J. HECHT.

WICKET OR CLOSURE FOR WINDOWS.

APPLICATION FILED MAR. 30, 1916.

1,342,673.

Patented June 8, 1920.

4 SHEETS—SHEET 1.

Fig. 1.

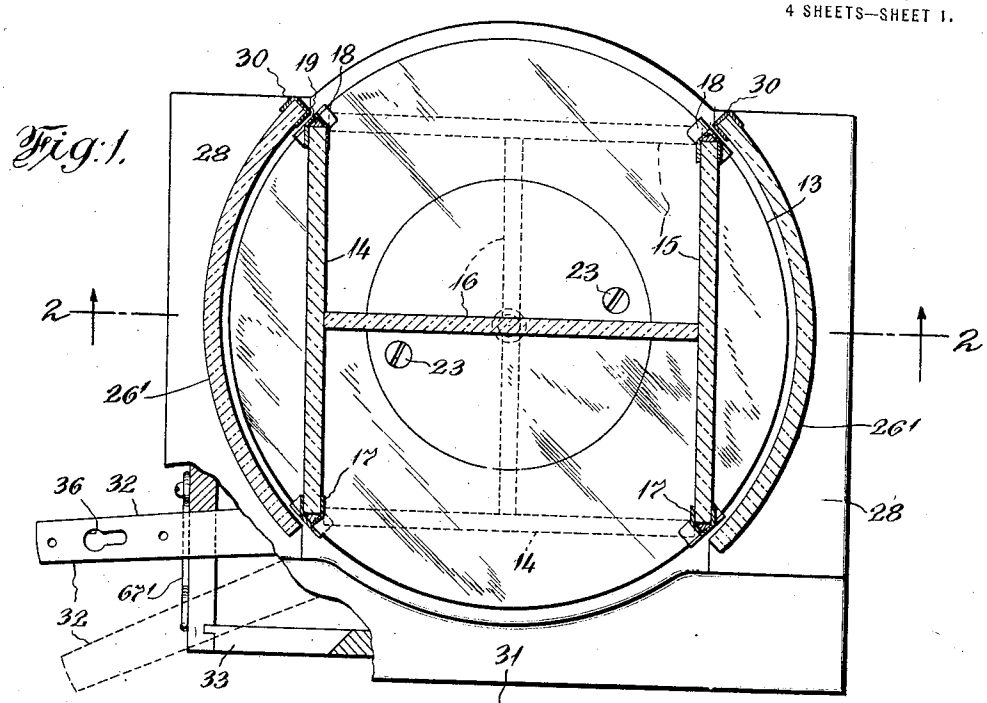
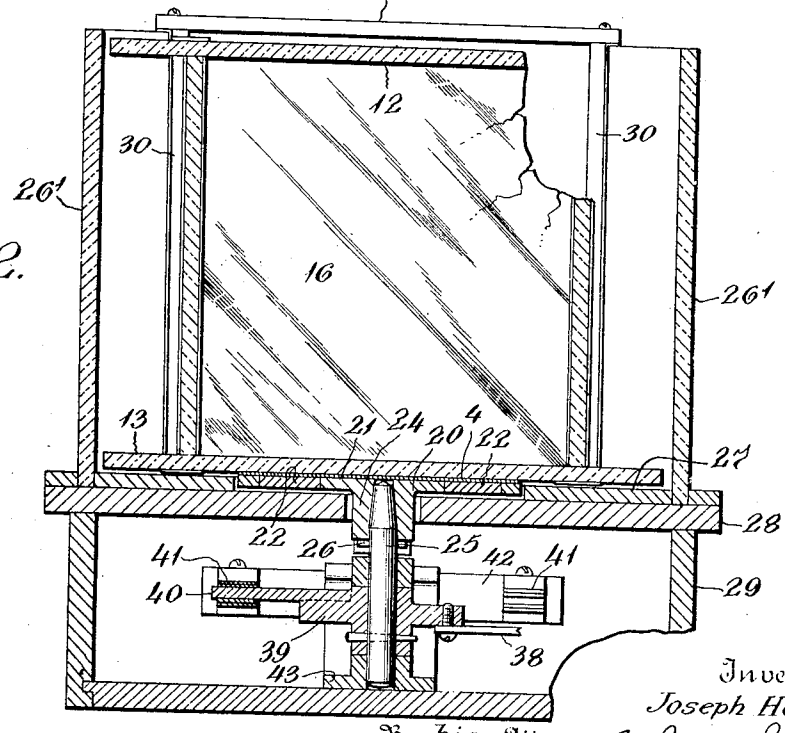


Fig. 2.



