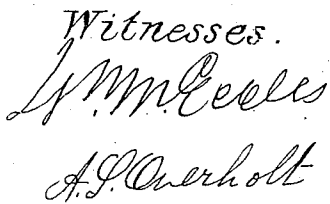


No 77,690. Patented May 5, 1868.



Inventor:
Peter White

United States Patent Office.

PETER WHITE, OF ST. LOUIS, MISSOURI.

Letters Patent No. 77,690, dated May 5, 1868; antedated April 22, 1868.

IMPROVEMENT IN CHECK-VALVES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, PETER WHITE, of the city and county of St. Louis, State of Missouri, have invented a new and useful Improvement in Gauge and Check-Valve; and I do hereby declare that the following is a full and exact description of the same, reference being had to the annexed drawings, and letters marked thereon.

The nature of my invention consists in providing the valve with a double movable seat, so it may be ground and used on both sides.

Figure 1 represents a longitudinal section of my valve and seat, cut through the centre from top to bottom.

F F is a packing-cap. E is a cylinder, fitting at the bottom on the valve-seat, and provided with a rim at the top, so as to fit on the pipe R, and it is furnished with port-holes, H H, so as to admit the steam; also it has a hole in the centre, through which the shaft K passes.

B is the valve-seat, made with shoulders, as seen in the cuts, and fitting closely on the partition-walls T T. This seat is ground on both sides, so as to fit the valve, A, which is likewise ground, on both upper and lower sides, to fit the seat. N is a directing-shaft, passing through the valve A, and working up and down in the socket P and shaft K, except when fastened to the shaft K by the thumb-screw L, which is done when you wish to use the valve as a gauge-valve; but when you wish to use it as a check-valve, you unfasten the thumb-screw, which permits the shaft N, with the valve, to play up and down in the sockets P and K.

The valve A is set on the centre of the shaft N, so, when one side is worn out, the cylinder E may be unscrewed, the seat B inverted, and valve A inverted, and all placed in again, and the cylinder E screwed down on the shoulders of the valve-seat.

K is a shaft, with a screw cut on it, so as to fit a female screw in the cylinder E, and at the bottom with a hole or socket, for the shaft N to work in; also it is provided with the thumb-screw, passing through from the outside and into the socket, so as to tighten the shaft N, when desired. It may be furnished, as in ordinary cases, at the top with a hand-wheel or a crank.

Now, when the cylinder E is screwed down tight on the shoulders of the valve-seat B, there is no way for the steam to pass along the pipe, except through the valve-seat B, which has a large hole through the centre for that purpose, and which is closed by screwing the shaft K down, and screwing it up will open the valve-hole.

Also, the cylinder E may be unscrewed at any time, the seat lifted out and ground.

Now, what I claim as my invention, is—

1. The combination of the shaft K, thumb-screw L, shaft N, valve A, valve-seat B, socket P, and cylinder E, substantially as herein set forth.
2. The arrangement of the valve A and seat B, as herein set forth and described.

PETER WHITE.

Witnesses:

WM. M. ECCLES,
A. S. OVERHOLT.