June 5, 1934. C. A. SCHEELER 1,961,250

PROTECTIVE CLOSURE

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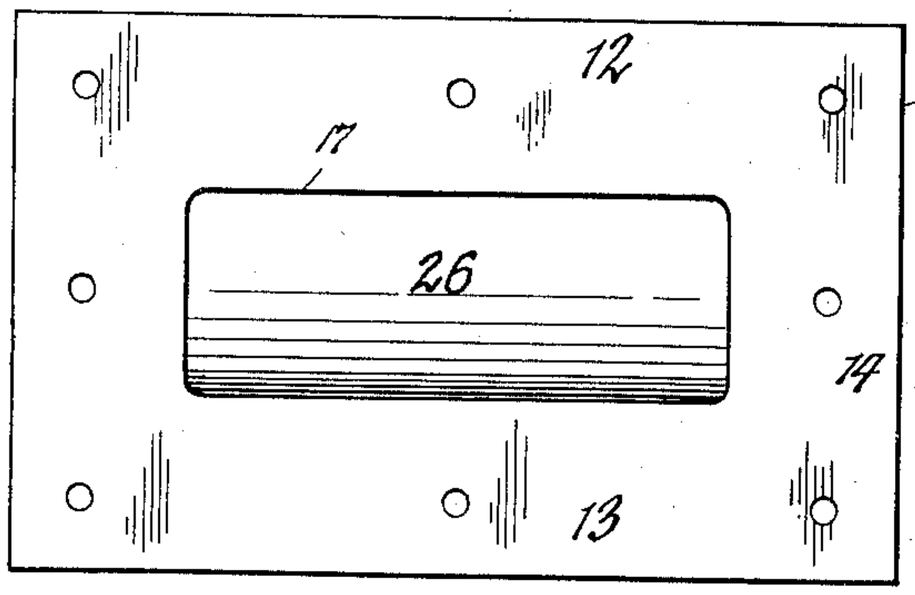

Fig. 1.

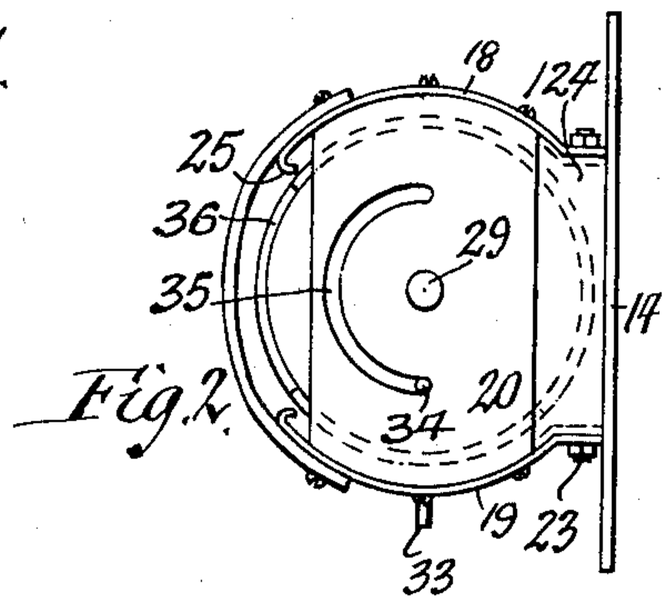

Fig. 2.

