

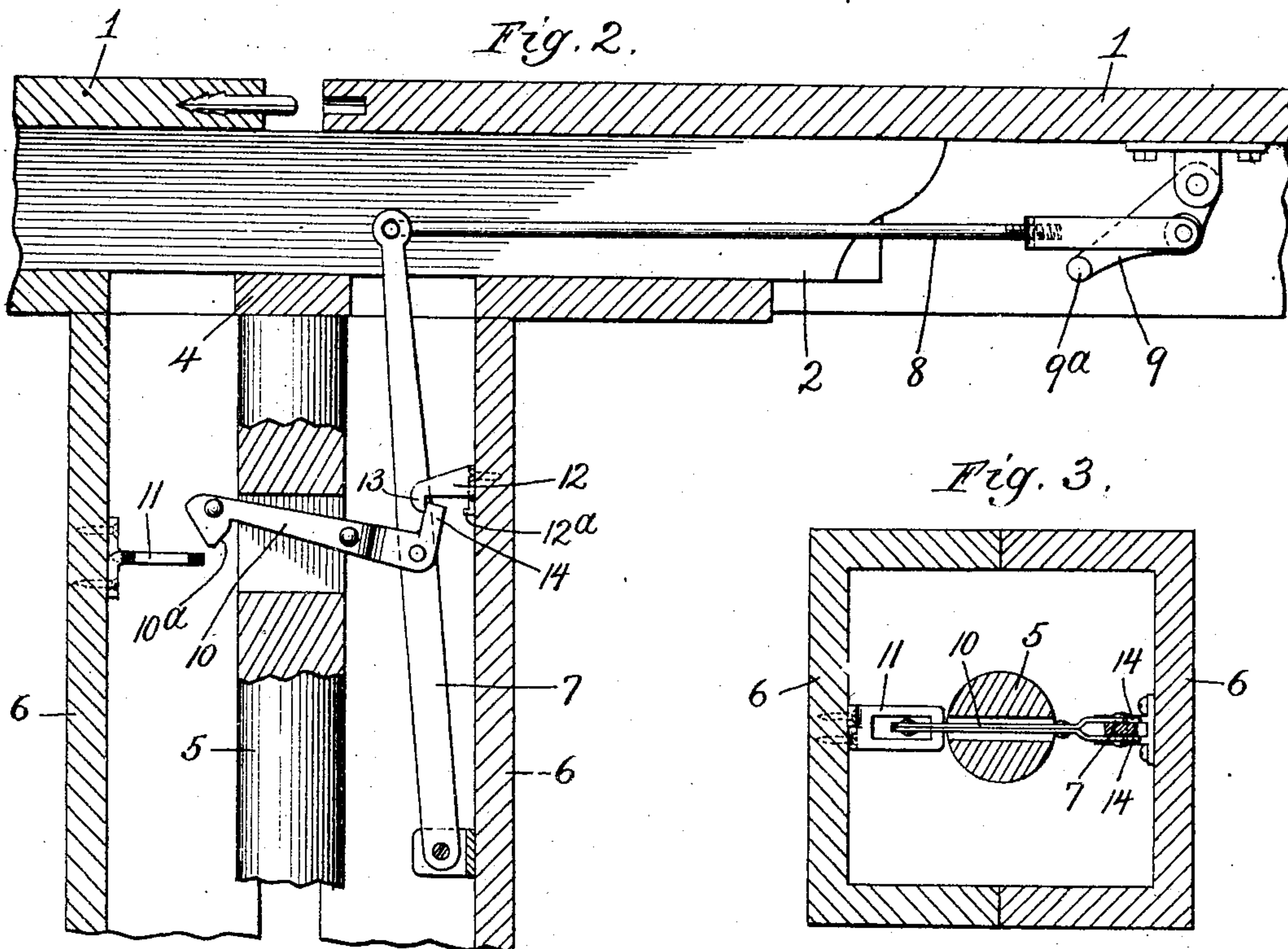
