Aug. 14, 1928. 1,680,332

R. L. JEWELL

DOOR MOUNTING

Filed Nov. 25, 1925

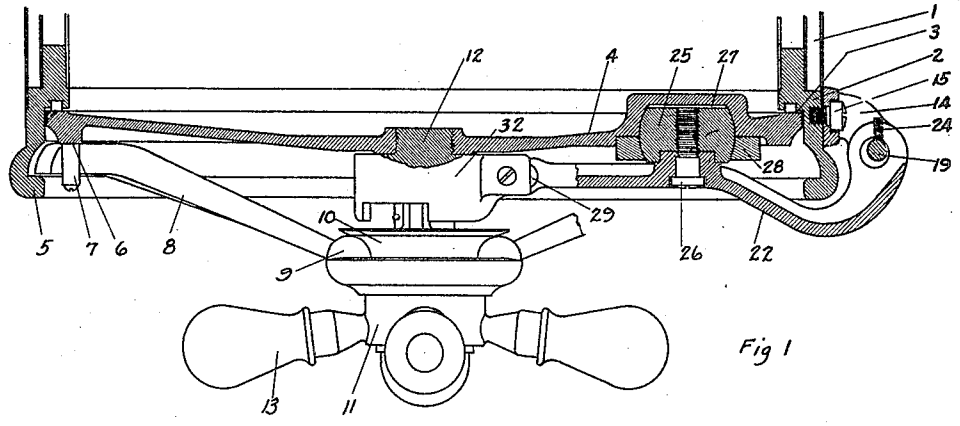


Fig 1

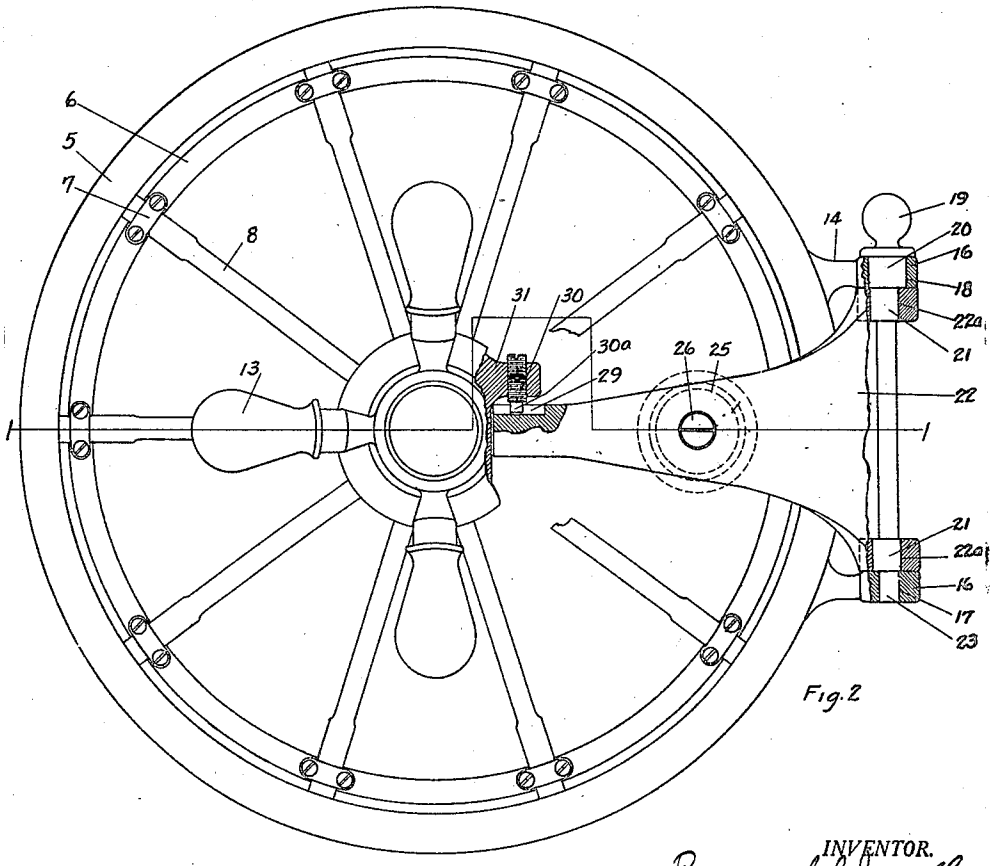


Fig. 2

INVENTOR.
Raymond L. Jewell
BY
ATTORNEYS.

Patented Aug. 14, 1928. 1,680,332

UNITED STATES PATENT OFFICE.

RAYMOND L. JEWELL, OF MILLCREEK TOWNSHIP, ERIE COUNTY, PENNSYLVANIA, ASSIGNOR TO AMERICAN STERILIZER COMPANY, OF ERIE, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

DOOR MOUNTING.