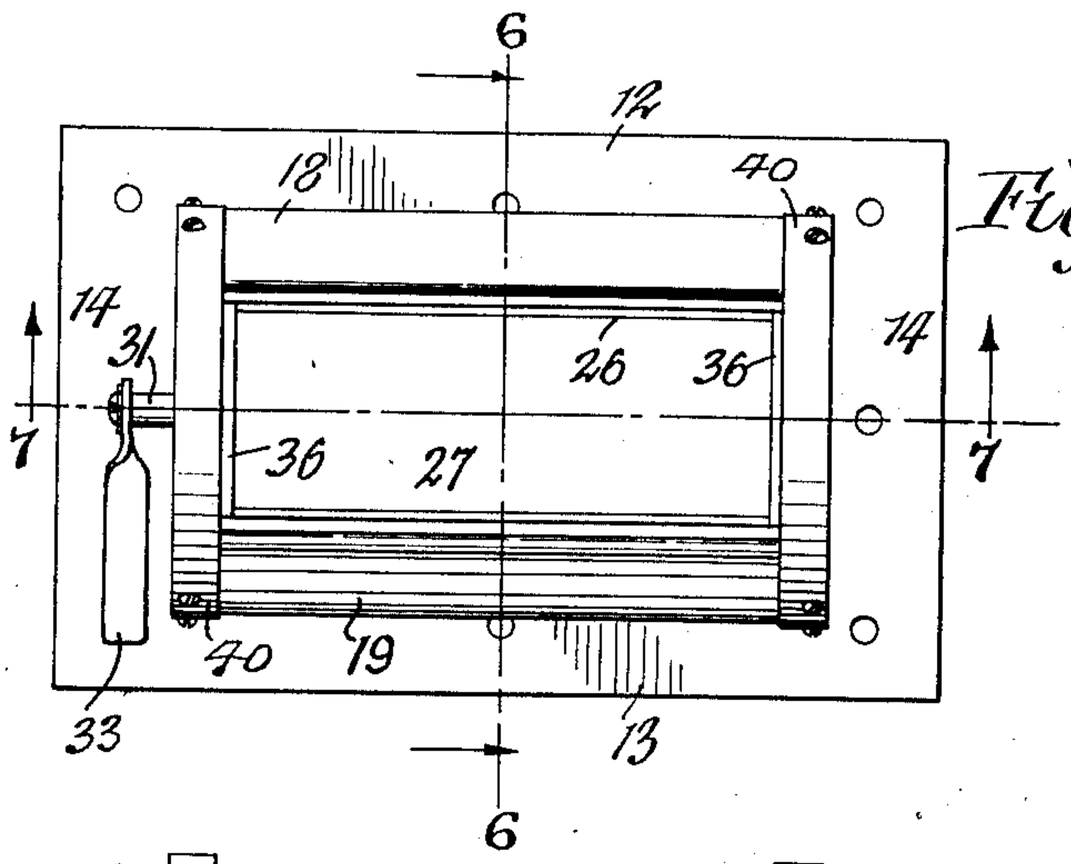

Fig. 3.

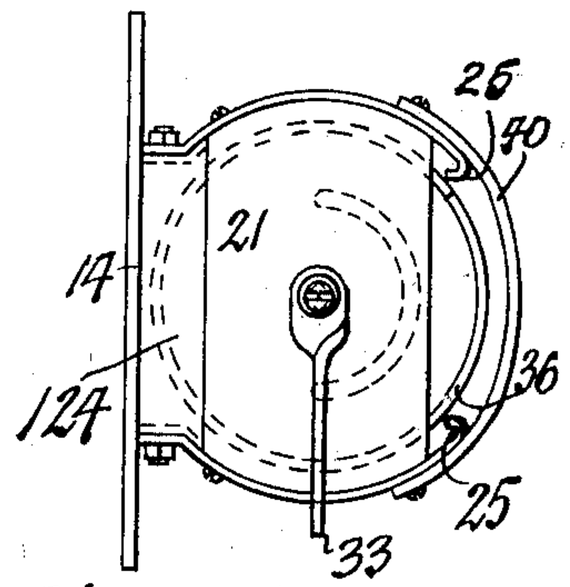

Fig. 4.

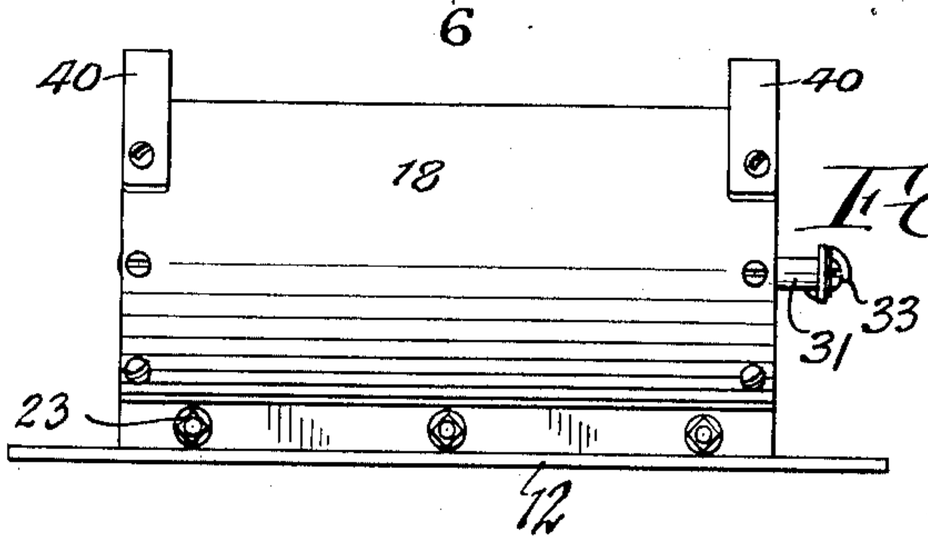

Fig. 5.

