No. 773,691. PATENTED NOV. 1, 1904.

E. TYDEN.

PEDESTAL TABLE LOCK.

APPLICATION FILED MAR. 16, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

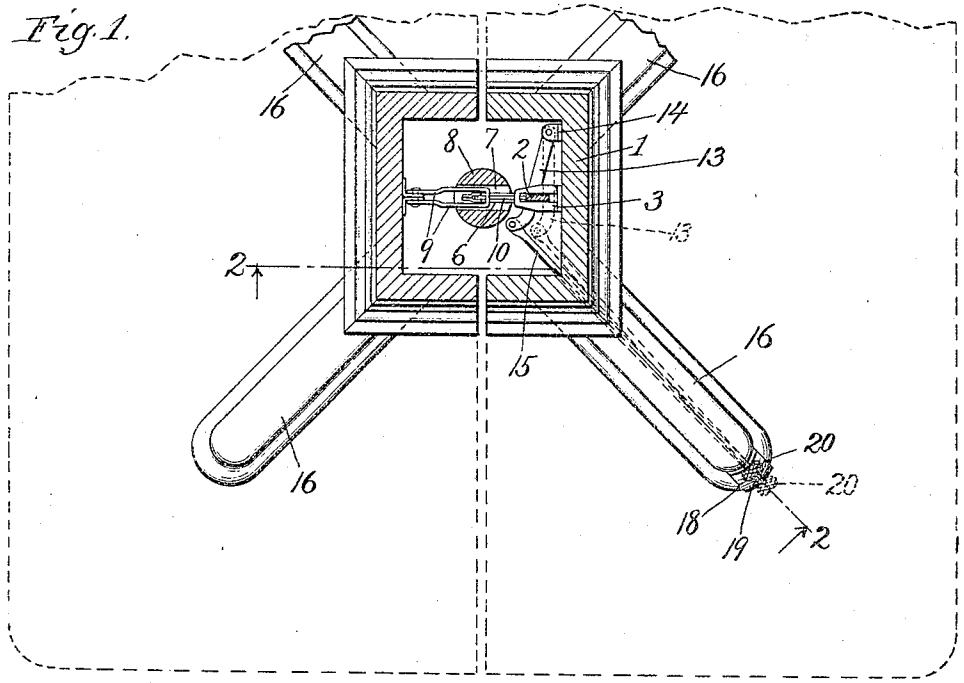


Fig. 2.

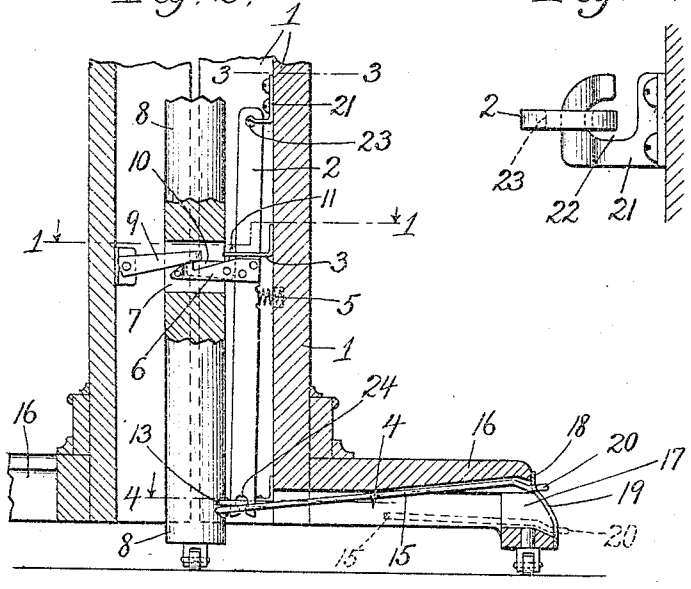
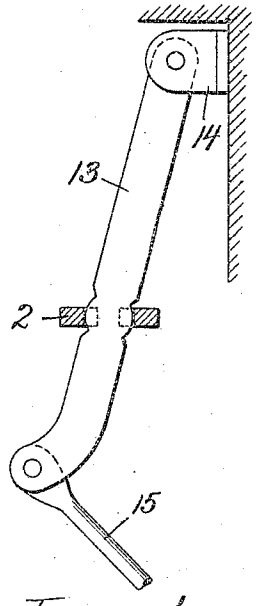


Fig. 3.