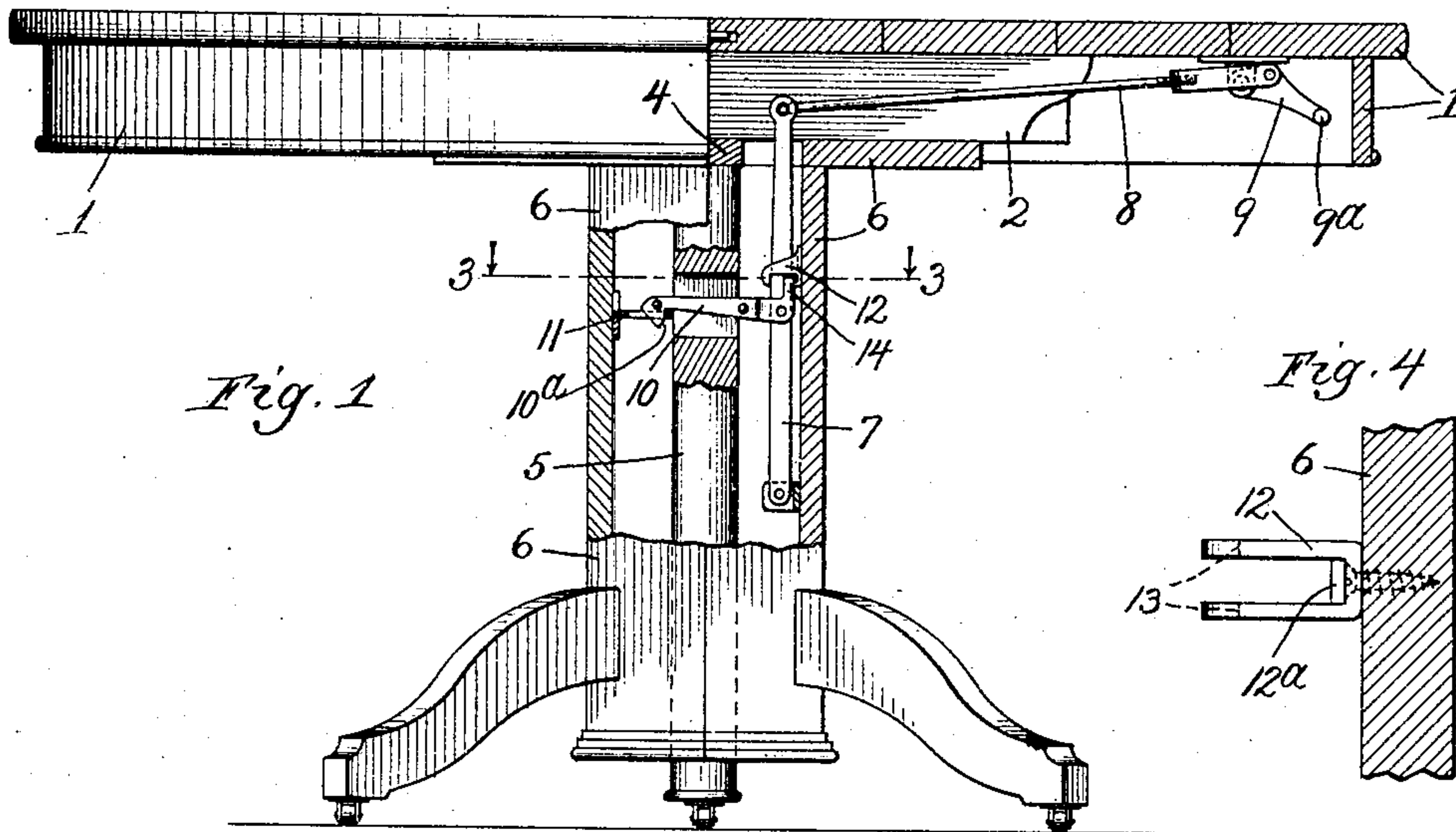
No. 786,070.