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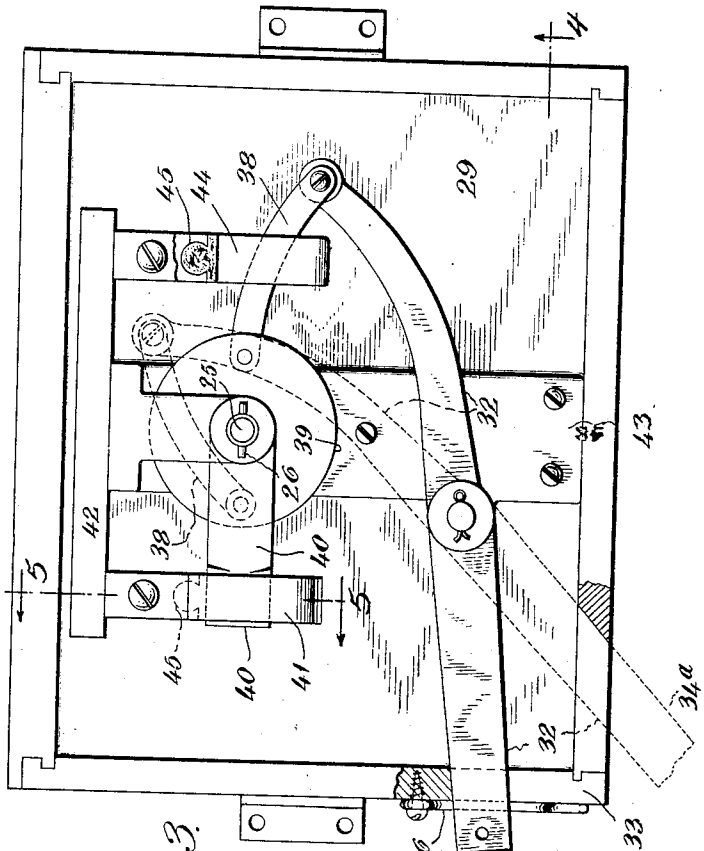


Fig. 3.

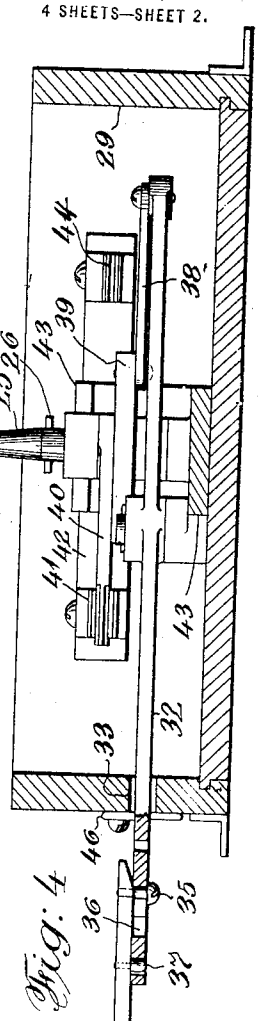


Fig. 4.



Fig. 5.

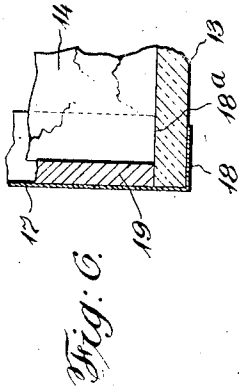


Fig. 6.

