the apparatus.

In its preferred embodiment, the invention is an attachment for "French" doors or ventilators or hinged windows or transoms, and comprises means of positive locking in any position.

In the ordinary "French" door, transom or ventilator, it is impossible to lock the hinged apparatus positively except when in a fully closed position, also it is frequently necessary, with the means now in use to place a lock which is not effective where the doors are double. This device operates on the same side of the hinged apparatus as the hinge, with consequent aid as to support and individual position control of each sash. In addition said means is protected against tampering.

Figure 1 is a detailed view in perspective of the device.

Figure 2 is a vertical elevation partly in section showing the device attached to a window and sash.

Figure 3 is a horizontal section of the device as modified for an inswinging window shown in an open position.

Figure 4 is a horizontal section of the device taken on line 4—4 of Fig. 2.

Figure 5 is a vertical side view of the device in its position on a "French" window.

Figure 6 is a perspective view of the locking plunger utilized in my invention.

Figure 7 is a section taken on line 7—7 of Figure 2.

Similar numerals refer to similar parts throughout the several views.

This device consists of an arc shaped bar (1) and in combination a locking device and means of locking the device in any open or closed position of the French window (15) and means for fastening the locking device and bar to the sash (15) and casement (18) respectively so that the center of curvature of the arc shaped bar lies along the axis of the hinges of the door (15).

For an inswinging "French" window (15) the arc shaped bar (1) is notched on the outside of the arc and is so attached to the sash of the window (15) that the arc shaped bar (1) will pass through the locking device and slot (20) which is in the casement (18).

For an outswinging "French" window (15) the arc shaped bar (1) is notched on the inside of the arc and is so attached to the casement (18) that the arc shaped bar will pass through the locking device and slot (20) which is on the "French" window (15). Notches (16) are of a size to fit plunger (3).

The plunger 3 is inclosed in a guide having front and back plates 4 and 5, and top and bottom L-shaped pieces 6 and 7, against the shoulders 6*a* and 7*a* of which, rest compression springs 8 and 9 adapted to continuously urge the plunger to the right as viewed in Figure 2, into locking engagement with the arc-shaped bar 1, the portion 3*a* of the plunger 3 entering the notches 16, thereby preventing movement of the window 15 relative to the casing 18 until the plunger 3 is pressed inwardly (to the left as shown in Fig. 2). The plates 4 and 5 are slotted as at 13 to permit passage of the arc-shaped bar 1 therethrough.

The plunger 3 comprises a flat T-shaped piece having an extension finger piece 19 extending at right angles thereto. The narrow portion 21 of the plunger fits closely between the opposed ends 22 of the arms of the L-shaped pieces 6 and 7, to be guided thereby. The wider portion 23 of the plunger 3, is similarly guided by the legs 24 of the L-shaped pieces 6 and 7. Springs 8 and 9 bear against the shoulders 25 of plunger 3. A rectangular slot at 14 passes through the plunger 3 the sides of which support, guide, and protect the arc-shaped bar 1, which passes through it.

Pressure upon the finger piece 19, compresses springs 8 and 9, withdraws the portion 3*a* of the plunger from engagement with the sides of the notches 16, and permits such movement of the window as may be desired. Upon release thereof, springs 8 and 9 urge the plunger back into engagement with the arc-shaped bar 1, to enter the nearest notch and thus prevent further hinge movement.

Having thus described the invention, what I claim as new is:

1. A locking device for hinged members including a bar on one of said members, a locking plunger adapted for engagement with said bar and carried by the other of said members, guiding means therefor, said plunger comprising a flat member provided with a slot for the reception of said bar and shoulders on the opposite sides thereof, and resilient means between said shoulders and said plunger whereby said plunger is resiliently urged into engagement with said bar.

2. A device as described in claim 1 in which said guiding means includes a member with opposed top and bottom portions projecting from the plane of such member, each of said portions having a horizontal and a vertical section, said plunger being guided between said horizontal sections and between the ends of the vertical sections, the inner side of said vertical section providing seats for said resilient means.

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