Application filed November 25, 1925. Serial No. 71,481.

Doors for pressure vessels, such as sterilizers ordinarily require a nice adjusting to make them seat properly. This involves an adjustment of the edge and also an angular adjustment to permit the door to properly seat. The present invention is designed to facilitate these adjustments so as to bring about a perfect seating of the door. Features and details of the invention will appear from the specification and claims.

The invention is illustrated in the accompanying drawings as follows:—

Fig. 1 shows a section on the line 1—1 in Fig. 2.

Fig. 2 a front elevation, partly in section.

1 marks the chamber, 2 the door ring on the chamber, 3 the seat on the ring, 4 the door, 5 the inturned locking flange on the door ring, 6 a fulcrum ring on the door, 7 straps secured to the fulcrum ring through which the pressure closure levers 8 project, 9 the spherical ends on the closure levers, 10 a head for the closure levers, and 11 a nut on which the head is journaled the nut having a screw-threaded connection (not shown) on a post 12 and provided with handles 13 by which the nut may be operated. These features are in common use in doors of this type.

Hinge plates 14 are secured to the door ring by screws 15. The hinge plates have the hinge projections or lugs 16. An opening 17 is arranged in the lower lug and an opening 18 in the upper lug. These openings are concentric but of slightly different size. A hinge pin 19 has a portion 20 fitting the opening 18. The portions 21 fit openings 22^a in a mounting arm 22 and the lower end of the pin has a portion 23 conforming in size to the opening 17. The portions 20 and 23 are concentric but eccentric to the portion 21 so that by turning the pin slightly the door may be adjusted sidewise so as to bring it into proper conformity to its seat.

A set screw 24 is provided by means of which the pin 19 may be locked in adjustment.

The mounting arm 22 has a spherical bearing member 25 secured thereto by a screw 26. This bearing member seats in a socket 27 on the door face and is locked in place by a plate 28. The inner end of the arm 22 has a slot 29 into which an end 30^a of a screw 30 projects, the screw extending through an ear 31 in a plate 32 secured on the door. By screwing the screw 30 in or out, the door may be swung up or down on the bearing formed between the spherical member and the socket. Thus the door may be adjusted up or down to its seat. The slot 29 is slightly larger than the projection 30^a so that the door is free to move on the spherical bearing 25 to permit of angular movement of the door to aline the face of the door with its seat. Thus the adjustment of the door edgewise to the seat, both up and down and sidewise may be quickly and positively accomplished and the door is permitted, by reason of its mounting, to immediately find its seat.

What I claim as new is:—

1. In a door mounting, the combination of a door seat; a door; a door supporting arm having a slot at its inner end and a hinge connection at its outer end; a joint connection between the door and the arm; and a screw operating in the slot to adjust the door across the arm.

2. In a door mounting, the combination of a door seat; a hinge; an arm supported by the hinge; a door; and a connection between the door and the arm normally permitting relative universal movement between the door and its seat.

3. In a door mounting, the combination of a door seat; a hinge; an arm supported by the hinge; a door; and a connection comprising a spherical joint between the arm and the door normally permitting relative universal movement between the door and its seat.

4. In a door mounting, the combination of a door seat; a hinge; an arm supported by the hinge; a door; a connection between the door and the arm normally permitting relative universal movement between the door and its seat; and means for adjusting the door center transversely to the arm whereby the door may be adjusted vertically relatively to its seat when the arm extends horizontally from its hinge.

5. In a door mounting, the combination of a door seat; a hinge; an arm supported by the hinge; a door; a connection between the door and the arm normally permitting relative universal movement between the door and its seat; and means for swinging

the door center transversely to the arm whereby the door may be adjusted vertically relatively to its seat when the arm extends horizontally from its hinge.

6. In a door mounting, the combination of a door seat; a hinge; an arm supported by the hinge; a door; a connection between the door and the arm normally permitting relative universal movement between the door and its seat; and means for swinging the door center transversely to the arm comprising a screw between the door and the arm whereby the door may be adjusted vertically relatively to its seat when the arm extends horizontally from its hinge.

7. In a door mounting, the combination of a door seat; a hinge comprising an eccentrically arranged hinge pin; an arm supported by the hinge; a door; and a connection between the door and the arm normally permitting relative universal movement between the door and its seat.

8. In a door mounting, the combination of a door seat; a hinge comprising an eccentrically arranged hinge pin; an arm supported by the hinge; a door; a connection between the door and the arm normally permitting relative universal movement between the door and its seat; and means for adjusting the door center transversely to the arm whereby the door may be adjusted vertically relatively to its seat when the arm extends horizontally from its hinge.

In testimony whereof I have hereunto set my hand.

RAYMOND L. JEWELL.