109. SAFES, BANK PROTECTION
AND RELATED DEVICES.

12

Draftsman

June 3, 1930. E. E. SPOTTSWOOD 1,761,095

PROTECTIVE STRUCTURE FOR CASHIERS AND THE LIKE

Filed July 15, 1926 2 Sheets-Sheet 1

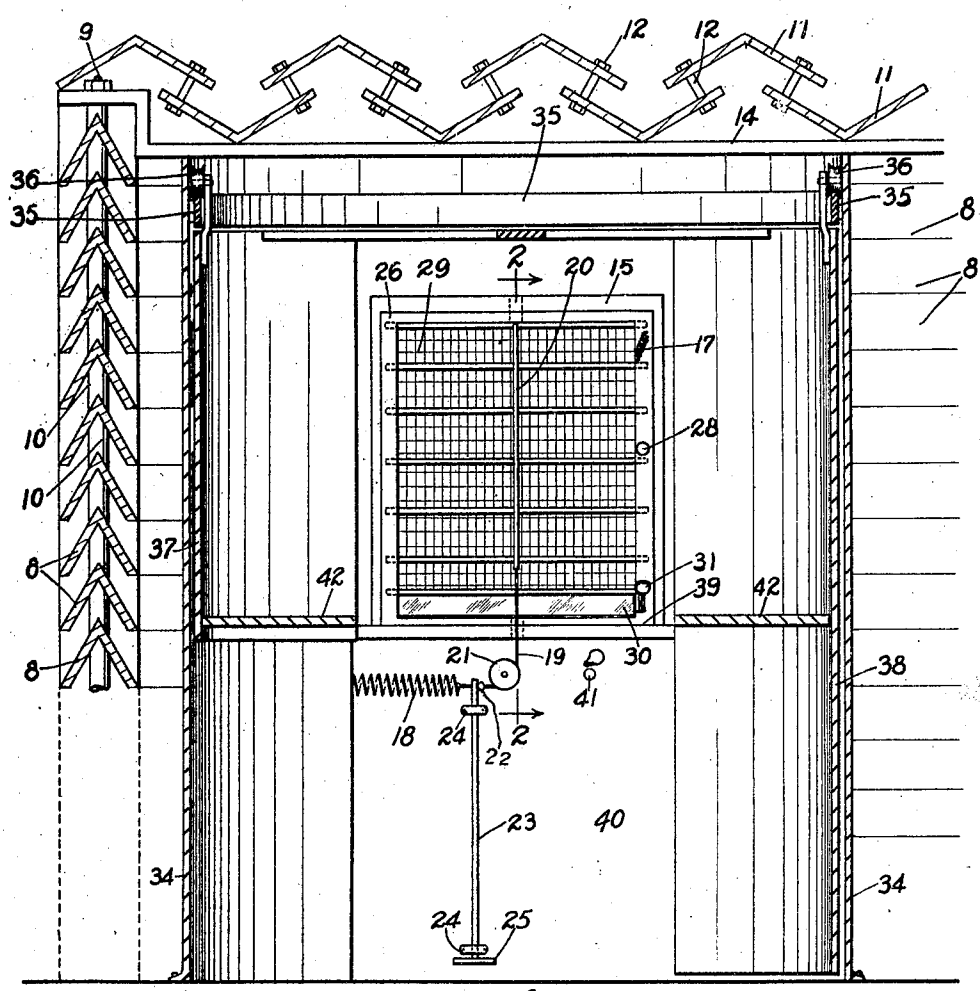


Fig. 1.

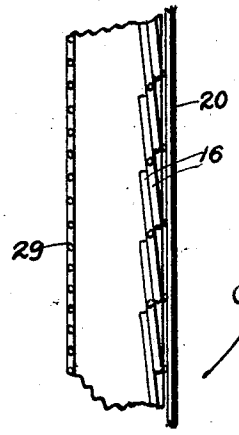


Fig. 5.

