Oct. 8, 1946. G. W. YOUNG 2,409,007

BANK PROTECTOR

Filed Feb. 23, 1945

Fig. 1.

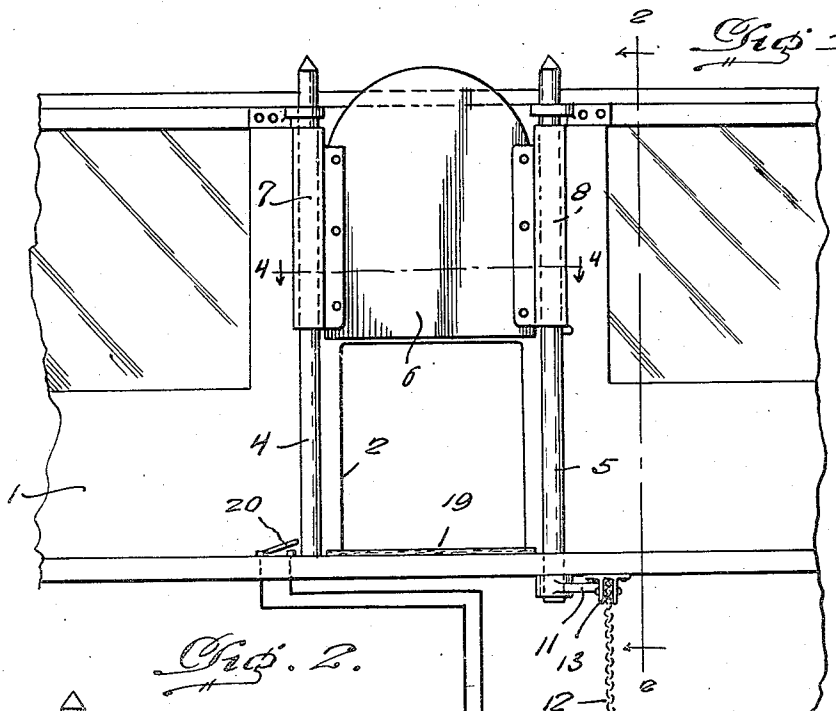


Fig. 2.

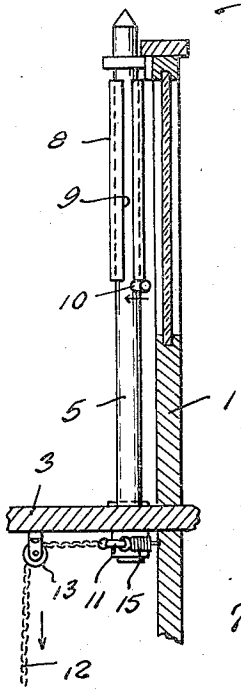


Fig. 3.

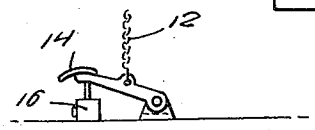
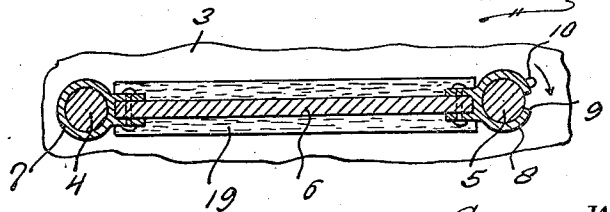


Fig. 4.



Inventor

George W. Young,

By McMorrow and Berman

Attorneys

Patented Oct. 8, 1946

2,409,007

UNITED STATES PATENT OFFICE

2,409,007

BANK PROTECTOR

George W. Young, Bloomfield, N. J.

Application February 23, 1945, Serial No. 579,377

5 Claims. (Cl. 109—18)

1

The present invention relates to new and useful improvements in bank protecting means, and has for its primary object to provide, in a manner as hereinafter set forth, an apparatus of this character comprising a novel construction and arrangement for quickly closing a teller's window and shielding the teller in the event of an attempted robbery.

Another very important object of the invention is to provide, in a bank protecting apparatus of the type including a vertically slidable drop shutter for closing the window, unique means, operable by the teller, for releasably securing said shutter in raised or inoperative position.

Still another very important object of the invention is to provide a bank protecting apparatus of the character set forth wherein an alarm will be automatically set off by the operation of the shutter-releasing means.

Other objects of the invention are to provide a bank protector of the aforementioned character which will be comparatively simple in construction, strong, durable, highly efficient and reliable in use, compact and which may be manufactured and installed at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawing wherein like characters of reference designate corresponding parts throughout the several views, and wherein:

Figure 1 is an elevational view of an apparatus constructed in accordance with the present invention.

Figure 2 is a vertical sectional view, taken substantially on the line 2—2 of Figure 1.

Figure 3 is a detail view in side elevation of the foot lever and the alarm switch which is arranged and adapted to be closed thereby.

Figure 4 is a view in horizontal section, taken substantially on the line 4—4 of Figure 1.

