## R. KREHER. CHECK OR PUMP VALVE.

(Application filed May 22, 1901.)

(No Model.)

Inventor Richard Michel Witnesses:

## United States Patent Office.

RICHARD KREHER, OF BRAIDENTOWN, FLORIDA.

## CHECK OR PUMP VALVE.

SPECIFICATION forming part of Letters Patent No. 702,223, dated June 10, 1902.

Application filed May 22, 1901. Serial No. 61,416. (No model.)

To all whom it may concern:

Beitknown that I, RICHARD KREHER, a subject of the Emperor of Germany, residing at Braidentown, in the county of Manatee and State of Florida, have invented certain new and useful Improvements in Check or Pump Valves; 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.

The invention relates to that class of valves which rest upon a flat seat and which are guided in their movement to properly reseat.

Figure 1 is a vertical section through a liftpump, showing my valve attached thereto. Fig. 2 is a top view of the guiding-disk. Fig. 3 is an enlarged sectional view through the valve, and Fig. 4 is a bottom view of the supporting-disk.

A is the barrel of the pump or may be the end of a pipe, which is provided with flange B for securing the seat C to the same by the clamping-disk D and the bolts E. The seat C is formed by flanges on a short pipe F, to which a service-pipe G is attached. The valve H consists of the leather or other pliable disk b, the supporting-disk a, the guiding-disk d, provided with perforations within the circumference thereof, and the bolt e. The supporting-disk is provided with the annular

rib f, which in cross-section is round on its outer face, which presses upon the leather disk where it comes in contact with the seat, insuring a close fit of the valve, and thereby 35 preventing leaking of the same. The guidingdisk d is placed on the supporting-disk a, and the two are held securely together and to the leather disk b by the bolt e. The guidingdisk is of greater diameter than the support- 40 ing-disk and pump barrel or pipe, which is enlarged to receive the same and forms a stop g, against which the guiding-disk strikes to limit the lift of valve. The guiding-disk is provided with openings or perforations h 45 where it projects over the supporting-disk for the passage of fluid when the valve is off the seat.

Having thus described my invention, what I claim, and desire to secure by Letters Pat- 50 ent, is—

In a check or pumping valve the combination of a leather disk, with a supporting-disk provided with an annular rib a perforated guiding-disk and a bolt for clamping same 55 together.

In testimony whereof I affix my signature in presence of two witnesses.

RICHARD KREHER.

Witnesses:
ALEX C. ROESCH.

O. C. WROBBEL.