PATENTED MAR. 28, 1905.

E. TYDEN.
PEDESTAL TABLE LOCKING DEVICE.

APPLICATION FILED JUNE 25, 1902.

2 SHEETS—SHEET 1.



Witnesses.

Edward T. Wray.
Weston B. Lagear.

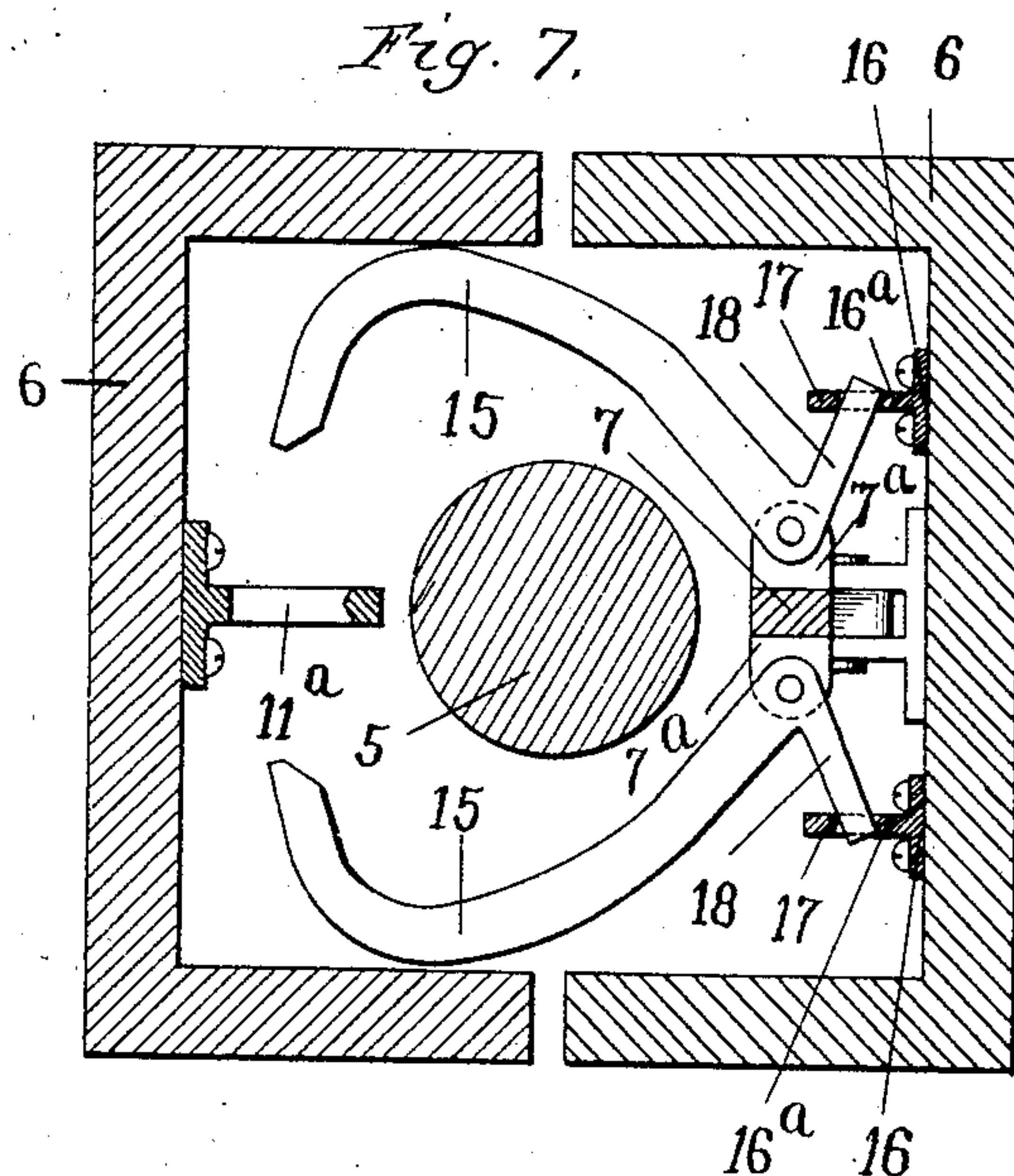
