

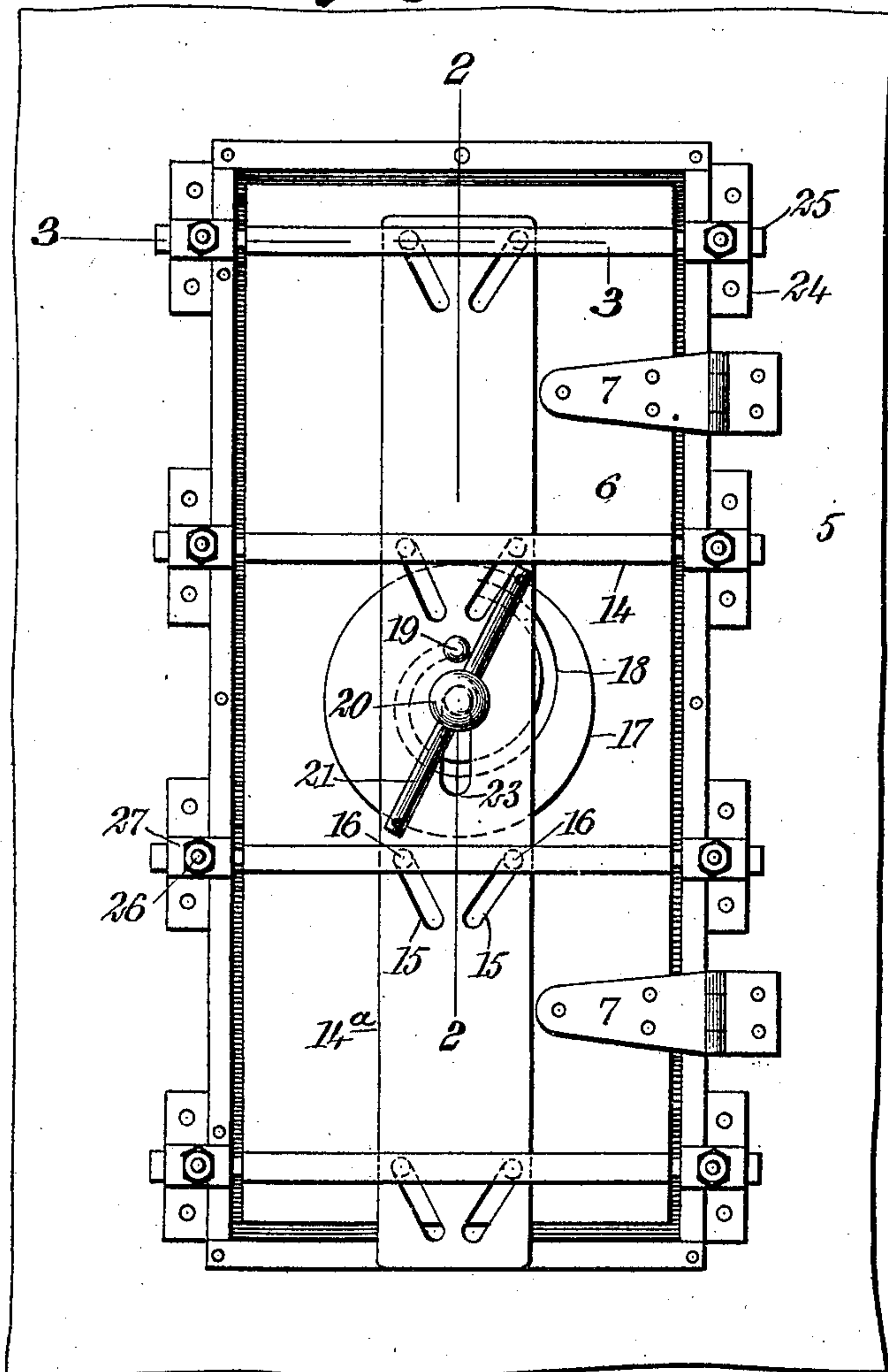
No. 819,460.

PATENTED MAY 1, 1906.