Inventor
Edwin Egmont Spottswood
By Murray and Bugbee
Attorneys

Drafting

12

June 3, 1930. E. E. SPOTTSWOOD 1,761,095

PROTECTIVE STRUCTURE FOR CASHIERS AND THE LIKE

Filed July 15, 1926 2 Sheets-Sheet 2

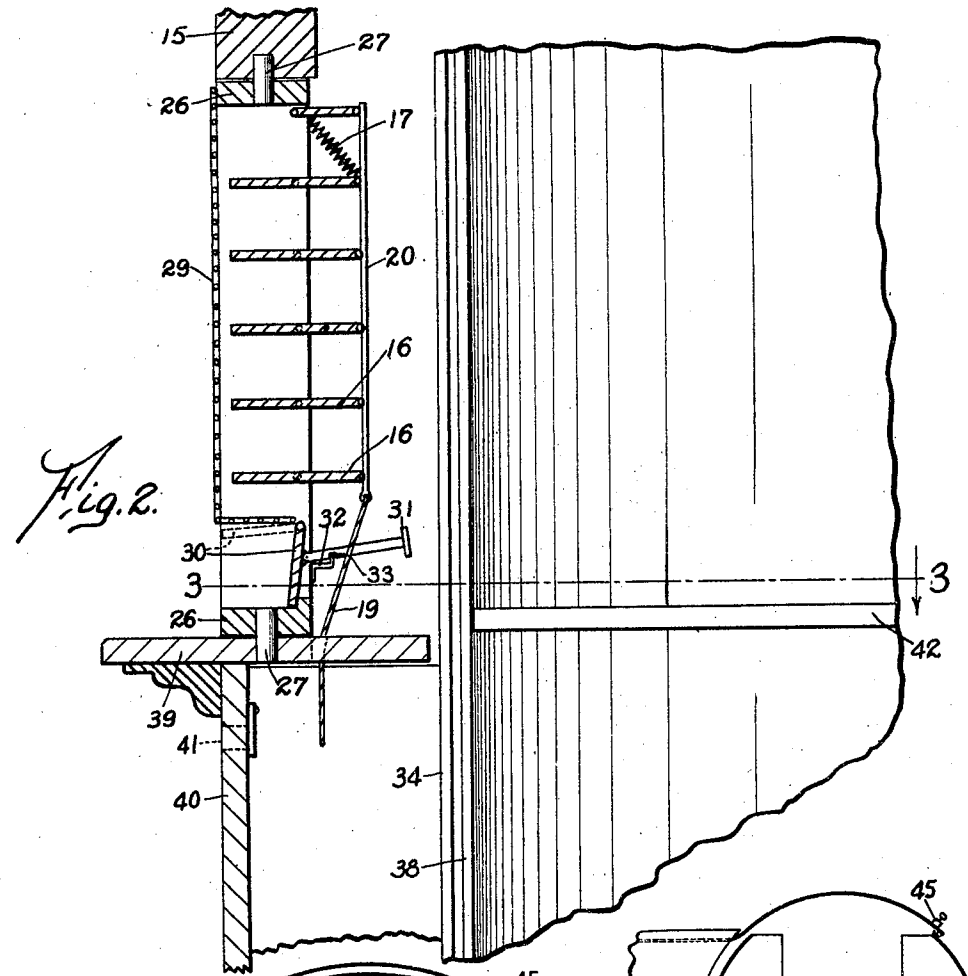


Fig. 2.

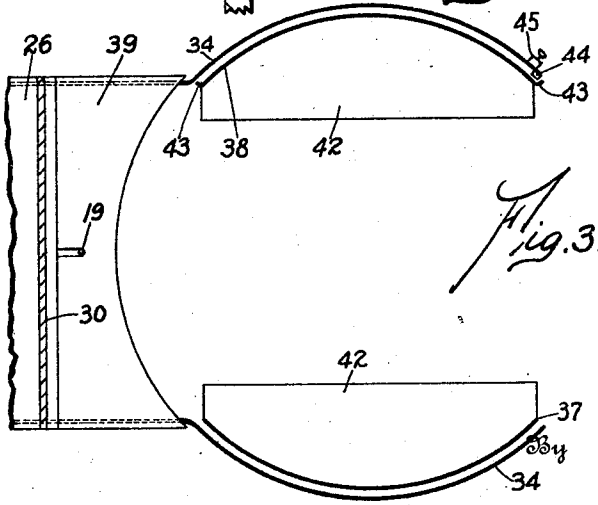


Fig. 3.