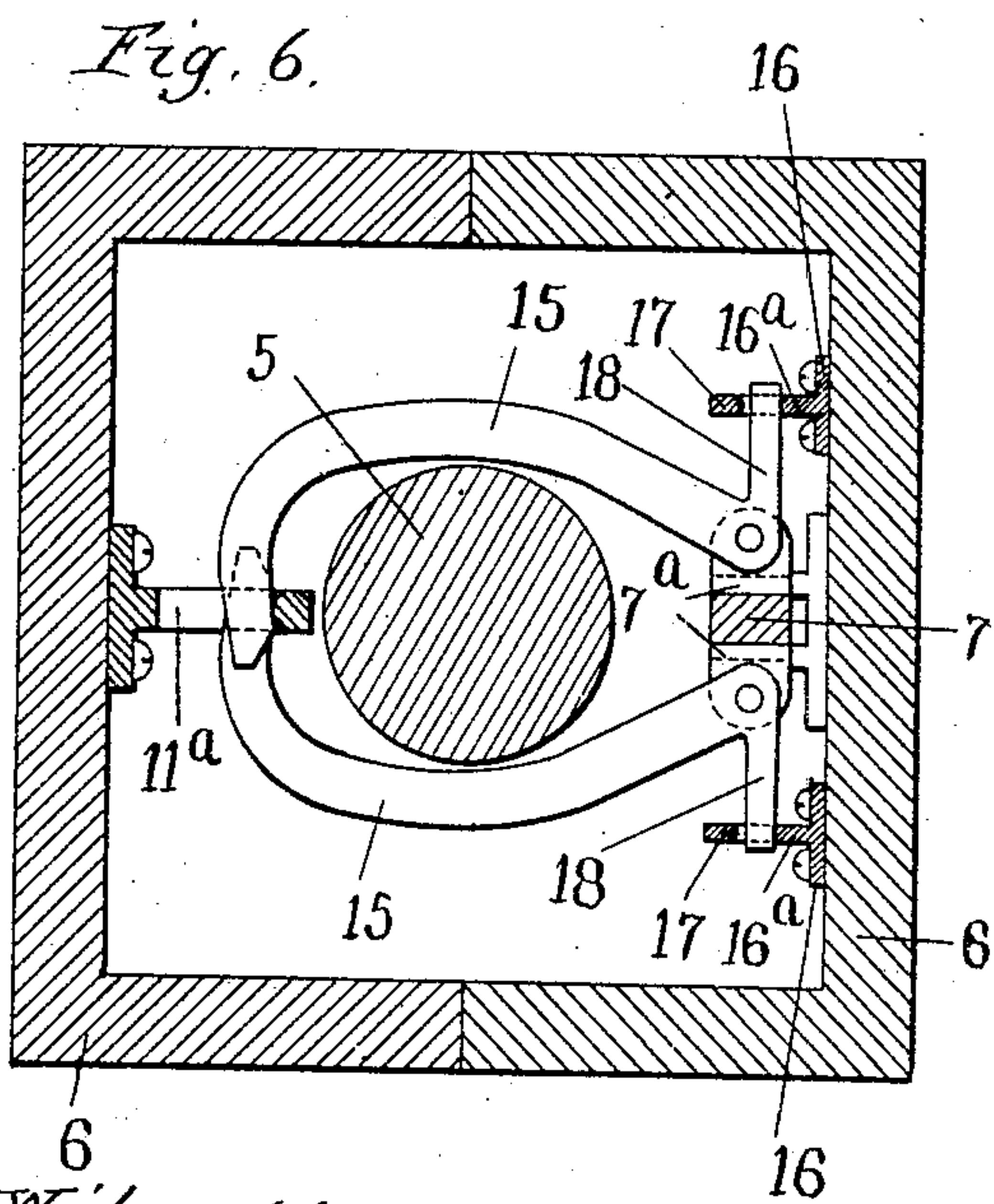
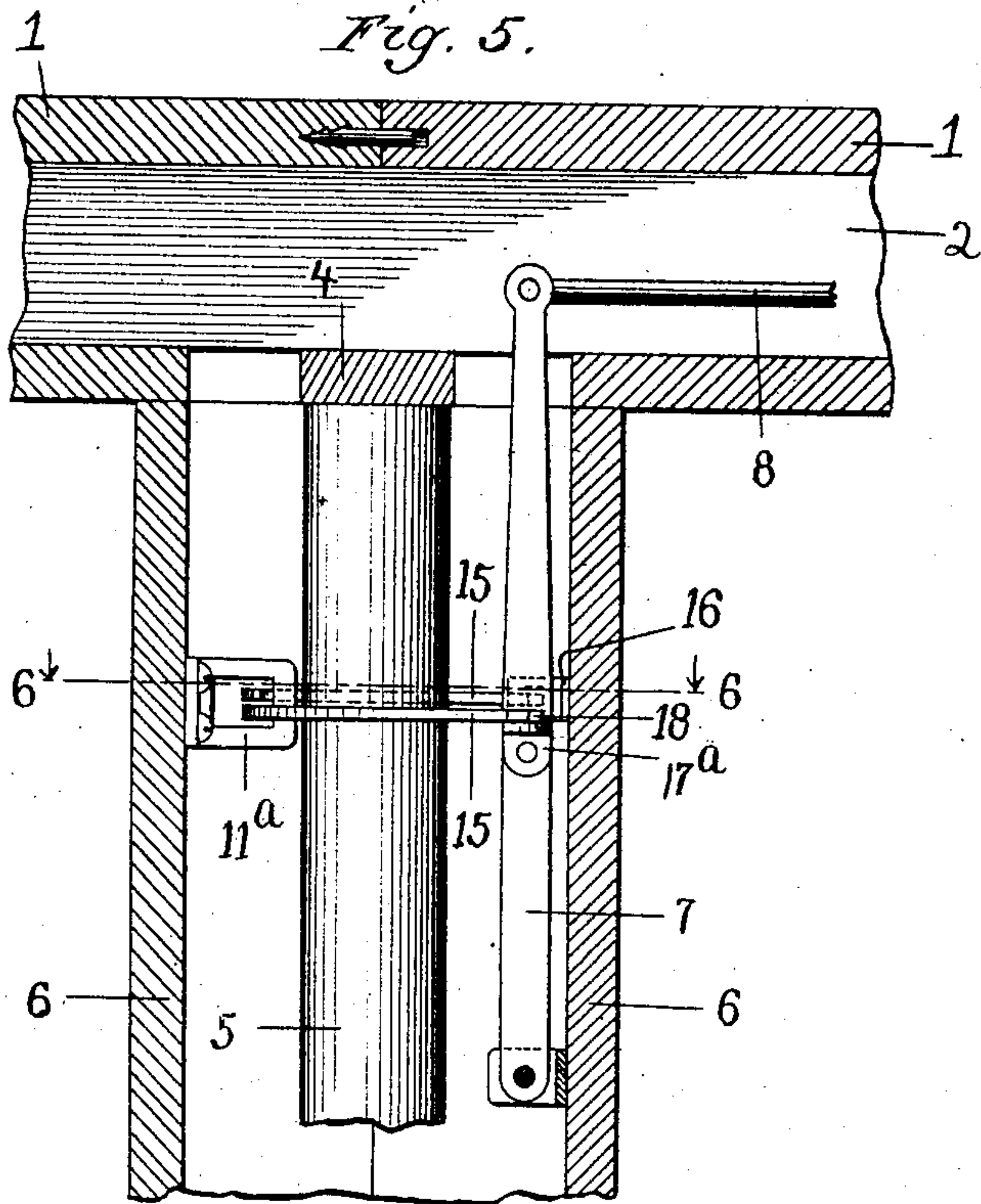
Inventor.