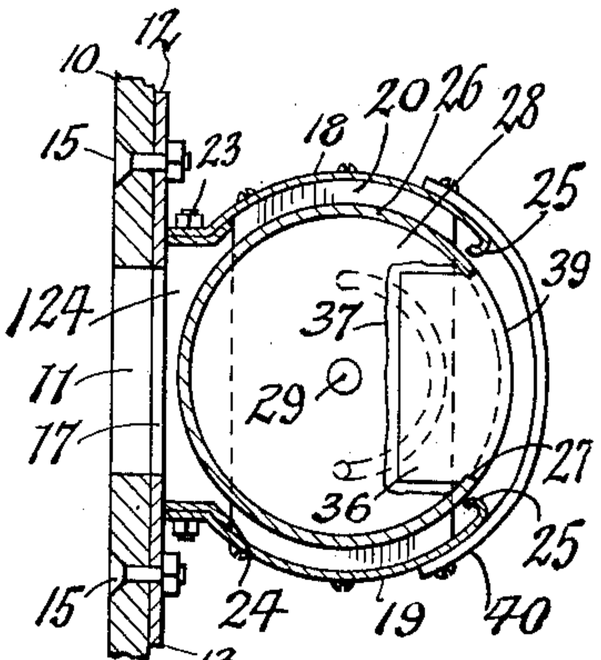

Fig. 6.

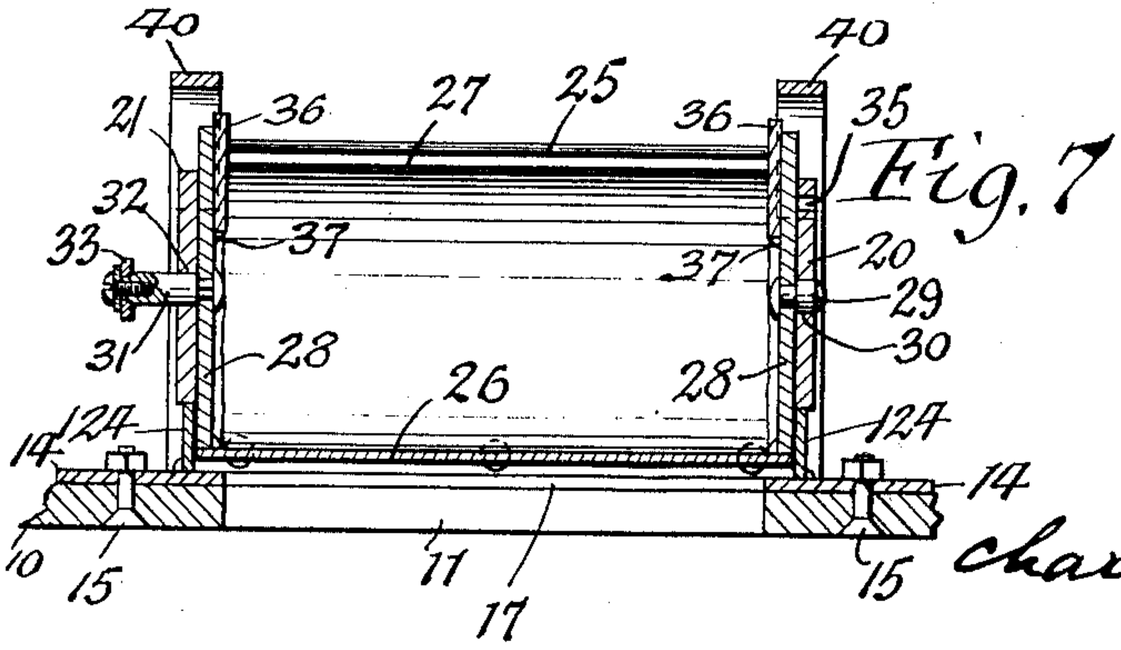

Fig. 7

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PROTECTIVE CLOSURE

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3 Claims. (Cl. 20—1.01)

This invention relates to a protective closure which is more particularly intended for use across the inner side of the opening or window of a bank teller's compartment so as to permit of easily and conveniently passing valuables such as money, checks and the like, from the exterior of the wall of the teller's compartment to the interior of the same, and also to permit the passage of similar articles from the interior of the teller's compartment to the exterior thereof without exposing the teller to the liability of being shot or held up as sometimes occurs when bandits make a raid on a bank.

It is the purpose of this invention to provide a protective closure for the passage of valuables of this character which is comparatively simple in construction, easily operable from the inner side of the teller's compartment so as to facilitate introduction and removal of valuables through the teller's window opening, and which not only effectively protects the teller from any attempt to injure him through the use of firearms, but which is also compact and neat in appearance and will not delay the transactions which are usually carried on through a paying teller's window.