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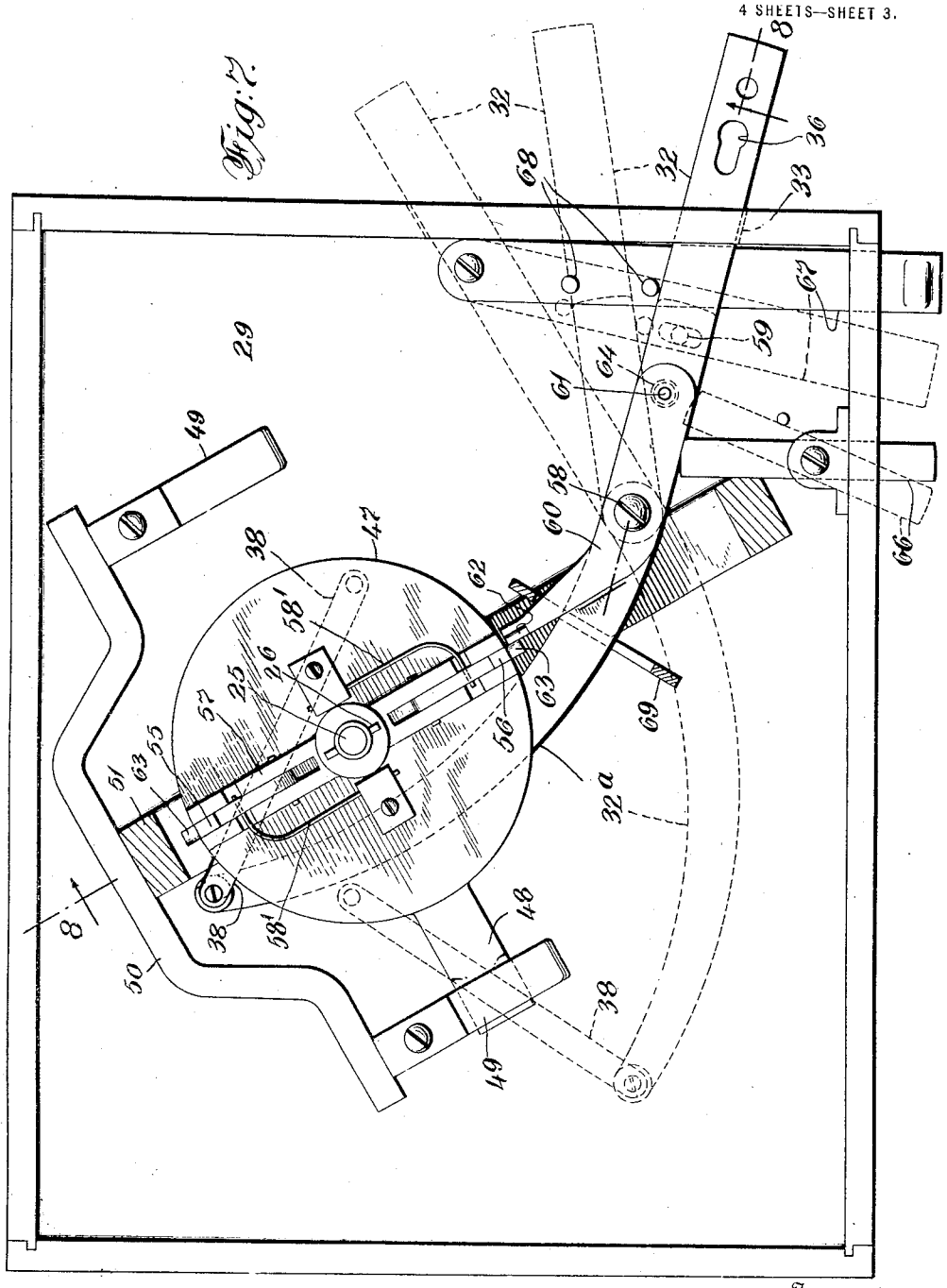
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4 SHEETS—SHEET 3.

Fig. 2.



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4 SHEETS—SHEET 4.

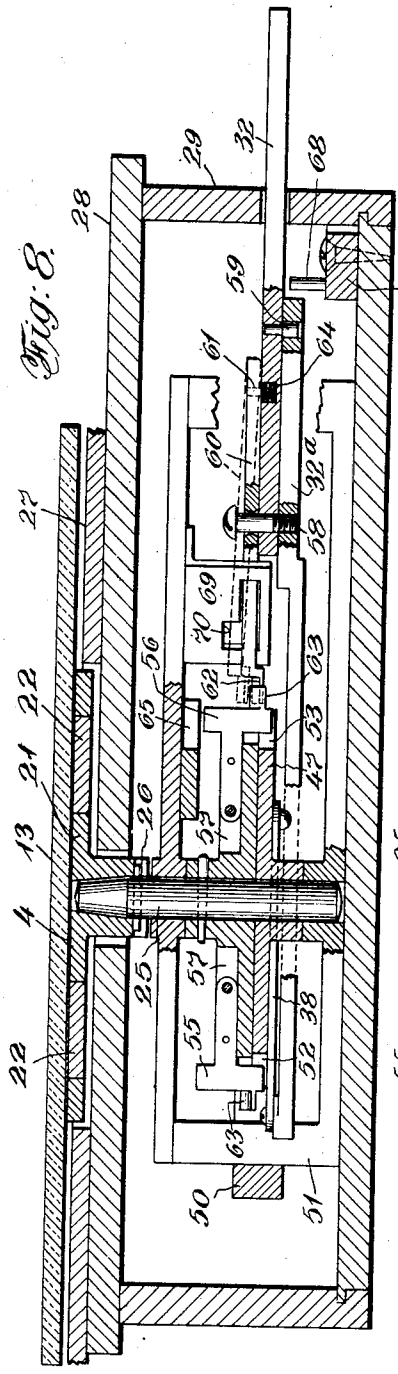


Fig. 8.

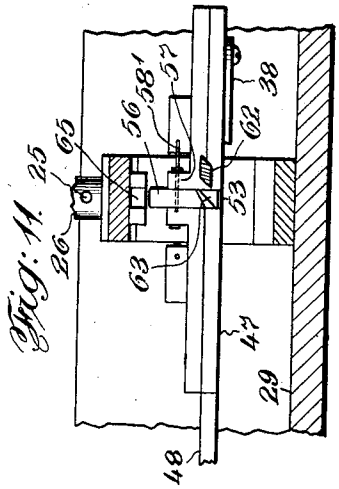


Fig. 11.

