

No. 649,132.

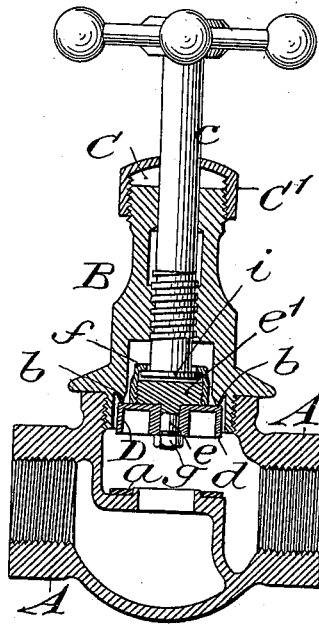
P. H. MACCORQUODALE.  
STOP VALVE.

Patented May 8, 1900.

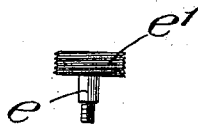
(Application filed Mar. 31, 1899.)

(No Model.)

*Fig. 1.*



*Fig. 2.*



*Witnesses:-*

*George Barry Jr.*  
*Edward Viner.*

*Inventor:-*

*Peter H. MacCorquodale*  
*by attorneys*  
*Proctor & Sewall*

# UNITED STATES PATENT OFFICE.

PETER HEANAGE MACCORQUODALE, OF SYRACUSE, NEW YORK.

## STOP-VALVE.

SPECIFICATION forming part of Letters Patent No. 649,132, dated May 8, 1900.

Application filed March 31, 1899. Serial No. 711,208. (No model.)

*To all whom it may concern:*

Be it known that I, PETER HEANAGE MACCORQUODALE, a citizen of the United States, and a resident of Syracuse, in the county of Onondaga and State of New York, have invented a new and useful Improvement in Stop-Valves, of which the following is a specification.

This invention relates to that class of stop-valves known as "globe" valves, in which there is provided, besides the ordinary valve-seat against which the head or disk of the valve closes the valve-passage, a second seat against which the said head or disk may seat itself for the purpose of preventing leakage around the valve-stem when it is desired to repack the stuffing-box and the packing-nut is removed for that purpose.

The improvement consists in the combination hereinafter described, very effectively embodying such provision and affording facility for the disconnection of the disk or head from the stem for renewal or repair when necessary.

Figure 1 of the accompanying drawings represents a central section of a valve embodying my invention; Fig. 2, a side view of the valve-disk holder.

A designates the body of the valve-casing, in which is the valve-seat proper, *a*. B is the cap of said casing, in which are the stuffing-box C for the valve-stem *c* and the screw-thread in which the said stem works.

D is the valve-disk, the face *d* of which opens and closes from and toward the seat *a* for the purpose of shutting off and letting on steam.

Behind the disk D there is provided in the cap B, opposite the valve-seat *a*, the additional valve-seat *b*, which surrounds the valve-stem and against which when the valve is wide open from the seat *a* the back of the disk is capable of closing so tightly as to positively exclude the pressure of steam from the stuffing-box C and to permit the removal of the packing-nut C' for the renewal of the packing.

The valve-disk D has a swivel connection with the stem, said connection consisting of a disk-holder *e e'*, a nut *g* for fastening the disk D to said holder, a flange *i* around the

inner end of the valve-stem, and a swivel-nut *f*, which attaches the holder *e e'* loosely to the flange *i* of the stem. The holder consists of a headed stud, the head *e'* of which is screw-threaded externally to receive the swivel-nut *f* and the point of which is screw-threaded to receive the fastening-nut *g*, which holds the valve-disk securely to the head *e'*. The swivel-nut *f* has an internal flange, which, lapping loosely over the flange *i* of the stem C, permits the stem to turn as much as necessary independently of the disk and allows the disk to seat itself against the seat proper, *a*, for closing the steam-passage or against the seat *b* for shutting off the steam from the stuffing-box.

An important feature of the above-described attachment of the valve to the stem is the facility afforded for the removal of the disk from the holder when the cap B is removed from the body of the casing. If the disk is then brought back tightly against the seat *b*, the friction between the disk and seat will be sufficient to prevent the disk from turning while the nut *g* is unscrewed by any suitable instrument, leaving the disk loose on the holder. This provision for the removal of the disk obviates the necessity of placing any of the parts in a vise, with the liability of marring them.

What I claim as my invention is—

In a globe-valve, the combination of a valve-seat in the cap of the valve-casing, a valve-stem having a flange around its inner end, a valve-disk, a headed holder having a screw-thread around its head and one around its point, a nut applied to the latter screw-thread to secure the disk to the said holder, and a swivel-nut applied to the first-mentioned screw-thread to attach the holder loosely to the flange of the stem, substantially as herein described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 28th day of March, 1899.

PETER HEANAGE MACCORQUODALE.

Witnesses:

ALBERT STEARNS,  
CLARKE R. ALVORD.