In the accompanying drawing:

Figure 1 is a front elevation of the protective closure embodying my invention.

Figure 2 is an elevation thereof viewed from one of its ends.

Figure 3 is a rear elevation of the same.

Figure 4 is an elevation viewed from the opposite end.

Figure 5 is a top plan view thereof.

Figure 6 is a vertical cross section taken on line 6—6 Fig. 3.

Figure 7 is a horizontal longitudinal section taken on line 7—7 Fig. 3.

In the following description similar characters of reference indicate like parts in the several figures of the drawing.

In Figs. 6 and 7 the numeral 10 represents the wall or partition forming part of an enclosure in the building of a bank teller's compartment and which is provided with a window opening 11 through which valuables such as checks, money, securities and other valuable papers are passed back and forth between the front side of this wall and the compartment on the rear side thereof.

My improved protective closure for this teller's window in its preferred construction is as follows:

Mounted on the inner side of the wall 10 and around the teller's window 11 therein is a frame which preferably is made of sheet metal and comprises upper and lower horizontal plates 12, 13 and upright end plates 14, 14 connecting the upper and lower plates, the several members of this frame being connected with the wall by means of bolts 15, as shown in Figs. 6 and 7, or by any other suitable means.

In rear of the opening 17 in this frame and the opening 11 in the wall 10 is a housing which is generally of cylindrical form, the axis of which is horizontal and parallel with the wall and supporting frame. In its preferred construction this housing comprises upper and lower curved walls 18, 19 of sheet metal which are arranged concentrically relatively to each other, and two upright end heads 20, 21 which connect the corresponding ends of the curved walls 18 and 19. The front ends of the curved upper and lower walls 18 and 19 are separated from each other and connected respectively by bolts 23 with flanges 24 extending rearwardly from the rear side of the frame plates at the top of the opening therein. The upright end plates 20, 21 of the housing are connected by upright flanges 124 with the upright plates 14 of the window frame. The flanges 24, 124 therefore form a neck which completely closes the gap between the rear side of the window frame and the housing.

The rear horizontal edges of the upper and lower curved walls of the housing 18, 19 are separated from each other so that in cooperation with the front longitudinal edges of these walls, a passage is formed through this housing which registers with the passage of the supporting frame and the window opening in the wall. Each of the rear longitudinal edges of the curved walls of the housing is provided with an inwardly and forwardly turned flange 25 which produces a forwardly opening horizontal channel on this part of the housing which is adapted to intercept any bullets which may be fired from a revolver, pistol or other firearm, and thus prevent the same from reaching the bank teller and injuring the latter.

Within the housing is arranged a cylindrical drum which turns about an axis co-incident with the axis about which the upper and lower walls 18, 19 of the housing are curved. In its preferred form this drum comprises a cylindrical body 26 of sheet metal which is provided on one part only of its periphery with a longitudinal opening 27 for rendering the interior of this drum accessible in order to deposit valuables therein and remove the same therefrom. At its opposite ends the body of this drum is provided with circular heads

28 of metal which may be secured thereto by brazing, welding or any other suitable means. The head at one end of this drum is provided with a trunnion 29 which is journaled in a bearing opening 30 on the adjacent housing end plate 20, and on its opposite head this drum is provided with a trunnion 31 which turns in a bearing opening 32 in the opposite upright end plate 21 of the housing.

The last-mentioned trunnion 31 is provided on the exterior or the respective housing plate 21 with a handle 33 whereby the bank teller, while stationed on the rear or inner side of the wall, is able to turn the drum manually for the purpose of presenting the side passage or opening 27 of the drum either to the front end of the passage through the housing or to the rear end of this passage and thereby enable valuables such as money and jewelry or valuable papers to be inserted into the drum as well as removed therefrom on either side of the wall of the teller's compartment.

While the drum is presenting its opening to either ends of the passage through the housing, or this opening occupies any position intermediate of the extremities of the housing passage, a solid or imperforate side of the drum always obstructs a direct line of access from the exterior of the wall to the interior of the compartment through this closure and thus prevents a bandit in attempting to hold up the bank from firing directly through this passage at the teller. If an attempt is made to fire a bullet through the annular space between the periphery of the drum and the interior of the housing such bullets will be deflected zig-zag in this space by the drum and housing, and eventually be caught either in one or the other of the channel-shaped flanges 25 and retained within the housing so that they can be subsequently removed therefrom without having endangered the occupant of the teller's compartment.