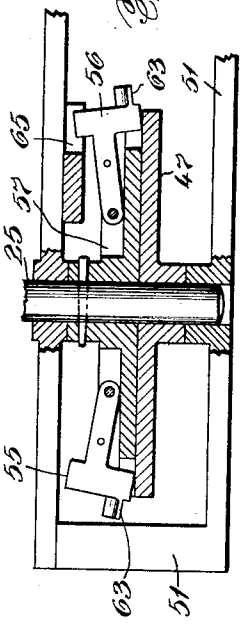


Fig. 9.

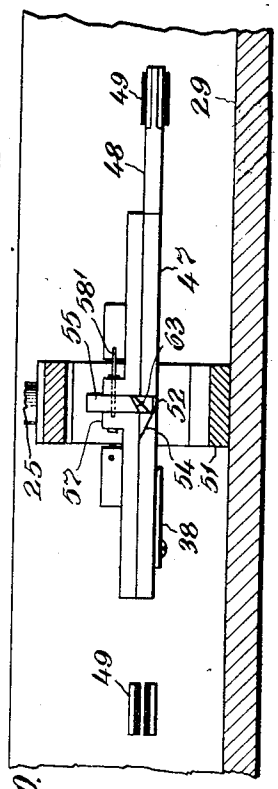


Fig. 10.

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UNITED STATES PATENT OFFICE.

JOSEPH HECHT, OF BROOKLYN, NEW YORK, ASSIGNOR TO CASH SAFETY WINDOW COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

WICKET OR CLOSURE FOR WINDOWS.

1,342,673. Specification of Letters Patent. Patented June 8, 1920.

Application filed March 30, 1916. Serial No. 87,882.

To all whom it may concern:

Be it known that I, JOSEPH HECHT, a citizen of the United States, residing in the borough of Brooklyn, in the county of Kings, city and State of New York, have invented new and useful Improvements in Wickets or Closures for Windows, of which the following is a specification.

This invention relates to wickets for windows such as tellers' windows of banks and windows of ticket dispensing offices, and it is the object of the invention to provide a wicket to at all times maintain such windows closed to prevent the passage of air or drafts through said windows and the surreptitious removal of articles from behind the window and at the same time permit articles to be passed through such window from either side of the window.

It is a further object of the invention to provide a revoluble wicket or closure for such windows which is normally locked against movement but which may be automatically released and a predetermined rotative movement imparted thereto and again locked against movement after such rotation has been imparted thereto from one side of the window only, and to provide a wicket or closure of this character which is simple and cheap in construction, and simple and efficient in operation.

A further object of the invention relates to an improved construction of a wicket or closure whereby the window will be closed in all positions of the wicket.

Further objects and advantages will hereinafter appear.

In the drawings accompanying and forming a part of this specification Figure 1 is a plan view, partly in section, of a wicket or closure for windows showing an embodiment of my invention with the wicket and the wicket frame in section to show the construction thereof.

Fig. 2 is a longitudinal sectional view taken substantially on the line 2—2 of Fig. 1 and looking in the direction of the arrows.

Fig. 3 is a plan view, partly in section, of the operating means to impart rotative movement to the wicket and a supporting casing for said means.

Fig. 4 is a sectional side elevation taken substantially on the line 4—4 of Fig. 3 looking in the direction of the arrows.

Fig. 5 is a sectional view of the means to retain the wicket in fixed position against movement, such view being taken substantially on the line 5—5 of Fig. 3 looking in the direction of the arrows.

Fig. 6 is a fragmentary sectional view to show the manner of securing the component parts of the wicket together.

Fig. 7 is a plan view of modified means to intermittently impart rotative movement to the wicket.

Fig. 8 is a sectional elevational view taken substantially on the line 8—8 of Fig. 7 looking in the direction of the arrows and showing the wicket operatively connected to its actuating means.

Fig. 9 is a sectional elevational detail of the means to operatively connect and disconnect the wicket from its actuating means, showing the same in disconnected position.

Fig. 10 is a sectional detail of the means to lock the wicket against rotative movement looking at the left of Fig. 8 and showing the same in locked position; and

Fig. 11 is a sectional detail of the locking means looking at the right of Fig. 8.

Similar characters of reference designate like parts throughout the different views of the drawings.

In the embodiment of my invention shown in the drawings the wicket consists of a pair of superposed circular plates or disks 12 and 13 of suitable material, preferably glass, secured together and spaced apart by transverse parallel partitions 14 and 15 at opposite sides of the center of the disks and a partition 16 extending transversely between and centrally of the disks at right angles to the partitions 14 and 15 substantially midway between the sides of said partitions and with the sides abutting against said partitions, the top and bottom abutting against the plates 12 and 13, as clearly shown in Figs. 1 and 2. The partitions 14, 15 and 16 are also preferably constructed of glass. The plates 12 and 13 and partitions 14 and 15 are secured together by supports 17 constructed of sheet metal bent up to channel shape in cross section to provide portions to engage at opposite faces of the partitions adjacent the side edges and having a portion, as at 18, to engage around the peripheral edge and with the bottom of the plate 13. By this construction the ends of the channel shaped

members abut the plates 12 and 13, as at 18a, and the portions 18 engaging with the plates serve to secure the plates and partitions together, as clearly shown in Fig. 6. By so forming the supports 17 there is a V-shaped portion at the ends of the partitions which is preferably filled with a wood fillet, as shown at 19. The partition 16 is secured at the top and bottom edges to the plates 12 and 13 and at its side edges to the partitions 14 and 15 by a suitable cement, and the partitions 14 and 15 are also secured at the top and bottom edges to the plates 12 and 13 in a similar manner.