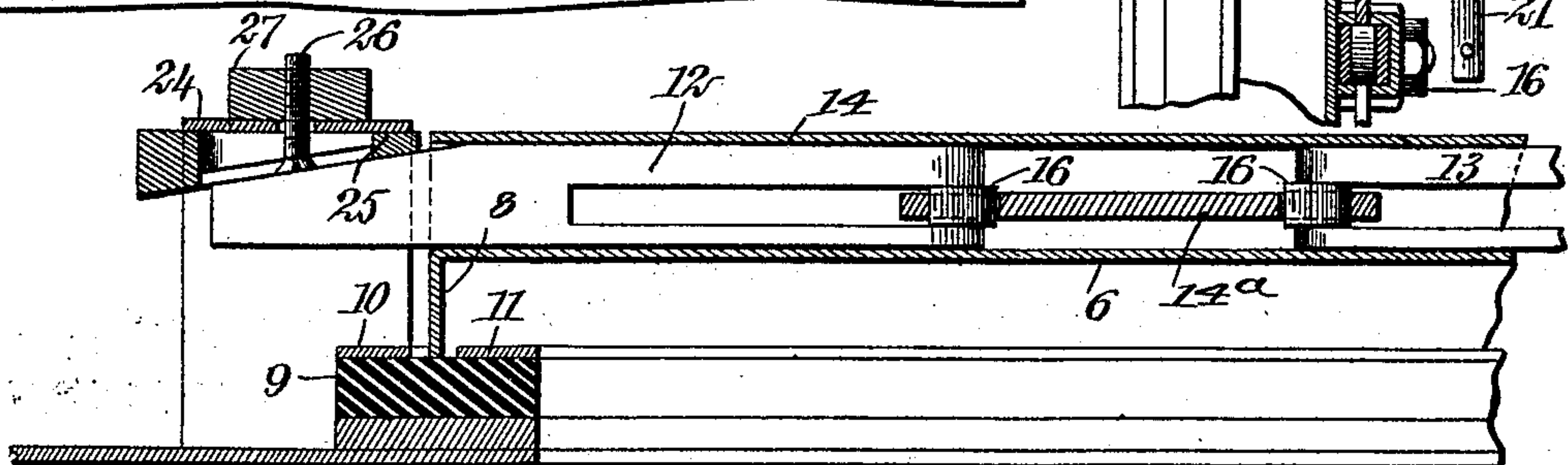
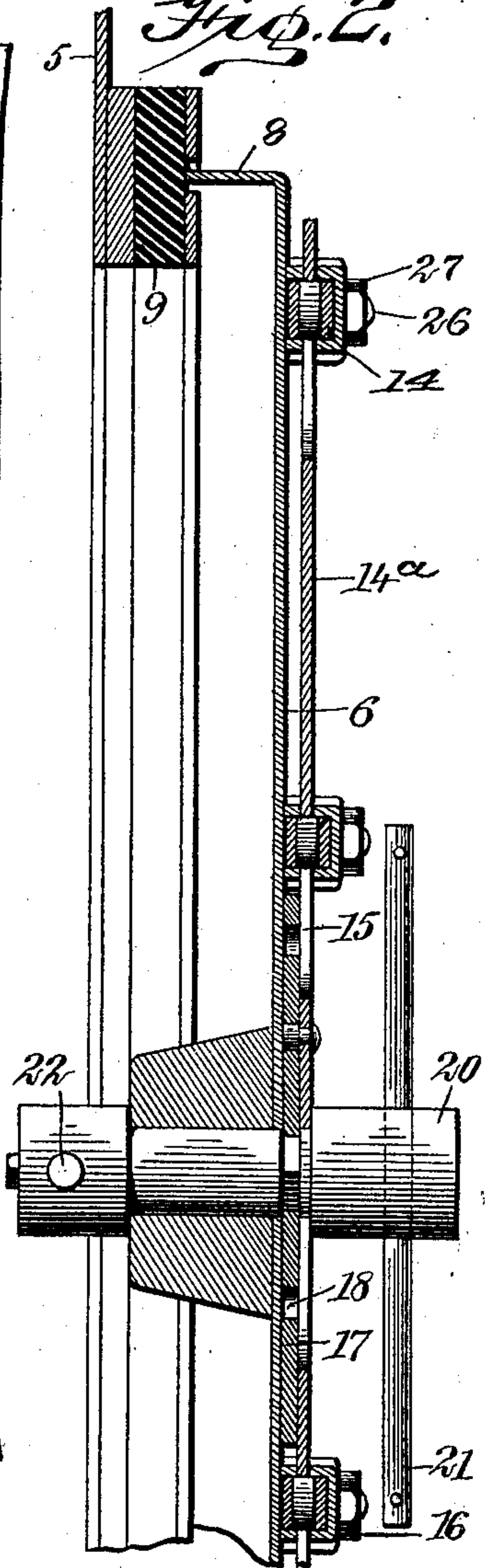
J. ROONEY.  
DOOR FASTENING.

APPLICATION FILED SEPT. 20, 1905.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*H. G. Dieterich*  
*C. R. Ferguson*

*Fig. 3.*

INVENTOR

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BY

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# UNITED STATES PATENT OFFICE.