Fig. 4.



Witnesses.

Edward T. Wray.

Fred'k G. Fischer

Inventor.

Emil Tyden.

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his Att'ys.

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NO MODEL. APPLICATION FILED MAR. 16, 1903. 2 SHEETS—SHEET 2.

Fig. 5.

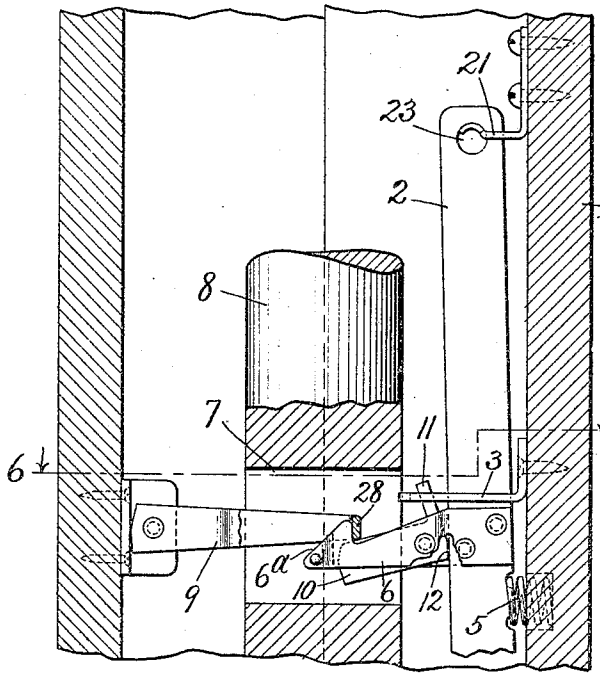


Fig. 7.

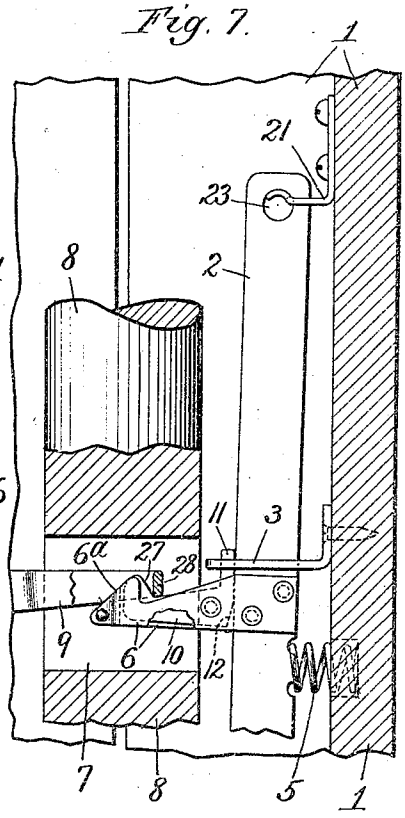
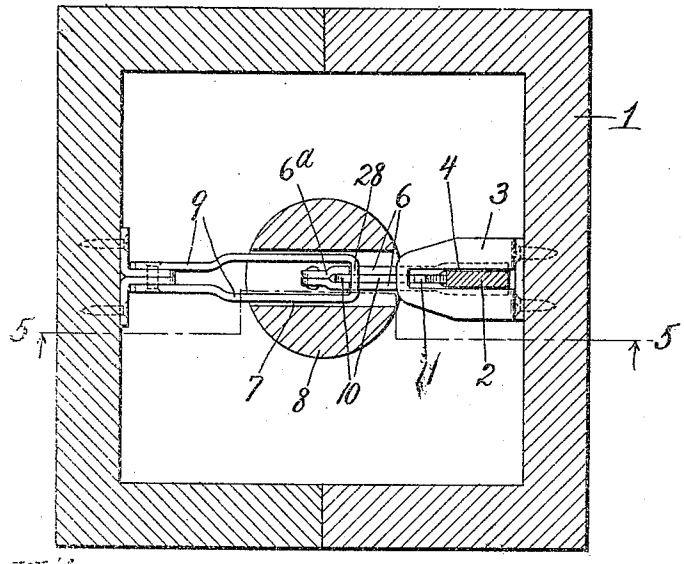


Fig. 6.