Emil Tyden
by Burton & Burton
his Attys

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2 SHEETS—SHEET 2.



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Edward T. Wray.
Weston B. Lazard.

Inventor.
Emil Tyden
by Newton Norton
his Atty's.

UNITED STATES PATENT OFFICE.

EMIL TYDEN, OF HASTINGS, MICHIGAN.

PEDESTAL-TABLE LOCKING DEVICE.

SPECIFICATION forming part of Letters Patent No. 786,070, dated March 28, 1905.

Application filed June 25, 1902. Serial No. 113,075.

To all whom it may concern:

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

The purpose of this invention is to provide improved means for drawing and holding together the two parts of a pedestal-table to prevent the pedestal from separating at the lower end by sagging, as is liable to happen in the absence of means especially adapted to prevent it.

It consists in the features of construction specified in claims.

In the drawings, Figure 1 is a partly-sectional elevation of a pedestal-table having my improvements, section being made through one member of the table and through the pedestal substantially at the axis of the latter. Fig. 2 is a detail view of the portion of the table comprising the operating parts of my invention on a larger scale than Fig. 1, showing the parts at a different position in respect to the locking from that in which they appear in Fig. 1. Fig. 3 is a section of the line 3 3 in Fig. 1. Fig. 4 is a detail plan of a bracket employed in the operation of the locking device. Fig. 5 is a view similar to Fig. 2, showing a modified construction involving similar principles. Fig. 6 is a section at the line 6 6 on Fig. 5. Fig. 7 is a view similar to Fig. 6, showing the locking parts thus engaged on the pedestal partly spread.

My invention is shown in an extension-table comprising the two separable members 1 1, with the customary extension devices in the form of slides connecting them, one of the slides being shown at 2, with a bridge that unites it with the corresponding slide shown at 4, having attached to it a center leg 5 in the usual manner.

Pedestal members 6 6, pertaining to the table members 1 1, respectively, are of the usual construction in this, that they are adapted when the table is closed up to inclose the center leg.

To one of the pedestal members 6 there is pivoted near the lower end a lever 7, which extends up within the pedestal member and is connected by a rod 8 to a bell crank-lever 9 on the under side of one of the members of the table-top. To the lever 7 there is pivoted a latch or hook 10, which projects inward with respect to the pedestal—that is, toward the opposite member from that on which the lever 7 is fulcrumed. Preferably, or most conveniently, the lever and its latch are located so that the latch projects substantially at the middle of the pedestal, and the center leg 5 is apertured to permit the latch to extend through it, and the opposite pedestal member is provided with a suitable engaging element substantially in the form of a staple 11, with which the hook of the latch may become engaged. On the pedestal member to which the lever 7 is fulcrumed there is mounted a bracket 12, which overhangs the rear end of the latch 10 and has a hook 13 depending in front of an upstanding tail or trip-finger 14, with which the latch is provided. It will be seen that when the lever 7 is moved inward at the upper end, the latch being carried inward with it, the tail or finger 14 of the latch will encounter the hook end 13 of the bracket 12, and being stopped by such encounter a further inward movement of the lever or latch will cause the latch to be lifted at its inner or downwardly-hooked end. It will also be seen that the tendency of the latch under the action of gravity will be to descend at the hooked end, so as to become engaged with the staple 11 when the pedestal members are sufficiently near together for such engagement. The nose or terminal hook of the latch is sloped on its under edge, and the lowest position to which the latch can fall at that end, in view of the position of the hook 13, is such that as the pedestal members approach the sloping nose of the latch will encounter and ride up on the staple, so that the latch may drop over the staple-bar when the members are near enough together. The operation of the device will be understood from the foregoing description up to the point when such engagement occurs. This will happen before the pedestal members are fully

closed up at the lower end and after the table members are fully closed at the top, if there is any tendency of the table to droop at the center or junction line of the two members at the top, causing a wider separation at the bottom than at the top of the pedestal; but whether the table-top is closed up or not when the latch becomes engaged with the staple the operator, by means of finger-piece 9^a of the bell-crank lever 9 rocking said lever over its fulcrum and drawing the rod 8 outward—that is, toward the end of the table—will cause the latch to draw the opposite pedestal member having the staple toward the member on which the lever 7 is fulcrumed, and the proportion of the parts will be calculated so that the pedestal will be fully closed up at the bottom, and therefore the table members will be fully closed at the top by the time the pivot of the rod 8 to the bell-crank lever 9 has reached the line of the fulcrum of the bell-crank lever and the pivotal connection of the rod at the upper end to the lever 7, and having slightly passed that line the reaction of the parts will prevent a return, and the bell-crank lever is provided with a suitable stop to arrest its further movement, so that the parts remain locked when at that position. When the table is to be unlocked, the bell-crank lever will be thrown back over the center, and thereby the pedestal and table members will be released from the binding action of the lock, and the bell-crank lever being further pushed inward, thrusting the rod 9 and moving inward the upper end of the lever 7, the tail of the latch will be brought into encounter with the hook 13 of the bracket 12 and the latch will be lifted out of the staple, so that the separation of the table members may be effected, carrying the latch clear of the staple.