The wicket as thus constructed is mounted on and rotatable with a turn-table 20 and secured to said table in a suitable manner, as by cement as shown at 21, in which instance should the table be made of metal it is provided with wood insertions 22 to which the cement will readily adhere. But if desired the wicket may be secured to the table by screws 23 passing through openings in the plate 13 and having screw threaded connection with the table. The table 20 has a perforated hub portion 24 to operatively connect the table and wicket to an operating shaft 25 rotatable on a vertical axis. The opening in the table hub is tapered to correspond with the tapered end of the shaft 25 and is operatively connected to the shaft by a pin 26 extending transversely through the shaft engaging in a transverse recess in the hub, as clearly shown in Figs. 2 and 8.

The wicket is adapted to have rotative movement in a pair of opposite vertical partitions 26′ to constitute the sides of the opening or window, these partitions being in the form of a segment of a circle with the lower ends engaging in recesses in a plate 27, this plate preferably being in sections and secured to a counter or support 28; which support may constitute the cover for a casing 29 to inclose the operating mechanism (to be hereinafter described) and whereby said mechanism is secured to the counter or support. To provide an additional support for the partitions 26′ the forward edges engage in supports 30 of channel shape in cross section secured at their lower ends in the plate 28 and at their upper ends secured to a bar 31.

By this construction the wicket is provided with a supporting or receiving table for articles at opposite sides of the partition 16, or at opposite sides of the partition or wall in which the window or opening for the wicket is located, and by imparting rotative movement to the wicket these tables are caused to be placed at opposite sides of said partition or wall whereby articles may be transported through the wicket opening from the exterior of the window, or vice versa. It will be obvious that in all positions of the wicket the opening of said wicket will be closed, preventing drafts of cold air and preventing the passage of the hand or some instrument through the wicket opening to surreptitiously remove articles through the window. During the rotative movement of the wicket one edge of each of the partitions 14 and 15 will lie and move adjacent the partitions or walls 26′, except during a small portion of such movement, or when a one-quarter revolution has been imparted to the wicket, but during such interval of movement the partitions 14 and 15 will be in position with their side edges adjacent the ends of the partitions 26′, as shown in dotted lines in Fig. 1.

As stated, the wicket is adapted to be rotated to transport articles placed on the wicket at opposite sides of the partition 16 through the wicket opening. To impart this rotative movement to the wicket there is provided a lever 32 pivotally supported within the casing 29 with one end extending through a slot 33 in said casing to which is removably connected an operating handle 34, the connection of the handle consisting of a headed stud or screw 35 fixed in the handle with the head spaced therefrom, the said stud being passed through an enlarged portion of an opening 36 and then caused to engage in a reduced portion by longitudinally moving the handle when a pin 37 projecting from the handle will engage in an opening in the lever as clearly shown in Fig. 4.

In Figs. 3 and 4 means are shown to impart rotative movement to the wicket in one direction and then in a reverse direction, oscillating or moving the wicket back and forth. For this purpose the lever 32 is connected by a link 38 to a wheel or disk 39 fixed to the shaft 25 and connected to the wheel eccentric to the axis of rotation of said disk and shaft. In the normal position of the lever with the wicket in the position shown in Fig. 1 the lever and connected parts will assume the position shown in the full lines in Figs. 3 and 4 with a projecting portion or arm 40 rotatable with the shaft engaging between clamping members 41 carried by a transversely extending portion 42 of a bracket 43 in which the shaft 25 is journaled. The engagement of the arm 40 with this clamp serves to maintain the wicket in this position. To impart movement to the wicket to transport an article through the wicket opening the lever is moved to the dotted line position 34a (Fig. 3) when the link 38 will assume the dotted line position imparting a one-half revolution to the shaft 25 and the connected wicket, when the arm 40 will be caused to engage between clamping members 44 maintaining the wicket in such adjusted position. The clamps may have a suitable material, as shown at 45, to serve as a buffer for the

arm 40. To again transport an article through the wicket opening the lever is moved in a reverse direction to assume the full line position shown in Fig. 3. To lock the lever against movement there is pivotally connected to the casing a hook or latch 46 to engage over the lever. The casing may also have perforated angle pieces fixed thereto to secure the wicket with the operating mechanism to a support, as shown at opposite sides of Fig. 3.