Witnesses.
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his Atty's.

No. 773,691. Patented November 1, 1904.

UNITED STATES PATENT OFFICE.

EMIL TYDEN, OF HASTINGS, MICHIGAN.

PEDESTAL-TABLE LOCK.

SPECIFICATION forming part of Letters Patent No. 773,691, dated November 1, 1904.

Application filed March 16, 1903. Serial No. 147,962. (No model.)

To all whom it may concern:

Be it known that I, EMIL TYDEN, a citizen of the United States, residing at Hastings, in the county of Barry and State of Michigan, have invented new and useful Improvements in Pedestal-Table Locks, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

This invention is designed to provide improved means for locking together the separable members of pedestal extension-tables.

It consists in the features of construction set out in the claims.

Figure 1 is a horizontal section at the line 1 1 on Fig. 2 through the pedestal of an extension-table having my improvements, showing the members of the table partly closed and ready to be locked. Fig. 2 is a vertical section at the line 2 2 on Fig. 1. Fig. 3 is a detail section at the line 3 3 on Fig. 2. Fig. 4 is a section at the line 4 4 on Fig. 2. Fig. 5 is a vertical detail section at the line 5 5 on Fig. 6, showing the pedestal members closed and locked. Fig. 6 is a section at the line 6 6 on Fig. 5. Fig. 7 is a detail section of parts corresponding to those shown in Fig. 5, illustrating a slight modification and showing the pedestal parts in a position similar to Fig. 2.

Upon one of the pedestal members 1 there is fulcrumed a vertically-disposed lever 2, the fulcrum of the lever being for certain specific purposes of the invention preferably toward the upper end of the pedestal and the operating devices toward the foot. A bracket 3, having a slot 4 through which the lever extends, operates as a guide and check for the movement of the lever, a spring 5 being provided reacting against the lever to thrust it inward with respect to the pedestal—that is, away from the pedestal-wall on which it is mounted—to the limit permitted by the restraining devices. This lever has a latch 6 projecting rigidly inward from it at a point intermediate in the height of the pedestal and the lever being mounted midway in the width of the pedestal. This latch protrudes through a slot 7 in the center leg 8 to reach and become engaged with a staple 9, which is pivoted to the opposite pedestal member. To the rigid latch 6 there is pivoted a trip-lever 10, whose horizontal arm extends upon the pivot alongside the latch, while its vertical member 11 projects up into the slot 4 of the guide-bracket 3 in position to encounter the end of the slot as the lever 2 swings inward and by such encounter causes the horizontal arm to be lifted alongside the nose of the fixed latch, so as to disengage the pivoted latch or staple 9 therefrom and hold it out of engagement so long as the lever 2 remains at the inward position, to which it is thrust by the spring. As a matter of detail of construction I make the rigid latch 6 of sheet metal folded to form two limbs which embrace the lever 2, to which the latch is rigidly secured by rivets taken through both the limbs. The trip-lever 10 is located, and thus swings, as stated, alongside both side bars constituting the fixed latch. The trip-lever tends by gravity to take the position shown in Fig. 5, with the horizontal arm depressed, so as to uncover the nose of the rigid latch and permit the safe engagement of the pivoted latch or staple therewith. The movement of the trip-lever in the direction thus caused by gravity is checked at the proper point by the heel 12 on the trip-lever encountering the inner vertical edge of the lever 2.

From the construction thus far described it will be understood that as the two members of the table are closed together the pivoted latch or staple 9 encountering the sloping nose 6^a of the rigid latch 6 rides up on it and is lodged upon the upper edge of the trip-lever 10 before the members of the pedestal are entirely closed together. If the pedestal remains slightly separated at the lower part when the table-top is closed, the operator by any means provided for that purpose may draw the free end of the lever 2 back toward the wall of the pedestal member on which the lever is fulcrumed, and thereby the trip-latch 10 will be dropped, permitting the pivoted latch or staple 9 to drop into safe engagement with the hook of the fixed latch, and the further retraction of the lever 2 will close up the two pedestal members to the extent of the range of movement provided for said lever 2.