JAMES ROONEY, OF NEW YORK, N. Y.

## DOOR-FASTENING.

No. 819,460.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed September 20, 1905. Serial No. 279,265.

*To all whom it may concern:*

Be it known that I, JAMES ROONEY, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Door-Fastening, of which the following is a full, clear, and exact description.

This invention relates particularly to improvements in doors for water-tight compartments of marine vessels, although it may be used for other purposes, such as in caissons or the like, the object being to provide a novel form of locking device to secure the door closed in a water and air tight condition.

I will describe a door embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is an inside elevation of a door embodying my invention. Fig. 2 is a section on the line 2 2 of Fig. 1, and Fig. 3 is a section on the line 3 3 of Fig. 1.

Referring to the drawings, 5 designates the door-casing, and 6 the door having hinge connection 7 with the casing. The door consists of suitable metal, and it has at its sides and ends a flange 8, designed to engage with a packing 9, of rubber or other suitable material, secured to the casing around the door-opening. As here shown, the packing is secured in place by means of plates 10 11, the adjacent edges of which are spaced apart to permit the flange 8 to pass between them, as clearly indicated in the drawings.

Arranged at suitable intervals on the inner side of the door are pairs of oppositely-movable locking-bars 12 13. The bars of a pair are movable in guide-boxes 14, secured to the surface of the door. These guide-boxes have at about the center openings at the lower and upper walls, through which a shifting-plate 14<sup>a</sup> is vertically movable. This shifting-plate is provided with upwardly-divergent slots 15 for receiving pins 16, attached to the inner or adjacent ends of the opposite locking-bolts of a pair. These pins are indicated in Fig. 3 in the form of antifriction-rollers, which are placed between the forked inner ends of the bolts.

As a means for moving the shifting-plate up and down I employ a disk 17, having an eccentric or spirally-disposed slot 18 for re-

ceiving a pin 19 on said plate. This disk is mounted rigidly on a shaft 20, extended through the door, the outer end being provided with a handle 21, and a smaller handle 22 may be provided at the inner end. The plate 14<sup>a</sup> is provided with a vertical slot 23, through which the shaft 20 passes. Secured to the door-casing at both the hinge side and opposite side are keepers 24 for the locking-bolts, and arranged in each keeper is a wedge-shaped wear-plate 25 for engaging with the bevel end of a locking-bolt forced into the keeper. These wear-plates have screws 26 passing out through openings in the keepers, the inner headed ends of said screws engaging in slots in the wear-plates, and the outer threaded ends are engaged by adjusting-nuts 27. By employing the wear-plates, which may be moved inward and outward, and beveling or inclining the ends of the bolts it is obvious that when the bolts are moved outward into the keepers the flange 8 will be forced tightly against the packing 9, thus practically forming a water and air seal. By turning the disk 17 in one direction the plate 14<sup>a</sup> will be moved upward, withdrawing the several bolts simultaneously from the keepers. By a downward movement of the shifting-plate 14<sup>a</sup> the several bolts will be moved into the keepers.

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

1. The combination with a door-casing and a door, of a plurality of pairs of bolts mounted to slide laterally on the door, the bolts of a pair moving in opposite directions, keepers on the casing for receiving the bolts, a shifting-plate mounted on the door and having divergent slots, rollers connected to the bolts and engaging in the slots, and a cam for moving said plate vertically.

2. The combination with a door-casing and a door, of guide-boxes on the door, bolts slidable in said guide-boxes the bolts being arranged in oppositely-movable pairs, the said guide-boxes having openings in the upper and lower walls, a shifting-plate movable through said openings, the said shifting-plate having divergent slots for receiving pins, a disk mounted to rotate on the door and having a spirally-disposed slot, a pin extended from the shifting-plate into said spirally-disposed slot, and keepers on the door-casing for receiving the bolts.

3. The combination with a door-casing and

a door, of a plurality of pairs of locking-bolts slidable laterally on the door, means for simultaneously sliding the several bolts, keepers secured to the casing for receiving said  
5 bolts, and wear-plates adjustable in the keepers.

4. The combination with a door-casing and a door, the said door having a flange extended around its edge, a packing material on  
10 the casing with which said flange is designed to engage, locking-bolts arranged in pairs on the doors, the bolts of a pair being

mounted to slide in opposite directions, a shifting-plate for moving the bolts and means for moving said plates from both the inner 15 and outer sides of the door.

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

JAMES ROONEY

Witnesses:

RICHARD J. SHERIDAN,  
THOMAS F. MAHER.