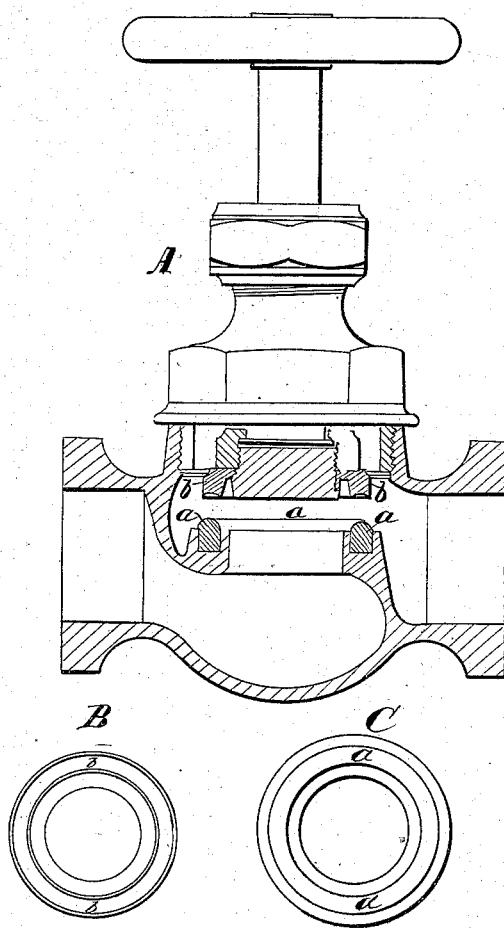


Burnett & Comstock,
Globe Valve,
N^o 54,851. Patented May 22, 1866.



Inventor:
Mo. Burnett
H. Comstock
By Their Atty.
Crosby & Gould

UNITED STATES PATENT OFFICE.

M. BURNETT AND H. COMSTOCK, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN STEAM-VALVES.

Specification forming part of Letters Patent No. 54,851, dated May 22, 1866.

To all whom it may concern:

Be it known that we, M. BURNETT and H. COMSTOCK, both of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Valves; and we do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of our invention sufficient to enable those skilled in the art to practice it.

Our invention relates to that class of aperture-controlling devices in which a valve is moved toward, upon, and off from a valve-seat as contradistinguished from that class of devices in which, like a plug-cock, the aperture is opened and closed by the sliding or moving of one part upon the other.

Our invention consists in a valve-seat of soft yielding material, such as vulcanized rubber preferably, soft metal, wood, or other suitable substance in the form of a ring or short cylinder, when made changeable by being embedded in a suitable cylindrical receptacle formed in the material of the valve-case, with a portion of the ring projecting above the surrounding metal of the case and operating in combination with the valve.

The object of this invention is to secure a stop-valve which can be kept at all times in such condition as to be tightly closed without necessity of having recourse to the tools or services of a mechanic by the simple operation of changing a worn seat for a new one.

In the drawings, A represents, partly in section and partly in elevation, an ordinary globe-

valve so modified as to embrace our invention. B shows the valve in plan, and C is a plan of the seat located in a circular groove formed in the metal of the valve-case.

In the metal of the valve-case a groove is turned, into which can be driven the seat *a*, this being formed of suitable size to fit the groove. Where the seat *a* is of vulcanized rubber we prefer to form the groove in the metal a little the widest at the bottom and to give the short cylinder or ring *a* a similar form of cross section, so that when it is forced into place, which, under the circumstances, the elastic quality of the rubber permits, the seat is in a manner dovetailed in its place. The upper surface of seat *a* we prefer to make convex, as shown in the drawing marked A, and to give the bearing-surface of the valve *b* a corresponding annular concavity.

Whenever from any circumstances the material of the valve-seat becomes changed from chemical causes, as often occurs in the use of rubber, or becomes worn or abraded, it can, by reason of its projecting above the material in which it is held, be seized and removed and a new and perfect seat substituted therefor.

We claim—

As an improvement in stop-valves, the arrangement of the seat *a* and valve *b*, when constructed substantially as described.

MARSHALL BURNETT.
HARRISON COMSTOCK.

Witnesses:

F. GOULD,
J. B. CROSBY.