I have shown means for operating the le-

ver 2, located at the foot of the pedestal. The lower end of said lever is pivotally connected to a horizontal lever 13, which is fulcrumed on a bracket 14, mounted on the inner wall of the member of the pedestal on which the lever 2 is fulcrumed, and at the other end it is connected to an operating-rod 15, which extends out along one of the pedestal-feet 16, being preferably lodged within such foot on the under side, as illustrated. This lever protrudes through a slot 17 in the end of the foot, on which there is mounted a plate 18, having a slot 19, through which the end of the lever also protrudes. The end of the foot and the plate mounted thereon are formed so that the plate presents an inclined face, and the end of the lever is furnished with a pedal-piece 20, which extends across the slot and rides on the inclined face of the plate when the pedal-piece is depressed by the foot of the operator, and the rod 15 is thereby pulled outward by the cam action of the inclined plate and operates the horizontal lever 13, pulling the lower end of the lever 2 outward—*i. e.*, away from the center of the pedestal—this action being performed after the table members are closed together far enough to cause the pivoted latch or staple 9 to occupy the position shown in Fig. 2, where it is ready to drop into engagement with the rigid latch or hook when the trip-latch 10 is caused to drop by the movement of the lever 2, as described. The lower part of the plate 18 presents a face substantially at right angles to the pull of the rod when the pedal-piece is depressed to the lowest limit of the slot, and thus operates to lock the parts securely in the position at which the pedal members are fully closed together, as illustrated in Figs. 5 and 6. For releasing the locking devices and permitting separation of the table members the operator will, by the toe, lift the pedal-piece 20 past the vertical portion of the face of the plate 18, and the reaction of the parts, and particularly of the spring 5, as well as any separating movement of the table members, will cause the pedal-piece to be crowded up along the sloping face of the plate and complete the releasing action.

Some minor details of construction merit attention. For convenience in assembling the parts and for cheapness in construction I provide for pivoting the lever 2 to the pedestal member a bracket 21, (see Fig. 3,) which has the aperture 22 in which the lever is pivoted made in the form of a slot opening to the edge of the bracket, so that the lever, which has a closed eye 23, (see Fig. 5,) may be entered edgewise in the opening of the slot and swung round ninety degrees to the position at which it operates, and the guide-bracket 3 being afterward secured in place on the pedestal-wall keeps the lever in operative position, so that it cannot escape from the bracket. At the lower end, for convenience and cheapness of construction, I make the lever 2 with the aperture for engaging the lever 13 also in the form of a slot 24, opening by a narrowed rift through the end of said lever, and I form the horizontal lever 13, preferably struck out of sheet metal, (see Fig. 4,) with the part which engages the slot formed as to the opposite edges in arcs of a circle whose diameter adapts it to make a working fit in the aperture 24 of the narrowed rift, so that the horizontal swinging movement of the lever 13 is accommodated at the pivotal connection of the lever 2, although said movement of the latter lever is strictly limited to a vertical plane transverse to the length of the lever 13.

In Fig. 7 I have shown a slight modification of the trip-latch, which consists in cutting it back on the upper edge to form an inclined face 27, on which the cross-bar 28 of the pivoted latch or staple 9 lodges when the pedestal members are closed together ready for latching. This permits the said cross-bar to drop a little below the upper edge of the hooked nose of the rigid latch 6 and may give slightly-increased certainty of the engagement of the two elements when the pedal 20 is suddenly depressed for the purpose of drawing the members together. In such case in the form shown in the principal figures the very quick movement given to the lever 2 and the latch from the position shown in Fig. 2 might with the form of the trip-latch shown in that figure pull the nose of the latch 6 past the cross-bar 28 of the pivoted latch or staple 9 before the latter would have time to drop.

I claim—

1. In a pedestal extension-table in combination with the separable members of the pedestal, a vertically-disposed lever fulcrumed on one of the pedestal members having connected with it one of two coöperating devices for connecting the two pedestal members, the other of said coöperating devices mounted on the other pedestal member; a horizontally-disposed lever at the lower part of the pedestal connected with the lower end of said vertically-disposed lever and an element connected with said horizontally-disposed lever extending out along one of the pedestal-feet and provided at the outer end with means exposed outside the pedestal-foot in position to be operated by the foot of the operator for actuating the levers to operate the pedestal-connecting devices.

