O. W. JOHNSON.

PUMP.

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1,084,885.

Patented Jan. 20, 1914.

Fig. 1.

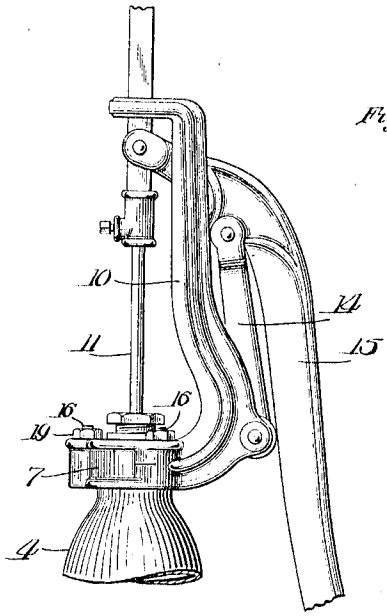


Fig. 2.

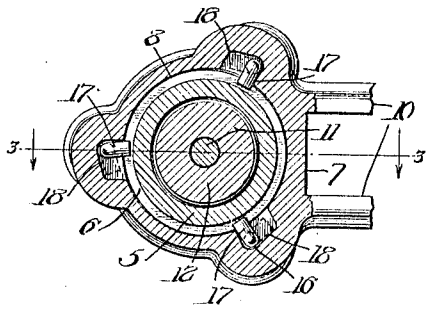
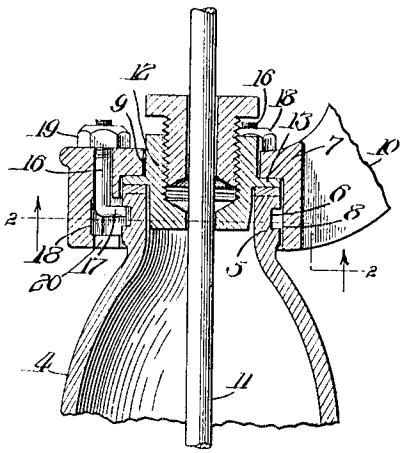


Fig. 3.



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PUMP.

1,084,885. Specification of Letters Patent. **Patented Jan. 20, 1914.**

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To all whom it may concern:

Be it known that I, OSCAR W. JOHNSON, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Pumps, of which the following is a specification.

This invention relates to pumps, and more particularly to the mounting of a pump cap upon the base of the pump.

It is the object of my invention to provide novel means for holding a pump cap in connection with the base, whereby the cap may be revoluble upon the base to position a pump handle carried by the cap at various radial positions relative to the base.

In the accompanying drawings: Figure 1 is a side elevational view illustrating my improved pump cap applied to a pump. Fig. 2 is a horizontal section taken on the line 2—2 of Fig. 3. Fig. 3 is a vertical section on line 3—3 of Fig. 2 showing the mounting of the cap upon the base.

The upper end of a pump base 4 is formed with a circular head 5 having an annular groove 6. A pump cap 7 is formed with a circular recess 8 and a reduced opening 9 through its top, the cap being mounted rotatable upon the pump head 5, said head within the recess, and has two upstanding arms 10 which form an overhead guide for the piston rod 11. In this case a stuffing box 12 located in opening 9 closes the end of the head 5 and has a peripheral flange 13 interposed between the top of said head and a shoulder of the cap to hold the stuffing box in position. A link 14 is pivoted to the cap intermediate the arms 10, and a pump handle 15 is fulcrumed at the free end of said link and has a pivotal connection with the piston rod. Three bolts 16 are carried vertically in the cap spaced apart equally adjacent the periphery of head 5, have elbows 17 at one end located in recesses 18 which extend from recess 8, the free end of said elbows being adapted to be located in groove 6, and have nuts 19 at their other end adapted when screwed tight upon the cap, to draw the cap and pump head in a fixed relation. Openings 20 in the lower walls of recesses 18 are located just below the elbows 17 when the elbows are in their operative positions and are of just sufficient size to allow the bolts 16 to be inserted in cap 7, when said cap is removed from the pump; but with the cap upon the pump as shown and when the bolt elbows are turned as shown dotted in Fig. 2, said bolts cannot drop from place when their nuts are removed because their elbows will strike the bottom walls of recesses 18 adjacent said openings 20.

It will be seen that by loosening nuts 19 the cap may be moved to place the pump handle at any radial position with respect to the pump base. When it is desired to remove the cap from the base the bolts may be turned so that the elbows 17 may lie in recesses 18, as shown in dotted lines Fig. 2, thereby freeing the cap entirely from the pump head. This construction affords an efficient means of securing a cap adjustable and detachable with a pump base, one in which all radial positions are equally quick to be attained and in which the bolts do not drop from the cap should the nuts be removed therefrom.

I claim as my invention.

1. A pump comprising a pump head having an annular groove therein, a cap mounted revoluble upon the pump head, bolts carried by the cap and having an offset adapted to be located in said groove, the bolts being rotatable about their axes to move their offsets out of the grooves, and nuts screwed upon the bolts and adapted to draw the cap and pump head fixedly together through said offsets located in said groove.

2. A pump comprising a pump head having an annular groove therein, a cap mounted revoluble upon said head, a pivotal arm carried by the cap and movable into and out of said groove without being vertically displaced, and means operable upon said arm to move same vertically and draw the cap and head in a fixed relation through contact of said overlapping edges.

3. A pump comprising a circular pump head having an annular groove therein, an apertured cap mounted rotatable upon said head, said head within the aperture thereof, recesses extending from said aperture into the cap body and positioned adjacent said groove, and bolts carried by said cap each with an offset head located in a recess, the offset heads adapted to swing from the recesses into said groove.

4. A pump comprising a circular pump head having an annular groove therein, a cap mounted rotatable upon the head, re-

cesses formed in the cap body adjacent said groove, bolts carried by the cap each with an offset end located in a recess, the offset ends adapted to be swung into and out of said groove, and stops for limiting the movement of said offset ends to retain same within the groove and within the recess.

5. A pump comprising a circular head having a peripheral groove therein, an apertured cap mounted rotatable upon said head with the head within the aperture, recesses formed in the cap body located adjacent said groove and extending from said aperture, bolts carried by the cap each with an elbow end located in a recess, said elbow ends adapted to be swung into said groove, and sides of said recesses adapted to form stops to limit the positions of said elbow ends in the groove and in the recess.

6. A pump comprising a circular pump head having an annular groove therein, a cap mounted rotatable upon the head, recesses formed in the cap body adjacent said groove, bolts carried by the cap each with an offset end located in a recess, the offset ends adapted to be swung into and out of said groove, and said recesses having an opening at their lower sides with a stop adjacent the opening, whereby when a bolt is swung out of the groove and is moved downward, said stop will limit it from being displaced from the cap.

7. In a pump, the combination with a pump head, of a cap mounted revoluble upon said head, and bolts carried by the cap, having each an offset head adapted to engage the pump head, the bolts being rotatable about their axes to move their offset heads out of said engagement.

8. In a pump, the combination with a pump head having an annular groove, a cap mounted revoluble upon the pump head, and bolts connecting the cap and head, said bolts each having an offset head engageable with said annular groove, turning of the bolts moving their heads into and out of the groove.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

OSCAR W. JOHNSON.

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