In Figs. 7 to 11 I have shown a modified means of imparting rotative movement to the wicket. By this mechanism instead of oscillating or moving the wicket back and forth the wicket is intermittently given a one-half revolution. In this construction an operating lever 32 is also provided with a portion extending through an opening in the casing to which the operating handle is connected, the said lever being connected through the link 38 to a disk 47 loose on the wicket rotating shaft 25, said disk having a laterally extending arm 48 to engage between clamping members 49 carried by a transversely extending portion 50 of a bracket 51, similar to the bracket 43, in which the operating shaft 25 is journaled. It will be obvious that by moving the lever 32 to and fro the disk 47 will be oscillated on the shaft causing the disk arm 48 to alternately engage with the clamps 49 and serving to retain the lever in either of its extreme positions and maintain the wicket in adjusted position in a manner to be hereinafter described.

The disk has diametrically opposite recesses 52 and 53 in the periphery thereof, one side wall of the recess 52 being beveled, as at 54 (Fig. 10). A pair of locking dogs 55 and 56 are connected at diametrically opposite points to a carrier 57 fixed to the shaft 25. In the normal position of the lever 32 and link 38 shown in full lines in Fig. 7 the dog 55 will engage in the recess 52 and the dog 56 in the recess 53 and be retained therein by springs 58′ and thereby locking the disk and dog carrier together and the disk to the shaft and holding the same against movement, together with the wicket, by the engagement of the arm 48 with the clamp 49 as shown in said Fig. 7. To impart movement to the wicket the lever 32 is moved to the extreme dotted line position shown in Fig. 7, the lever in this instance consisting of a pair of sections 32 and 32^a pivotally connected at 58, and the section 32 is permitted to have a slight to and fro movement independent of the section 32^a during the initial portion of this movement by means of a pin and slot connection 59 between the levers. During the initial free movement of the lever 32 in the direction of the arrow the lever will move with it a latch 60 having the same pivotal connection as the lever at a point between its ends and the one end having a projecting pin to engage in a recess in the lever section 32 as shown at 61. The other end of the latch has a pallet 62. During the initial free movement of the lever section 32 the latch 60 will move with said lever section causing the pallet to engage with the under beveled face of a lip 63 projecting from the dogs 55 and 56 throwing the dog in engagement with the recess 53 of the disk 47 out of said recess and maintaining it out of the recess during the initial portion of the movement of the lever section 32 when said dog will engage with the upper surface of the disk 47. It will be noted that during this movement of the lever the disk will have free movement on the shaft 25 and as the disk is moved the other dog 55 will ride up the inclined portion 54 of the recess 52 and ride along the upper face of said disk. When the lever is moved to assume the extreme dotted line position shown in Fig. 7 with the disk arm 48 engaging with the clamp 49 opposite to the clamp with which said arm is shown in engagement in said figure, a one-half revolution will have been imparted to the disk 47 and the dogs 55 and 56 will engage in the succeeding disk recesses locking the dog carrier and thereby the shaft 25 to the disk 47. Upon return movement of the lever motion will be imparted to the shaft and the connected wicket, the latch pallet 62 just previous to the termination of the return movement of the lever riding over the upper inclined surface of the dog lip 63, for which purpose the latch is so connected to the pivot 58 as to permit of a rocking or slight upward movement to permit the pallet to ride over the dog lip 63, but said latch is normally maintained contiguous to the lever section 32^a by a spring 64. The lever section 32^a and latch 60 during the movement of the lever are guided in a slot in a plate 69 fixed to and depending from an overhanging portion of the bracket 51, this slot being enlarged at one end, as at 70, (Fig. 8) to permit of the rocking movement of the latch as it rides over a locking dog.

During the movement of the disk 47 by the lever with the shaft uncoupled therefrom by the dogs being maintained out of the disk notches, one of said dogs, such for instance as the dog 56, will be caused to engage in a recess 65 in the underside of the overhanging fixed part of the bracket 51 thereby locking the shaft and connected wicket against movement.

From the foregoing it will be readily understood that by the oscillating of the disk 47 the shaft 25 will be alternately coupled with the disk through the dogs 55 and 56 and intermittent rotative movement in one direction imparted to the shaft and wicket

by the lever. Should it be desired to impart a to and fro movement to the wicket the same as in the construction shown in Figs. 1 to 4 an adjustable stop 66 is provided to limit the movement of the lever 32. By adjusting this stop to the full line position shown in Fig. 7 the lever may be moved to the full extent of its movement to permit the pallet of the releasing latch 60 to ride over and under the lip of the dogs and imparting the intermittent movement hereinbefore described to the shaft and wicket. To impart an oscillatory or to and fro movement to the shaft and wicket the stop 66 is adjusted to the dotted line position thereby shortening the movement of the lever 32 so that the dog releasing pallet 62 will not ride over and fall in back of the dog lips 63 and permit the unlatching of said dogs, and since the dogs will at all times be in locking position in the recesses in the disk 47 the shaft and connected wicket will be oscillated as the lever is moved to and fro.