In order to somewhat increase the effectiveness of the lock for the purpose of binding the table members and pedestal members, at the same time to make somewhat wider allowance for sagging, so that the latch shall certainly have its nose past the staple-bar by the time the table comes together at the top, even in the case of the greatest sagging, the hook-nose of the latch on the inner side—that is, the side toward the latch-fulcrum—may be beveled, as seen at 10^a, and from the bracket 12 a lip 12^a projects in position to encounter a tail or finger 14 of the latch at the rear side when the lever 7 is pulled outward to draw the table members together. The action of this expedient will be that if the sagging is such as to make the separation of the pedestal members so great that only the point of the latch goes behind the staple-bar without effecting full and perfectly operative engagement therewith the movement of the lever tending to draw the parts together also by means of the lip 12^a operates on the tail, and the lip forces the nose of the latch down, and the bevel 10^a of the latch-nose operates to further

draw the pedestal members together by a wedging action which it produces.

In the form shown in Figs. 5, 6, 7 the latch is arranged to operate horizontally instead of vertically, the principle of operation being in every respect the same as in other figures. In these figures the lever 7 has a lug 8 offset laterally from it to afford means of pivoting to it the horizontally-operating latch 15, corresponding to the latch 10 of the other construction. Two such latches may be employed, as shown in drawings, one pivoted upon each side of the lever 7. The staple 14 for engagement of the latches is set vertically instead of horizontally, being otherwise substantially similar to the staple 11 in the other form. Corresponding to the bracket 12, having the hook 13 and abutment 12^a for engagement with tail 14 of the latch 11, there is provided a bracket 16, having a slot whose opposite sides 17 and 16^a correspond to the hook 13, abutment 12^a of the other form, and the latch 15 has a tail 18, corresponding to the tail 14 of the latch 11, which is engaged in the slot between the two sides 17 and 16^a. The operation of this modification will be clearly seen to be the same as the other form, except that the latches swing horizontally instead of vertically.

I claim—

1. A pedestal-extension-table locking device comprising, in combination with the separable table members and the pedestal members pertaining thereto respectively, a vertically-disposed lever fulcrumed to one pedestal member; an actuating device connected to said levers; a latch carried by the lever; means on the opposite pedestal member for engaging the latch, and means for holding said latch in position to be thus engaged, but out of such engagement, until the lever is actuated in the direction for closing the pedestal members together.

2. A pedestal-extension-table locking device comprising, in combination with the separable members and the pedestal members pertaining thereto respectively, a vertically-disposed lever fulcrumed to one pedestal member; an actuating device connected to said lever; a latch pivoted to the lever; means on the opposite pedestal member for engaging the latch, and means for retaining said latch in position to engage said first-mentioned means when the lever is actuated after the pedestal members are closed together.

3. A pedestal-extension-table locking device comprising, in combination with the separable table members and the pedestal members pertaining thereto respectively, a vertically-disposed lever fulcrumed to one pedestal member; connections for actuating said lever; a latch pivoted to the lever projecting therefrom toward the opposite pedestal member; a device on said opposite member for engaging the latch, said latch having a projection trans-

verse with respect to its pivot and with respect to the movement which that pivot derives from the lever; means on the pedestal member to which the lever is fulcrumed encountering such projection to cause the latch, when the lever is moved about its fulcrum in the direction for drawing the table members together, to be rocked about its pivot in direction for making its engagement with the device on the opposite member.

