

1,006,029.

FIG. 1.-A+B.

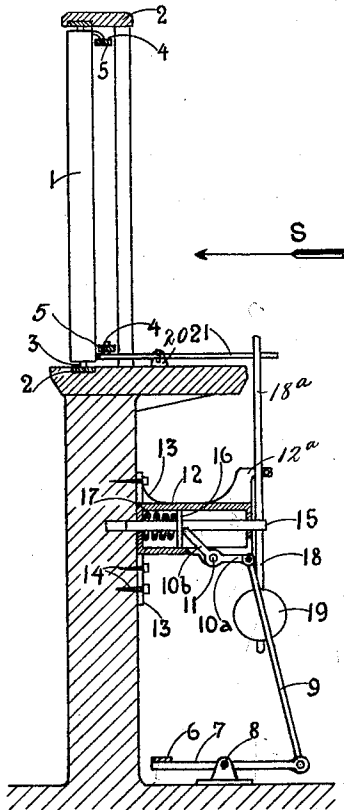


FIG. 2.

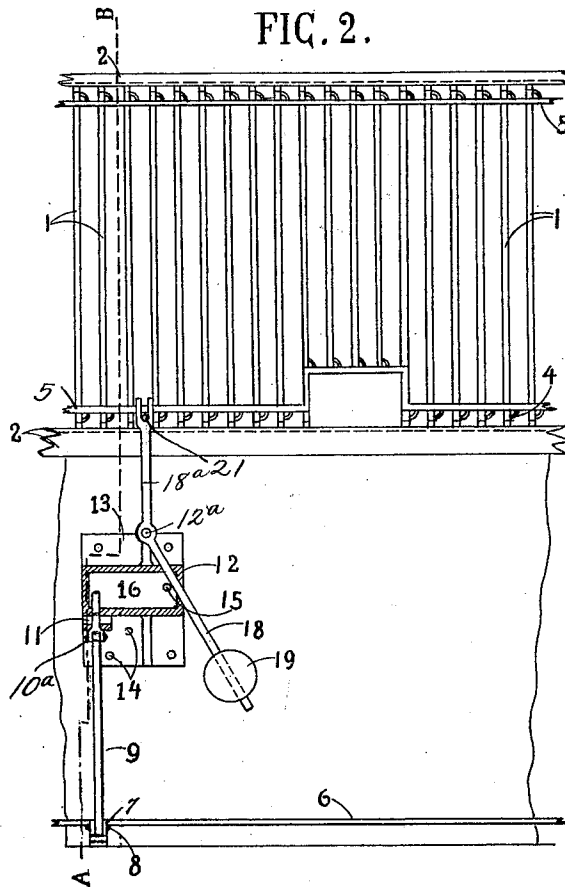


FIG. 3a.

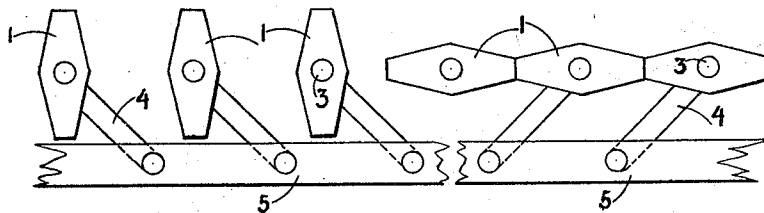


FIG. 3 b.

Wm. H. Jones
Rudolf Haseltauer
Mrs. Lolia Jones

William K. Wade
BY
Shepherd & Campbell
ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM N. WADE, OF IMPERIAL BEACH, CALIFORNIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF THREE-EIGHTHS TO NELS S. ABRAHAMSON, THREE-EIGHTHS TO ELIZA H. WADE, AND ONE-FOURTH TO JOHNSON W. PUTERBAUGH, ALL OF SAN DIEGO, CALIFORNIA.

AUTOMATICALLY-CLOSING GRATING.

1,006,029.

Specification of Letters Patent.

Patented Oct. 17, 1911.

Application filed February 7, 1911. Serial No. 607,091.

To all whom it may concern:

Be it known that I, WILLIAM N. WADE, a citizen of the United States of America, residing at Imperial Beach, in the county of San Diego and State of California, have invented certain new and useful Improvements in Automatically-Closing Gratings, of which the following is a specification.