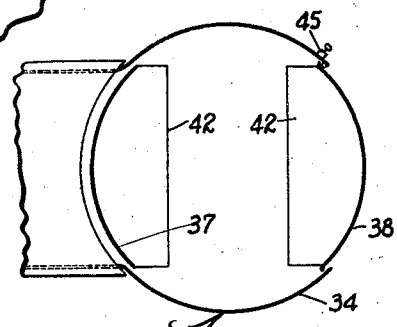


Fig. 4.

Inventor
Edwin Egmont Spottswood
By Murray and Gregelter
Attorneys.

109. SAFES, BANK PROTECTION AND RELATED DEVICES.
1 2

Patented June 3, 1930

1,761,095

UNITED STATES PATENT OFFICE

EDWIN EGMONT SPOTTSWOOD, OF CINCINNATI, OHIO

PROTECTIVE STRUCTURE FOR CASHIERS AND THE LIKE

Application filed July 15, 1926. Serial No. 122,673.

This invention relates to an improved protective cage structure for use by bank tellers and others who may be subject to banditry or holdup.

An object of my invention is to provide a structure wherein a cashier or teller may transact his usual money dealings with patrons or customers and which may, by operation of a simple mechanism, be converted into a bullet-proof chamber wherein both the cashier and his monies in charge are securely locked.

Another object is to provide a simple and rapidly operated protective shutter for the wicket of such structure.

Another object is to provide a structure of the class referred to, wherein absolute protection is attained without sacrificing any of the ordinary conveniences of such structures.

These and other objects are attained by the means described herein and disclosed in the accompanying drawings, in which:

Fig. 1 is a cross sectional elevational view looking from the inside of the cage or structure.

Fig. 2 is an enlarged view taken on line 2—2 of Fig. 1.

Fig. 3 is a cross sectional view taken on line 3—3 of Fig. 2 and showing relation of parts when the structure is in its normal position.

Fig. 4 is a diagrammatic view showing the relation of parts when in a locked condition.

Fig. 5 is a fragmental detail showing in closed position the relation of parts shown at the left of Fig. 2.

This invention contemplates the combination of a suitable protective device which will enable a teller or cashier to instantly protect himself against holdup at the point of a gun or similar banditry, together with means whereby he can immediately thereafter effectively lock himself and the monies in his care against attack from any direction.

In the present embodiment a suitable bullet-proof, but amply ventilated wall structure is provided for surrounding the area within which a cashier or teller has his cage. A plurality of angle strips 8, V-shaped in cross section, are supported above one another upon suitable rods 9 and spacers 10 carried by the rods. A roof or ceiling structure comprises a plurality of spaced overlapping strips 11, V-shaped in cross section and supported by suitable individual means such as bolts 12 extending through the adjacent overlapping ends of adjacent members. A suitable transverse member 14 amply supports the weight of the ceiling structure.

A suitable frame 15 may be mounted in the forward wall comprising the member 8 to provide the usual wicket space in which business is transacted.

Referring to Fig. 2, it will be noted that a shutter, which may be of bullet-proof material such as suitable heavy gauge steel, has pivotally mounted slats 16, normally held open through the action of a spring 17 and adapted to be instantly closed through the action of a tension spring 18 (see Fig. 1). A section of flexible cable or the like 19 connects with rod 20 to which the slats 16 are pivotally attached, passes about pulley 21 and is attached at its opposite end to tension spring 18. A suitable knob 22 on cable 19 is adapted to abut the side of a grooved pedal rod 23 which is vertically reciprocable on suitable supports 24 into and out of the transverse path of cable 19. From the foregoing it will be apparent that upon depression of a suitable pedal such as 25 the pedal rod 23 will be removed from the path of knob 22 on cable 19 so that the tension spring 18 may exert its force to close the slat members 16 of the shutter so that they will assume the position shown in Fig. 5.

The slat structure is mounted in a suitable frame 26 carried by suitable pivots 27 and which is normally made fast with frame 15 by any suitable latch such as 28. When it is necessary for a teller to receive or hand out

a large package or satchel the protective shutter mechanism may be rotated in a vertical plane.