2. In a pedestal extension-table, in combination with the separable members of the pedestal, a vertically-disposed lever fulcrumed on one pedestal member; coöperating latching devices, one carried by said vertically-disposed lever and the other by the opposite pedestal member; means for operating said vertically-disposed lever for drawing the pedestal members together when the latching devices are engaged and for releasing the same; a tripping device carried by the vertically-disposed lever

adapted to disengage the latching devices, and means for operating such tripping device for such disengagement by the movement of the vertically-disposed lever toward releasing position.

3. In a pedestal extension-table in combination with the separable members of the pedestal, a vertically-disposed lever fulcrumed on one pedestal member; coöperating latching devices for connecting the pedestal members, one rigid with said lever and the other pivotally mounted on the opposite pedestal member; a tripping device carried by the vertically-disposed lever and extending in position for obstructing the engagement of the latching devices when the rigid latch is thrust toward the opposite pedestal member; means for taking said tripping device out of such obstructing position when said rigid latch is retracted, and means for operating the vertical lever to thrust forward and retract said rigid latch.

4. In a pedestal extension-table in combination with the pedestal members, devices carried by the pedestal members respectively adapted to become engaged when the pedestal members approach and before they are fully closed; means for operating said devices after they become engaged to draw the pedestal members together, said means comprising a lever fulcrumed on one pedestal member and a link extending therefrom at the bottom of the pedestal out along one of the pedestal-feet and protruding therefrom; a cam mounted on the pedestal-foot with which the protruding end of said link engages, adapted to cause the depression of said protruding end to operate the link longitudinally for actuating the lever in direction to draw the pedestal members together.

5. In a pedestal extension-table in combination with the separable members of the pedestal, a vertically-disposed lever fulcrumed at the upper end on one pedestal member; a horizontally-disposed lever also fulcrumed on the same pedestal member and pivotally connected at the lower end of the vertically-disposed lever; a link from said horizontal lever extending out along one foot of the pedestal, and means at the extremity thereof for actuating said link longitudinally, and coöperating devices for connecting the two pedestal members, one carried by the vertically-disposed lever and the other by the opposite pedestal member, adapted to become engaged when the pedestal members approach and before they are fully closed together.

6. In a pedestal extension-table in combination with the two pedestal members, a vertically-disposed lever fulcrumed at the upper end on one of said members; a horizontal lever fulcrumed on the same pedestal member and pivotally connected to the lower end of the vertically-disposed lever; a link from said horizontal lever extending out along one of the pedestal-feet, and means at the extremity thereof for operating said link longitudinally to actuate the levers; coöperating latching devices for connecting the pedestal members, one carried rigidly by the vertically-disposed lever and the other carried pivotally by the opposite pedestal member and adapted to come into position for engaging the rigid latch when the pedestal members approach and before they are closed together; a tripping device carried by the vertically-disposed lever and means holding it in position to obstruct the engagement of the pivoted latch, adapted to be operated to cause it to move from such obstructing position when the said lever is actuated in direction to draw the pedestal members together.

7. In a device for locking together the separable pedestal members of a pedestal extension-table, in combination with the coöperating latching devices for connecting the two pedestal members; a lever which carries one of said coöperating devices fulcrumed on one of the pedestal members, the bracket which affords its fulcrum having an aperture for pivotal connection with the lever open laterally to the edge, the lever having a closed eye for engagement by insertion edgewise through such lateral opening and a guard-bracket for retaining the lever in operative position at an angle to the position at which it is entered.

8. In a locking device for connecting and drawing together the separable pedestal members of a pedestal extension-table, a lever fulcrumed on one member; coöperating latching devices, one carried rigidly by said lever and the other pivotally by the opposite pedestal member; releasable means for securing the lever at position for holding the pedestal members together a spring operating on said lever to hold it retractably normally at position for releasing the locking devices; the trip-lever, 10, pivotally carried by the latch-operating lever, extending alongside the rigid latch to obstruct the engagement of the pivoted latch therewith, and having a trip-finger, 11, and a stop coöperating with said trip-finger to hold the latch in obstructing position at the normal position of the operating-lever.

In testimony whereof I have hereunto set my hand, in the presence of two witnesses, at Chicago, Illinois, this 10th day of March, A. D. 1903.

EMIL TYDEN.

In presence of—
CHAS. S. BURTON,
FRED. G. FISCHER.