This invention relates to an automatically closing grating for use in banks, express offices, post offices, and other public places where large sums of money are handled and where there is always a possibility that an attempt may be made to bodily injure the cashier or other officials, by lawless persons seeking to rob such places.

The object of the invention is to provide a grating which, when released by the threatened official, will immediately close and present a bullet proof barrier in the place of the usual open grating through which persons ordinarily having business with the institution are visible to the cashier or other official.

Further objects and advantages of the invention will be set forth in the detailed description which now follows:

In the accompanying drawing, Figure 1 is a vertical section upon line A—B of Fig. 2, illustrating my improved grating applied to a bank counter, Fig. 2 is an inside elevation of said bank counter with certain of the parts in section, Fig. 3^a is a plan view of some of the bars of the grating in their open position, and, Fig. 3^b is a like view showing the bars in their closed position.

Like numerals designate corresponding parts in all of the figures of the drawing.

Referring to the drawing, the numeral 1 designates the bars comprising the grating. These bars may be of any shape in cross section, provided they are longer than they are wide. They may be oval, though I prefer to make them of the shape shown in Fig. 3^a. These bars are mounted to turn upon pins 3, said pins being carried by upper and lower rails 2, these rails forming portions of the counter structure. Levers 4 (see Fig. 3^a) are rigidly connected to the bars 1, the lower levers 4 being curved upwardly and the upper levers 4 being curved down-

wardly, the ends of these levers having pivotal engagement with lower bar 5.

To permit the cashier or other official to release the closing means hereinafter described, a foot rail 6, which lies close against the counter, is provided. This foot rail is supported by the inner end of a lever 7 which has a pivotal mounting in a floor bracket 8. The outer end of this lever is connected by a link 9 with the arm 10^a of a bell crank lever. This bell crank lever has a pivotal mounting at 11 in a box bracket 12, said box bracket being secured in position by ears 13 and screws 14 against the inner wall of the counter. A bolt 15 moves longitudinally within the box bracket 12 and carries a guide collar 16. A spring 17 bears between one end of the box bracket 12 and this collar, and normally tends to force this collar and the bolt by which the collar is carried, outwardly. When the bolt is projected outwardly, it lies in the path of movement of a lever 18 having a weight 19 upon the lower end thereof. This lever is pivotally mounted upon a neck extension 12^a of the box bracket 12. An upwardly extending arm 18^a of the lever 18 has a bifurcated upper end which engages one end of a lever 21. The lever 21 is pivoted for horizontal movement in a bracket 20. The lever 21 is pivotally connected to the bar 5.

The operation of the device is as follows: If it be desired to quickly close the grating to protect an official against assault by shooting or otherwise, pressure upon the rail 6 with the foot elevates the outer end of the lever 7 and the outer end of the arm 10^a of the bell crank lever through the medium of the link 9. This in turn forces the guide collar 16 inwardly against the tension of the spring 17 and moves the bolt 15 from the path of movement of the lever 18, whereupon the weight 19 acts to throw the lever 18 to a vertical position and this in turn moves the lever 21 through its engagement with the bifurcated upper end of the arm 18^a, thereby shifting the lower bar 5 longitudinally and turning the bars 1 upon the pins 3 through the medium of the levers 4, to their closed position (see Fig. 3^b). It is designed to make these bars heavy enough

to be bullet proof. It is a well known fact that many thousands of dollars are lost by the banks yearly by robberies in which bank cashiers are forced, at the pistol's point, to deliver the money of the banks to lawless persons. It is seldom that this is done without some slight parleying, and if means are provided whereby a bullet-proof grating can be caused to automatically close during such parleying, losses from these sources may be materially decreased.

From the foregoing description, it will be seen that simple and efficient means are herein provided for accomplishing the objects of the invention, but while the elements shown and described are well adapted to serve the purposes for which they are intended, it is to be understood that the invention is not limited to the precise construction set forth, but includes within its purview such changes as may be made within the scope of the appended claim.

Having described my invention, what I claim is:

In a device of the character described, the combination with a plurality of pivotally mounted bars which in cross section are longer than they are wide, rigid levers connected to each of said bars, a common longitudinally extending member to which all of said levers are connected, a weighted member, connections between said weighted member and said longitudinally extending member, a spring actuated bolt for holding said weighted lever in position for it to be acted upon by its weight, and foot operated means for retracting said bolt to release said weighted lever.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM N. WADE.

Witnesses:

W. A. SLOANE,

HARRY G. SLOANE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."