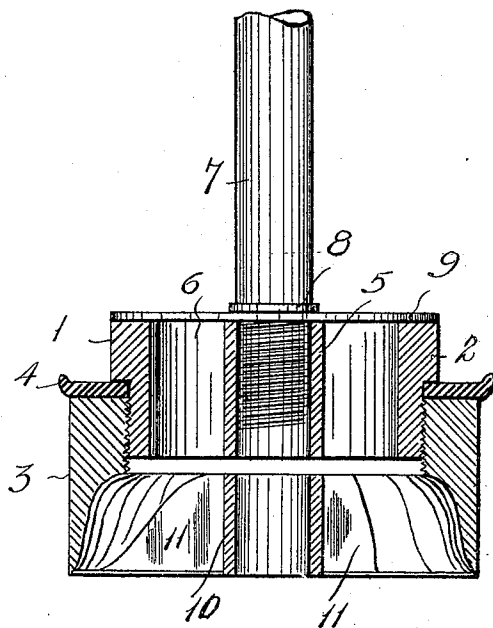


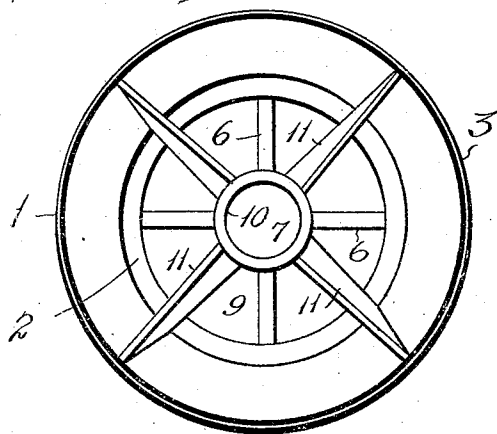
J. E. SHUTT.  
 PLUNGER HEAD OR VALVE.  
 APPLICATION FILED JAN. 4, 1909.

940,900.

Patented Nov. 23, 1909.



*Fig. 1.*



*Fig. 2.*

WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN E. SHUTT, OF GANADO, TEXAS.

PLUNGER HEAD OR VALVE.

940,900.

Specification of Letters Patent.

Patented Nov. 23, 1909.

Application filed January 4, 1909. Serial No. 470,558.

*To all whom it may concern:*

Be it known that I, JOHN E. SHUTT, citizen of the United States, residing at Ganado, in the county of Jackson and State of Texas, have invented certain new and useful Improvements in Plunger Heads or Valves, of which the following is a specification.

My invention relates to new and useful improvements in plunger-heads or valves.

The object of the invention is to provide the head or valve with inclined or angularly disposed wings or webs, arranged, where the head or valve is screwed on the rod or stem, so as to constantly tend to screw the head on as the same is reciprocated and thereby preventing the head or valve from unscrewing and working loose or dropping off of the rod or stem during the operation.

A further object resides in the reduction of the invention to a form whereby it may be applied to the hollow plunger heads now commonly used without changing the construction of the head and without alteration of the same except in the forming of screw threads in the lower end thereof.

Finally the object of my invention is to provide a device of the character described that will be strong, durable, simple and efficient and comparatively inexpensive to construct, also one in which the several parts will not be liable to get out of working order.

With the above and other objects in view, the invention has relation to certain novel features of construction and operation, an example of which is described in the following specification and illustrated in the accompanying drawing wherein:

Figure 1 is a vertical section of the plunger head embodying my invention, Fig. 2 is an underside view of the same.

In the drawings the numeral 1 designates the plunger head which is formed of a ring member 2 and a follower member 3 screw threaded onto the member 2, the "leather" 4 being confined therebetween.

An internally threaded sleeve 5 is supported in the center of the ring member by radial webs 6. This sleeve receives the rod 7 which is provided with a collar 8 for holding the flat valve 9 in position on the member 2.

The parts which have been described may be varied in construction and do not form the essential features of this invention which I will now describe.

In the center of the follower member a sleeve 10 is arranged. This sleeve has a sufficient interior diameter to permit the free passage of the rod 7 therethrough in case it was desired to continue the said rod and mount other plunger heads thereon. From this sleeve wings or webs 11 radiate and extend to the inner walls of the member 3. These webs have flat sides but extend downward at an angle so as to be inclined upwardly. These webs inclining upwardly or being disposed at an angle will act when the head is moved downward to impart a rotary motion to the member 3 and to the entire head and thus should the head start to unscrew from the rod, it will, when moved downward, screw onto the rod and become firmly fixed thereon by the continued downward movements which tend to rotate the head and hold it in position.

It will be noted that if the head is mounted on the rod with a right hand thread the wings are inclined to the left with relation to the rotation of the head so as to cause the said head to turn to the left and thus screw onto the rod; while on the other hand if a left hand thread is used the webs or wings are reversed.

It is to be understood that this invention may be applied to various forms of plunger heads and also to valves where the same are constructed substantially the same as a plunger head and are screwed on their stems.

It will be appreciated that a plunger head in a pump casing several hundred feet down in a well, would cause considerable trouble if it became detached or unscrewed from the rod and would render the pump inoperative and before the pump could be again used it would be necessary to draw out the rod, extract the plunger head and screw the same onto the rod and readjust the parts. My invention overcomes and avoids such trouble and delay. Further it is apparent that the webs will also have a tendency to cause the different members of the head to screw together preventing the packing and "leathers" from becoming loose and inoperative.

What I claim, is:

In a device of the character described, the combination with a plunger rod, of a webbed ring member having a hub at center of web into which said rod is threaded, a webbed follower member threaded upon said ring member, having a central hub, through which the plunger rod may be extended, and

the webs of which have a uniform deflection  
from the vertical, causing the screw-threads  
to lighten on the down stroke, a cup-leather  
interposed between said ring and follower  
5 member, and a valve superimposed upon said  
ring member.

In testimony whereof I have signed my

name to this specification in the presence  
of two subscribing witnesses.

JOHN F. SHUTT.

Witnesses:

L. A. ADAMSON,  
JACK A. SCHLEY.