To lock the lever 32 against movement there is provided a locking latch in the form of a plate 67 pivotally supported at one end within the casing below the lever with the free end in the form of a finger-piece extending through the recess in the casing through which the lever extends. This plate has a pair of upwardly extending pins 68 which in the normal unlocking position of the latch shown in full lines in Fig. 7 will lie below the lever section 32 and are of such length that the lever will clear the pins. (Fig. 8.) To lock the lever the lever is moved to the intermediate dotted line position shown in Fig. 7 and the latch 67 is thrown to the dotted line position shown in said figure when the pins 68 will engage at opposite sides of the lever section 32^a, as clearly shown in Fig. 7, preventing movement of the lever. It will be obvious that by throwing the latch to the full line position the lever will be released. In this position of the lever 32 the wicket will be given a one-quarter turn assuming the dotted line position shown in Fig. 1 with the partitions 14, 15 extending transversely between opposite ends of the partitions 26, and which is the position it is intended the wicket shall assume when the window is to be closed, as during the night.

Having thus described my invention, I claim:

1. A device of the class specified, comprising a wicket, a rotatable shaft upon which the wicket is mounted in co-axial alinement therewith to rotate therewith, a pivoted lever to impart rotative movement to the shaft, a link to connect said lever to the shaft eccentrically to the axis of rotation of the shaft, and means carried by the shaft to limit the rotative movement thereof, substantially as and for the purpose specified.

2. A device of the class specified, comprising a wicket, a rotatable shaft upon which the wicket is mounted to rotate therewith, a pivoted lever to impart rotative oscillatory movement to the shaft and wicket, a link to connect the lever to the shaft eccentrically to the axis of rotation of the shaft, a laterally extending arm rotatable with the shaft, and a pair of clamps with which said arm coöperates at the termination of the movements of the shaft, substantially as and for the purpose specified.

3. In a device of the class specified, a wicket comprising a pair of superposed disks, a pair of partitions extending transversely between the disks at opposite sides of the center thereof, supports embracing opposite faces of said partitions adjacent the side edges and embracing the peripheral edges and faces of the disks opposite to the top and bottom edges of the partitions to secure the disks and partitions together, and a partition extending transversely and centrally between the disks at right angles to and with the ends abutting against the other two partitions; a shaft rotatable on a vertical axis; means to support the wicket by the shaft in superposed and co-axial relation thereto; means including a to and fro movable manually operable lever to impart rotative movement to the shaft and connected wicket a predetermined distance when the lever is moved in one direction; and means operable to lock the wicket in its advanced position during the return movement of the lever, substantially as and for the purpose specified.

4. In a device of the class specified, a wicket comprising a pair of superposed disks, a pair of glass partitions extending transversely between the disks at opposite sides of the center thereof and parallel to each other, said partitions being cemented at their top and bottom edges to the disks, supports for said partitions extending between the disks and secured at their ends to the disks, said supports embracing the opposite faces of the partitions adjacent the side edges, a glass partition extending transversely and centrally between the disks at right angles to and with the side edges abutting against the other two partitions, said partition at its top and bottom edges being cemented to the disks and at its side edges cemented to the other two partitions; means to rotatably support said wicket; and means to impart rotative movement to the wicket, substantially as and for the purpose specified.

5. In a device of the class specified, the combination with a partition having an opening therein, of a rotatable wicket mounted in said opening to maintain the opening closed and operable to transport articles through the opening while main-

taining the opening closed; a shaft to which the wicket is mounted in superposed relation and in co-axial alinement; a to and fro movable lever; and a clutch operative to connect the shaft and wicket to the lever when the lever is moved in one direction to impart a predetermined rotative movement to the shaft and wicket, and automatically disconnect the lever from the shaft when moved in an opposite direction, substantially as and for the purpose specified.

6. A device of the class specified, the combination with a partition having an opening therein, of a wicket mounted in said opening to maintain the opening closed and operable to transport articles through the opening, a rotatable shaft upon which the wicket is mounted in superposed relation and in co-axial alinement therewith, a to and fro movable lever, and means operable by the lever when it is moved in one direction to operatively connect the shaft and wicket to the lever to impart rotative movement thereto and to disconnect the shaft and wicket from the lever and lock them in advanced position when it is moved in a reverse direction, substantially as and for the purpose specified.

7. In a device of the class specified, the combination with a partition having an opening therein, of a wicket mounted in said opening to maintain the opening closed and operable to transport articles therethrough; a rotatable shaft upon which the wicket is mounted to rotate therewith; a to and fro movable lever; a disk connected to the lever to have rotative oscillatory movement imparted thereto when the lever is moved to and fro; and means carried by the shaft to coöperate with the disk to normally maintain the same connected, said means being operable during the initial movement of the lever in one direction to disconnect the disk and shaft and maintain the same disconnected during such movement of the lever and disk a predetermined distance and automatically connect the disk and shaft when the lever reaches the limit of such movement and maintain the same connected to the termination of its reverse movement, substantially as and for the purpose specified.

