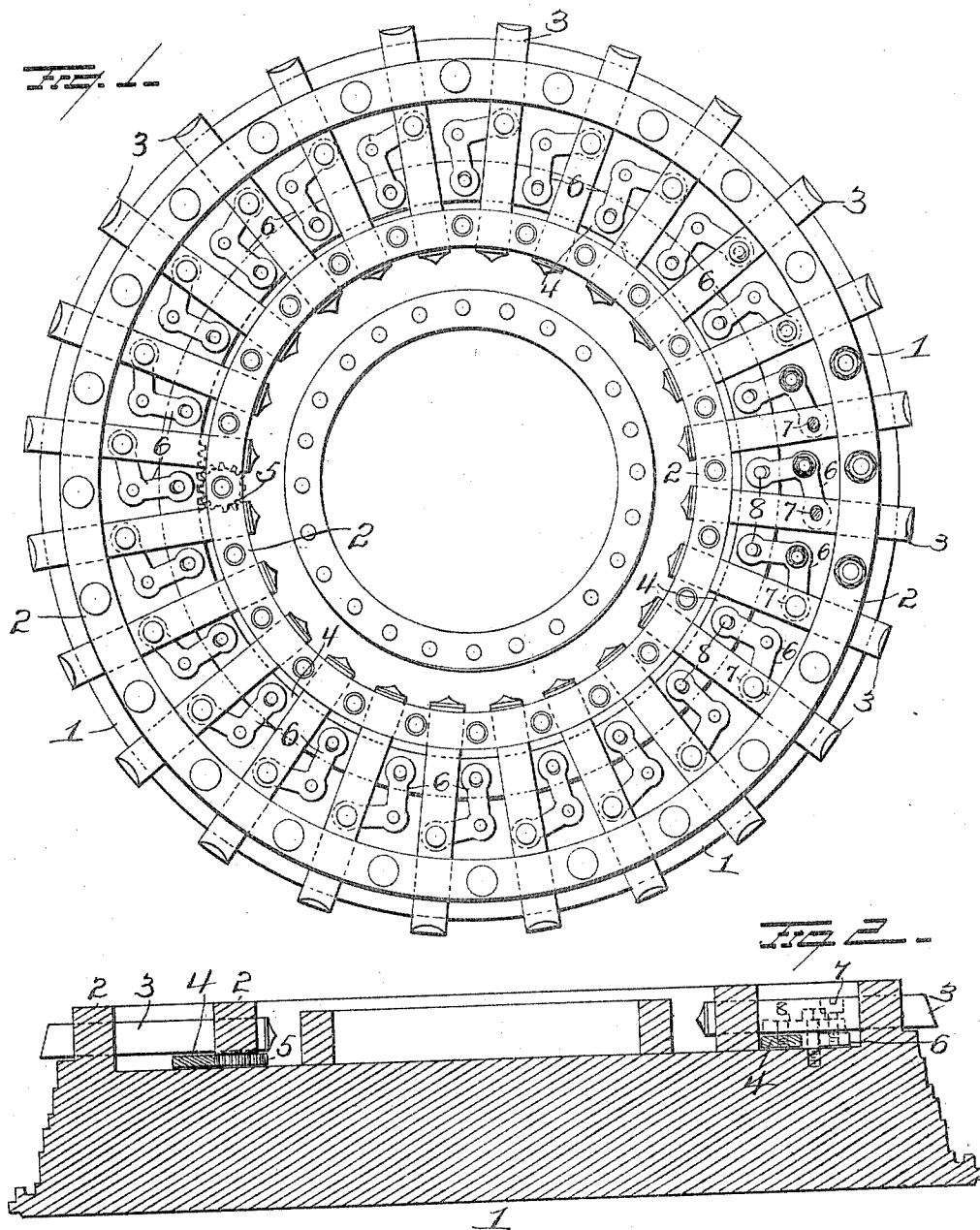


No. 811,698.

PATENTED FEB. 6, 1906.

J. E. CASSELY.
BOLTWORK FOR CIRCULAR DOORS.
APPLICATION FILED APR. 11, 1905.



WITNESSES
E. Nottingham
C. J. Downing

INVENTOR
J. E. Cassely
By H. A. Seymour
Attorney

UNITED STATES PATENT OFFICE.

JOSEPH E. CASSERLY, OF NEW YORK, N. Y., ASSIGNOR TO REMINGTON
AND SHERMAN COMPANY, OF PHILADELPHIA, PENNSYLVANIA.

BOLTWORK FOR CIRCULAR DOORS.

No. 811,698.

Specification of Letters Patent.

Patented Feb. 6, 1906.

Application filed April 11, 1905. Serial No. 254,982.

To all whom it may concern:

Be it known that I, JOSEPH E. CASSERLY, a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Boltwork for Circular Doors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in boltwork for circular doors, the object of the invention being to provide improved mechanism for simultaneously withdrawing or projecting all the radially-disposed bolts on the doors; and with this object in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully herein-
after described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in elevation illustrating my improvements, and Fig. 2 is a view in section thereof.

1 represents a door having fixed parallel rings 2 secured on its inner side, and alined openings are provided in these rings 2 to receive the radially-disposed bolts 3.

Mounted to turn around inner ring 2, beneath the bolts 3, is a movable ring 4, a portion of which has gear-teeth forming a rack in mesh with a pinion 5 to move the same, and this pinion 5 may be turned by any desired mechanism.

Beside each and every bolt 2 is a bell-crank lever 6, fulcrumed to the door and having the end of one of its members slotted to receive a pin or screw 7 on the bolt 3 and the end of its other member made with a slot to receive a pin 8 on the ring 4. Slots are provided in the bell-crank levers to compensate for varying positions of the pins 7 and 8 and prevent binding of the parts.

The operation is as follows: Pinion 5 moves ring 4 in one direction, which movement of ring 4 simultaneously moves all the levers 6 to move all the bolts inward or outward as the case may be.

Slight changes might be made in the general form and arrangement of the parts described without departing from my invention, and hence I would have it understood that I do not restrict myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a door, fixed rings thereon, and radially-disposed bolts mounted in said fixed rings, of bell-crank levers fulcrumed to the door and one located adjacent to each bolt and connected at one end thereto, and a ring movable about one of the fixed rings and connected with all of the levers.

2. The combination with a door and radially-disposed bolts thereon, of a bell-crank lever pivoted to the door beside each bolt, pins on the bolts projecting into slots in one end of the levers, a movable ring, pins thereon projecting into slots in the other ends of the levers, gear-teeth on said movable ring forming a rack, and an operating-pinion engaging said rack.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOSEPH E. CASSERLY.

Witnesses:

FRANK O. HERRING,
RUTHERFORD S. FOWLER.