Referring now to the drawing in detail, it will be seen that reference character 1 designates a portion of the front of a teller's cage or enclosure, said front having therein a window 2. Extending inwardly or rearwardly from the front 1 is a deal plate 3.

The embodiment of the present invention which has been illustrated comprises vertical stationary and rotary guide posts 4 and 5 which are mounted on the plate 3 adjacent the opposite sides of the window 2. Mounted for vertical sliding movement between the posts 4 and 5 is a drop shutter 6. The shutter 6 has secured on its vertical marginal portions tubular slides 7 and 8, respectively, which are operable on the posts 4 and 5.

2

As illustrated to advantage in Figures 2 and 4 of the drawing, the tubular slide or sleeve 8 is split in a manner to provide a vertical slot 9. Fixed on the rotary guide post 5 at an intermediate point is a pin 10 which is engageable beneath the slotted slide or guide 8 for releasably supporting the shutter 6 in raised or inoperative position.

The rotary guide post 5 extends downwardly through the plate 3 and has fixed on its lower end portion an arm 11. A chain 12 is trained over a pulley 13 beneath the plate 3 and has one end connected to the arm 11. The other end of the chain 12 is connected to a foot lever 14. A return spring 15 for the rotary guide post 5 is connected to the arm 11.

Mounted beneath the foot lever 14 for closing thereby is an electric switch 16. The switch 16 controls the electric circuit 17 to an alarm 18 which may be at any suitable location.

It is thought that the operation of the apparatus will be readily apparent from a consideration of the foregoing. Briefly, to lower the shutter 6 to operative position behind the window 2, it is only necessary to depress the foot lever 14. When this occurs, the chain 12 actuates the arm 11 against the tension of the spring 15 for rotating the guide post 5 in a direction to position the pin 10 beneath the slot 9. When this occurs, the shutter 6 drops by gravity on the guide posts 4 and 5 to closed position behind the window 2. A cushion 19 of felt or other suitable material is provided on the deal plate 3 for the shutter 6. It will thus be seen that the window 2 may be quickly and completely closed. When in lowered position, the shutter 6 also functions as a shield for protecting the teller in the cage. When the pedal 14 is depressed, the switch 16 is closed thereby for energizing the electric signal 18.

When the shutter 6 is in lowered position, the tubular slide or sleeve 8 is below the pin 10. Thus, when the foot pedal 14 is released, the spring 15 rotates the post 5 in the opposite direction for swinging the pin 10 out of alignment with the slot 9. In this manner the shutter 6 is positively locked in lowered position. A switch 20 is connected in the electric circuit 17 and is located to be engaged by one of the sleeves 7 of the shield 6 when the latter is in its lowermost position so that the electric alarm 18 will remain in operation even after the operator removes the foot from the pedal 14.

It is believed that the many advantages of a bank protector constructed in accordance with the present invention will be readily understood, and although a preferred embodiment of the apparatus is as illustrated and described, it is to be understood that changes in the details of construction and in the combination and arrangement of parts may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:

1. A bank protector of the character described comprising stationary and rotary guide posts, a shutter mounted for vertical sliding movement on the posts, coacting means on the rotary post and the shutter for releasably securing said shutter in raised position, and means for rotating said rotary guide post for releasing the shutter.

2. A bank protector of the character described comprising stationary and rotary guide posts, a vertically movable shutter mounted between the posts, sleeves fixed on the shutter and slidable on the posts, and coacting means on the rotary post and one of the sleeves for releasably securing the shutter in raised or lowered position.

3. A bank protector of the character described comprising stationary and rotary guide posts, a shutter having sleeves mounted for vertical sliding movement on the posts, coacting means on the rotary post and the shutter for releasably securing said shutter in raised position, and means for rotating said rotary guide post for releasing the shutter, said means including a pin on the rotary post engageable with the ends of one of said sleeves for securing same against sliding movement, said one sleeve having a slot therein extending from end to end thereof for the reception of the pin.

4. A bank protector of the character described comprising stationary and rotary posts, a vertically movable drop shutter mounted between the posts, sleeves on said shutter operable on the posts, a pin mounted on the rotary post at an intermediate point and engageable with either end of one of the sleeves for releasably securing the shutter against vertical movement in either raised or lowered position, said one sleeve having a slot therein extending from end to end thereof accommodating the pin when the shutter is raised or lowered, manually operable means for rotating the rotary post for aligning the pin with the slot, and means for rotating the post in the opposite direction for moving the pin out of alignment with the slot.

5. A bank protector of the character described comprising stationary and rotary guide posts, a drop shutter operable between said posts, vertical sleeves on the shutter operable on the posts, a pin on the rotary post engageable with the ends of one of the sleeves for securing the shutter in raised or lowered position, said one sleeve having a slot therein extending from end to end thereof and accommodating the pin when the shutter is moved upwardly or downwardly, an arm fixed on the rotary post, a foot lever operatively connected to the arm for rotating the rotary post in one direction for aligning the pin with the slot, and a spring connected to the arm for rotating the rotary post in the opposite direction for moving the pin out of alignment with the slot.

GEORGE W. YOUNG.