On the forward face of the pivotally mounted frame 26 is provided a screen 29, the purpose of which is to preclude insertion of a gun or the like between the slats 16 of the protective shutter. A pivotally mounted panel 30 is mounted adjacent the bottom of frame 26 and is provided with a suitable handle 31 which may be manipulated by the teller for opening a space through which currency or the like may be passed. A suitable latch 32 seats in notch 33 of handle member 31 and precludes possible operation of the panel 30 from the outside of the cage. A pair of spaced arcuate metallic walls 34 extend between the floor and cross member 14 of the ceiling structure and provide between them a space within which the teller or cashier works. A pair of tracks 35 disposed interiorly of stationary arcuate walls 34 have suspended therefrom by suitably grooved wheels or pulleys 36 a pair of movable protective walls 37 and 38 respectively, which normally coincide with the fixed walls 34 and which may be moved along tracks 35 to completely enclose the structure, as in indicated in Fig. 4. The movable arcuate wall 37 extends only to the normal level of the counter 39, it being desirable that the cashier or teller may, in an emergency, be able to conceal himself beneath the counter 39 and behind the protection of the forward wall 40 which is provided with a closable aperture 41, through which he may shoot at the intruder. The movable arcuate walls 37 and 38 each support a suitable counter 42 upon which money and valuables are disposed.

Flanges 43 are provided on opposite ends of arcuate wall 38 and serve to position the counters and movable arcuate walls by abutment with block 44 when in open position and by engagement with a locking means 45 when in a closed position (see Figs. 3 and 4).

The movable arcuate doors move as a unit, the short member 37 providing an additional protection between the cashier and the protective shutter mechanism, while the member 38 closes the entire rear of the cage. Any suitable alarm system and means of communication may be wired in any suitable manner, the wires being amply protected against tampering by unauthorized persons.

The operation of the device is as follows:

A teller, assuming the day's business, would dispose his supply of currency and other papers upon the shelves 42 which would be disposed at his left and right hand sides. When any transaction is to be made with a customer on the other side of the wicket, the teller would press handle 31 forward, thereby raising panel 30 and permitting exchange of papers or currency and the like. The space on counter 39 inside of the cage is of ample size to permit each individual transaction to take place in view of both customer and teller. When a large object is to be passed from customer to teller or vice versa, the frame 26 is swung about its pivotal mounting after unlocking latch 28.

Should the cashier or teller be suddenly confronted with a gun in the hands of a person on the other side of the wicket or should he, for any reason, become distrustful of the action of any such party, he would immediately depress the pedal 25 with his foot, whereupon the members 16 of the shutter would immediately fold one over the other as shown in Fig. 5, whereupon he would be amply protected from direct attack by one standing outside the wicket. The screen 29 precludes the possibility of anyone thrusting a gun through the wicket and thus preventing a teller or cashier from operating the shutter mechanism. Once the protective shutter has been released, the occupant of the cage may move the arcuate walls 37 and 38 by grasping hold of the counters 42 and thus turning the structure to the position shown in plan in Fig. 4. With the parts in this position, the cashier or teller and the funds in his charge are absolutely safe against bandits, while the occupant of the cage may assume the offensive by shooting through closable aperture 41 which is positioned well beneath the forward side of counter 39 and therefore not ordinarily noticeable to customers and patrons. Once rendered secure against attack, the occupant of the cage may also give any alarm which may be provided.

What I claim is:

1. In a cashier's cage the combination of a pair of spaced arcuate walls, a second pair of arcuate walls mounted for movement concentrically of the first mentioned walls and adapted at times to lie parallel with the first mentioned walls and at other times to close the space between said walls, and means for locking the movable walls in the last mentioned position.

2. In a device of the class described the combination of a protective wall having a wicket and counter associated therewith, a protective shutter for the wicket and closable from one side of the counter, means for pivotally mounting said wicket above the counter, means for retaining the protective shutter in a normally open position, a releasable means for automatically closing the protective shutter, and a pivotally mounted panel adjacent the base of the wicket.

3. In a ventilated bullet-proof wall the combination of spaced rods, metallic strips comprising angle irons having the rods extending through the apexes of the angles, spacers carried by the rods and disposed between the angle irons, and means for locking the parts upon the rods.

4. A bullet-proof ventilated protective wall

Drawing

I 2

structure comprising the combination of horizontally disposed spaced parallel angle irons and up-right vertical rods extending through the angle irons for maintaining them in the position named, said angle irons being spaced from one another in such position as to permit free passage of air and sound and to preclude both straight line and deflected passage of a projector.

In testimony whereof, I have hereunto subscribed my name this 13th day of July, 1926.

EDWIN EGMONT SPOTTSWOOD.