No. 811,701. PATENTED FEB. 6, 1906.

J. E. CASSERLY.

BOLTWORK FOR CIRCULAR DOORS.

APPLICATION FILED APR. 17, 1905.

Fig. 1.

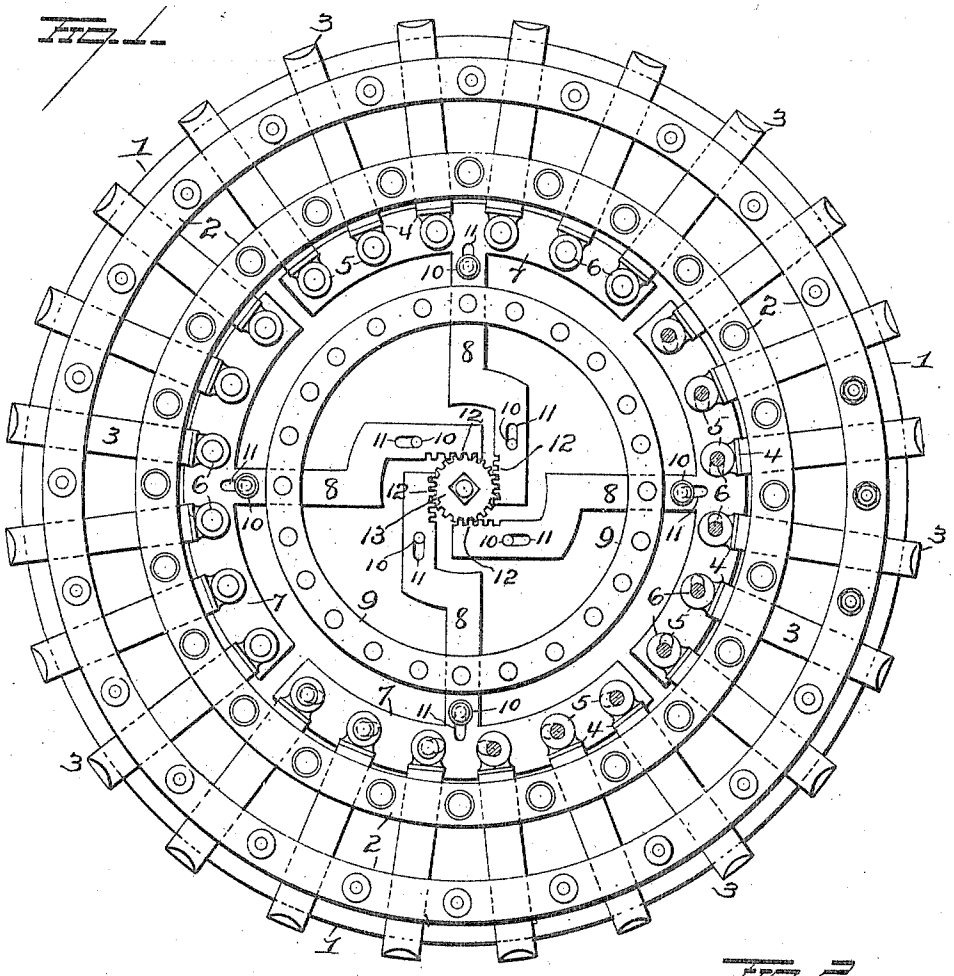
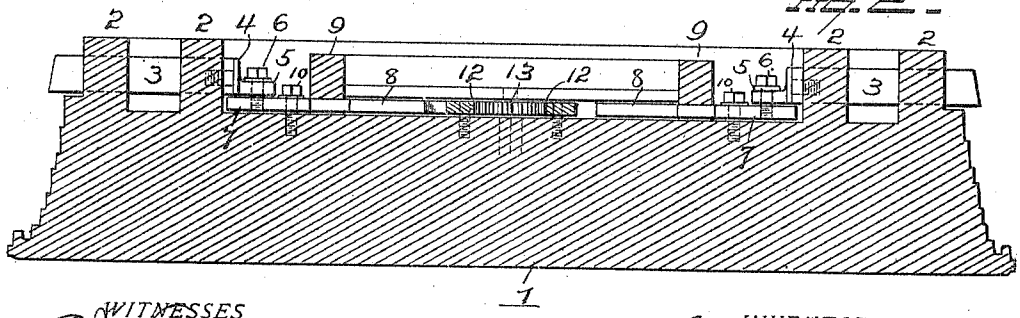


Fig. 2.



WITNESSES

E. Nottingham

G. F. Downing.

INVENTOR

J. E. Casserly

By H. G. 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. 811,701. Specification of Letters Patent. Patented Feb. 6, 1906.

Application filed April 17, 1905. Serial No. 256,086.

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 means for simultaneously operating a series of radially-mounted bolts about the door; and the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter 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 circular door, to the inner face of which parallel rings 2 are secured and are made with alined openings to receive and guide a series of radially-mounted bolts 3. Removable heads 4 are secured to the inner ends of the bolts and are made with flat disk-like portions 5, carrying screws or pins 6, projected into openings in segments 7. These segments 7 are arranged in circular formation inside the inner ring 2 and are provided centrally with inwardly-projecting arms 8, guided in notches in a fixed ring 9, and by means of pins 10 secured to the door and located in slots 11 in the arms. The inner ends of these arms 8 are offset, as shown, and provided with racks 12, all of which engage a central operating-pinion 13, so that when the latter is turned by any desired means all of the arms, segments, and bolts will be moved either 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 circular door and a series of radially-disposed bolts thereon, of a series of radially-movable segments, each segment movably connected with a number of bolts, arms on the segments provided with racks, and a single pinion meshing with the racks of all the arms to move them radially.

2. The combination with a circular door, parallel fixed rings thereon, and a series of radially-disposed bolts movable in said fixed rings, a series of segments inside the inner ring, removable heads on the inner ends of the bolts movably connected with the segments, arms on the segments provided with racks, and an operating-pinion engaging all the racks.

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.