Stop means are preferably provided which prevent the drum from being rotated more than a half turn in either direction and insure arresting the drum at either extremity of its movement so that the opening in the side of the drum will be presented either to the outer end of the passage in the housing or at the inner end of the same. This stop means, in its preferred form, preferably consists of a stop pin 34 arranged on that head of the drum having the trunnion 29 and projecting into a semi-circular slot 35 which is formed in the adjacent housing plate 20 concentrically with the axis of the drum and housing, as shown in Fig. 2. This stop device is preferably so arranged that the drum can only be moved through such an arc in which the opening 27 of the drum passes back and forth over the upper side of the axis thereof, and thereby prevents any valuables which are deposited in the drum from being spilled out through this opening as the latter moves alternately into a position in which it registers with the front end of the housing passage and with the rear end of the same.

It is desirable to yieldingly retain the drum in a position in which its side opening 27 is presented either to the front or rear end of the housing passage for the purpose of facilitating the manipulation of this closure device. This is preferably accomplished by means of a weight which is so disposed on the drum that it operates to hold the drum yieldingly in a position in which its stop pin 34 engages one end of the limiting slot 35 and also yieldingly retains the drum in a position in which it engages with the opposite end of this same slot.

In the preferred construction this weight is made in the form of two sections 36 which are secured to the inner side of the end heads of the drum adjacent to the inlet opening 27, and these weights may be secured to these end heads of the drum by brazing or soldering 37 or by any other suitable means.

These weights are also preferably extended outwardly through the drum opening 27 and curved at their outer edges 39 concentrically with the periphery of the drum so as to produce a neat and finished appearance, and also avoid any sharp corners at these places on the drum which otherwise might injure the operator.

For the purpose of strengthening the housing as a whole the rear edges of the upper and lower curved walls 18, 19 thereof are connected with each other at their opposite corresponding ends by means of curved braces or bars 40 which may be secured to these upper and lower walls 18, 19 by screws, as shown, or by any other suitable means.

When this closure device is not in use it is preferable to so turn the drum that its inlet opening faces rearwardly or into the teller's compartment, as shown in Fig. 6. When a customer presents himself at the teller's window the teller by means of the handle 33 turns the drum so as to present its inlet to the front end of the housing and thus enable the customer to deposit therein any valuables which he wishes to leave with the bank. After making such deposit the teller turns the drum back by means of the handle 33 so as to cut off the passage to the front and place the interior of the drum in communication with the teller's compartment so that the money, papers or other valuables may be removed from the drum and such disposition made thereof as desired.

During these operations the teller is fully protected against direct assault by firearms from a bandit, and thus enables the bank officer to conduct his business with the general public in absolute safety.

I claim as my invention:—

1. A protective closure for an opening in a wall, comprising a frame adapted to be mounted on said wall around said opening, a cylindrical housing connected with said frame and having upper and lower concentrically curved side walls and upright heads connecting corresponding ends of said side walls and forming with the same a diametrical passage through said housing which communicates at its outer end with said opening, a cylindrical drum arranged within said housing and having trunnions on its ends which turn in said heads and provided with an opening in one part of its peripheral wall for the introduction and removal of valuables, a handle connected with one of said trunnions, and stop means for arresting the rotation of said drum when turned for bringing its opening in line with either end of said passage, weights arranged on the interior of said drum at the ends of the opening therein, and inwardly and forwardly turned flanges arranged at the rear edges of the curved walls of said housing.

2. A protective closure for an opening in a wall, comprising a frame adapted to be mounted on said wall around said opening, a cylindrical housing connected with said frame and having upper and lower concentrically curved side walls and upright heads connecting corresponding ends of said side walls and forming with the same a diametri-

cal passage through said housing which communicates at its outer end with said opening, a cylindrical drum arranged within said housing and having trunnions on its ends which turn in said heads and provided with an opening in one part of its peripheral wall for the introduction and removal of valuables, a handle connected with one of said trunnions, and stop means for arresting the rotation of said drum when turned for bringing its opening in line with either end of said passage, weights arranged on the interior of said drum at the ends of the opening therein, and braces connecting the corresponding ends of the housing side walls at the rear edges of the same.

3. A protective closure for an opening in a wall comprising a cylindrical housing arranged opposite said opening and having upper and lower concentrically curved walls and upright heads connecting corresponding ends of said side walls and forming with the same a diametrical passage through said housing which communicates at its outer end with said opening, a cylindrical drum arranged within said housing and pivoted at its ends on said housing and provided with an opening in one part of its periphery for the introduction and removal of valuables, means for turning said drum and bringing its opening in line with either end of said passage, and inwardly and forwardly turned flanges arranged at the rear edges of the curved walls of said housing.

CHARLES A. SCHEELER.