4. A pedestal-extension-table locking device comprising, in combination with the separable table members and the pedestal members pertaining thereto respectively, a vertically-disposed lever fulcrumed to one pedestal member; an actuating device connected to said lever; a latch pivoted to the lever; means on the opposite pedestal member for engaging the latch, the lever being movable in direction for drawing the pedestal members together after the latch is engaged, and means on the pedestal member to which the lever is fulcrumed operating on the latch when the lever is moved in the opposite direction to disengage the latch.

5. A pedestal-extension-table locking device comprising in combination with the separable table members and the pedestal members pertaining thereto, respectively; a lever fulcrumed on one of the pedestal members at the lower part and extending upward within the pedestal; connections for operating the lever extending off therefrom at the upper end toward the end of the table, and means for securing the same in retracted position; a latch pivoted to the lever and projecting therefrom at a substantial distance below the top of the table within the pedestal toward the opposite pedestal member; a device on said opposite member for engaging the latch, the latch having near its pivot a finger; an abutment on the pedestal member on which the lever is fulcrumed, protruding in position to be encountered by the finger when the lever is moved away from locking position; whereby the latch is rocked at its pivot to the lever upon such encounter; the latch having at its free end as the means of engaging the device on the opposite pedestal member, a nose or projection extending in direction to be withdrawn from such engagement by such rocking of the latch.

6. In a pedestal-extension-table locking device in combination with the separable members of the table and the pedestal members pertaining thereto, respectively; a lever fulcrumed on one of the pedestal members toward the lower end extending upward within the pedestal and provided at the upper end with means for rocking it over its fulcrum; a latch pivoted to such lever and extending within the pedestal toward the opposite pedestal member and provided with a hooked end; a device on said opposite member for engagement with the hooked end of the latch, the latch having near its pivot to the lever a projection extend-

ing in the opposite direction from the hooked end; an abutment on the pedestal member on which the lever is fulcrumed, protruding in front of said projection so as to be encountered thereby when the lever moves the latch outward from the member on which it is fulcrumed, whereby such movement operates to disengage the hooked end of the latch from the opposite pedestal member.

7. In a pedestal-extension-table locking device in combination with the separable members of the table and the pedestal members pertaining thereto, respectively; a lever fulcrumed on one pedestal member toward the lower part and extending up within the pedestal toward the upper end to provide with connections at the upper end for operating it; a latch pivoted to such lever and extending toward the opposite pedestal member and having a hooked end, said opposite member having a device for engagement with said hooked end, one of said two engaging elements having a sloping edge facing toward the other element in the engagement, whereby the pedestal members may be drawn together when such engagement is forced, the latch having a projection near its pivot extending in the opposite direction from the hooked end, and an abutment on the pedestal member to which the lever is fulcrumed in position to be encountered by said projection when the lever is swung in toward the pedestal member; whereby upon such encounter the latch is forced about its pivot in the direction to move the hooked end into engaged position with the device on the opposite pedestal member.

8. A pedestal-extension-table locking device comprising a central leg, the separable members of the table, adapted to be withdrawn in opposite directions from the leg in extending the table, and the pedestal members pertaining thereto respectively; a loop or staple on one of the pedestal members; a curved latch or bolt pivoted on the other pedestal member, and being adapted to "clear around" the leg, and means for rotating the latch or bolt to engage the loop or staple.

9. In a pedestal-extension-table locking device in combination with the table members and the pedestal members pertaining thereto respectively, a hook-latch pivotally supported on one of the pedestal members for swinging horizontally and projecting therefrom toward the other pedestal member; a loop or staple on the opposite member for engagement of the latch; and means for operating said latch for engagement with such loop or staple on the opposite member.

10. In an extension-table, a center leg; separable members of the table operating opposite ways from the leg in extending; pedestal members pertaining to said table members respectively; a connecting element pivotally mounted on one pedestal member for horizontal movement; an engaging device for the

same on the opposite member, said connect-
ing element being curved horizontally to clear
around the center leg, and means for swing-
ing it about its pivot for engagement with
5 the opposite member.

In testimony whereof I have hereunto set
my hand, in the presence of two witnesses, at

Chicago, Illinois, this 7th day of June, A. D.
1902.

EMIL TYDEN.

In presence of—

A. C. BROWN,
FRED W. STEBBINS.