8. A device of the class specified, comprising a wicket, a rotatable shaft to which the wicket is connected, a to and fro movable lever, a disk loose on the shaft to which the lever is connected to impart rotative movement thereto when the lever is moved to and fro, diametrically opposite pivoted dogs carried by the shaft, recesses in the disk in which the dogs are adapted to engage when the disk is moved in one direction by the lever to operatively connect the shaft and wicket to said disk, substantially as and for the purpose specified.

9. In a device of the class specified, the combination with a partition having an opening therein, of a wicket mounted in said opening to maintain the opening closed and operable to transport articles through the opening; a lever having a limited to and fro movement on an axis parallel with the axis of the wicket; and means to normally connect the wicket to the lever operable to release the wicket from the lever and lock the wicket against movement when the lever is moved in one direction, and operable to connect the lever to the wicket when moved a predetermined distance in reverse direction to impart rotative movement to the wicket, and during such latter movement of the lever maintain them connected to the termination of the reverse movement of the lever for the purpose specified.

10. A device of the class specified, comprising a rotatably supported wicket, a to and fro movable lever, means coöperating with means connected to the lever to normally lock the wicket against movement, and means connected to the lever coöperating with said locking means to disconnect the wicket from the lever and lock it against movement when the lever is moved in one direction and again connect it to the lever when the lever is moved in a reverse direction to impart rotative movement to the wicket and maintain them connected at the limit of such reverse movement, substantially as and for the purpose specified.

11. A device of the class specified, comprising a wicket, a shaft rotatable on a vertical axis to which the wicket is connected to rotate therewith, a disk loose on said shaft, a lever having a limited to and fro movement connected to the disk to impart rotative movement thereto, pivoted dogs carried by the shaft to engage in recesses in the disk to connect the shaft and wicket to the disk when the disk is moved in one direction by the lever, and means to throw and maintain said dogs out of the disk recesses when the disk is moved in a reverse direction by the lever, substantially as and for the purpose specified.

12. A device of the class specified comprising a wicket, a shaft rotatable on a vertical axis to which the wicket is connected to rotate therewith, a disk loose on said shaft, a lever having a limited to and fro movement connected to the disk to impart oscillatory movement thereto, a pair of pivoted dogs carried by the shaft to engage in recesses in the disk to connect the shaft and wicket to the disk when the disk is moved in one direction by the lever, and one of said dogs adapted to ride up a beveled wall of one recess and engage with the upper face of the disk when the disk is moved in reverse direction, and means carried by the lever to throw the other dog out of the other disk recess and cause it to ride along the upper face

of the disk and to engage in a recess in a fixed part to lock the wicket against movement when the disk is moved in reverse direction by the lever, substantially as and for the purpose specified.

13. In a device of the class specified, a wicket; a shaft rotatable on a vertical axis to which the wicket is connected to rotate therewith; a disk loose on the shaft having diametrically opposite recesses in the periphery thereof with one side wall of one recess beveled; a lever having a limited to and fro movement; a link to connect said lever to the disk eccentric to its axis of rotation; a pair of diametrically opposite pivoted dogs carried by the shaft to engage in the disk recesses to connect the shaft and wicket to the disk when it is moved in one direction by the lever, and one of said dogs adapted to ride up the beveled wall of the one recess and engage with the upper face of the disk when the disk is moved in reverse direction; a lip having oppositely beveled faces extending laterally from each dog; and a latch carried by the lever having a pallet to ride over a dog lip in a disk recess when the lever is moved in one direction with the shaft connected to the disk through the dogs and said latch pallet riding under a dog lip and throwing a dog out of a disk recess and cause it to ride along the upper face of the disk and engage in a recess in a fixed part to lock the shaft and wicket against movement when the disk is moved in reverse direction by the lever, substantially as and for the purpose specified.

14. A device of the class specified, comprising a rotatably supported wicket; a to and fro movable lever; means to connect the wicket to the lever when it is moved in one direction and to disconnect the wicket from the lever when the lever is moved in a reverse direction to impart intermittent rotative movement to the wicket; and means adapted to coöperate with the lever to limit the movement in one direction and prevent the disconnecting of the wicket therefrom to impart oscillatory movement to the wicket as the lever is moved to and fro, substantially as and for the purpose specified.

15. A device of the class specified, comprising a rotatably supported wicket, a lever having a limited to and fro movement to impart rotative movement to the wicket, and a pivoted latch having a pair of projections between which a part of the lever is adapted to engage when the lever is in a certain position to lock the lever against movement, substantially as and for the purpose specified.

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