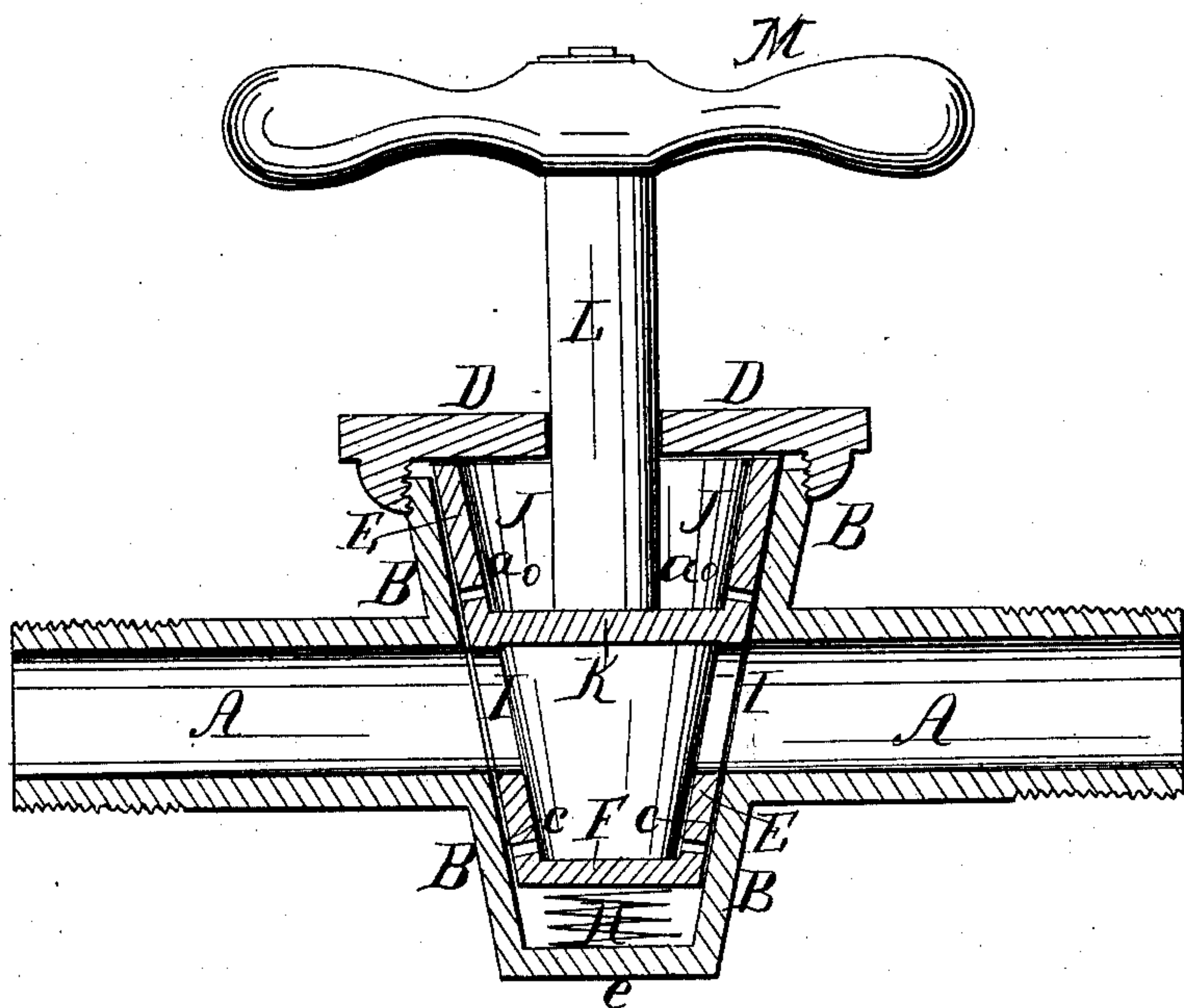


*R. Burton,*  
*Stop Cock,*  
*No 55,615, Patented June 19, 1866.*



*Witnesses;*  
*Wm. Brown*  
*Josh. Houghton*

*Inventor;*  
*Russell Burton*  
*By Munn & Co*  
*attys*

# UNITED STATES PATENT OFFICE.

RUSSEL BURTON, OF SOUTH ADAMS, MASSACHUSETTS.

## IMPROVEMENT IN STEAM PLUG-VALVES.

Specification forming part of Letters Patent No. **55,615**, dated June 19, 1866.

*To all whom it may concern:*

Be it known that I, RUSSEL BURTON, of South Adams, in the county of Berkshire and State of Massachusetts, have invented a new and useful Improvement in Faucets or Steam-Valves; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming part of this specification, in which the drawing is a vertical longitudinal section of my improved faucet and steam-valve.

The object of my improvement is to furnish a faucet or valve for retaining or permitting the passage of liquids or steam through a pipe; and it consists of a conical chamber formed on said pipe, and extending both above and below it, having a conical plug fitting into it, said plug being pushed up against the cover by the action of a spring, making it steam-tight, and the wear being compensated by forcing down the said plug by means of a screw-cover, as hereinafter more fully described, and also in forming in said plug a reservoir or reservoirs for the lubricating material, by means of which the faucet is kept lubricated and the friction and consequent wear diminished.

A is the pipe in which the faucet or valve is placed, and is so constructed that one end may be inserted in a cask or reservoir for drawing off its contents, or each end may be connected with the adjacent ends of pipes the continuous passage through which of steam or liquids it is desired to regulate or occasionally interrupt.

At the point of the pipe A where it is desired to form the valve there is made an enlargement, B, of said pipe, in the form of a truncated cone base upward, a similar cone-shaped cavity or chamber being formed within said enlargement. The lower end, C, of said enlargement is permanently closed, and the upper end is closed by a screw cap or cover, D. The plug E of the faucet or valve is also cone-shaped and of a size to fit into the cone-shaped chamber; but it is shorter, so that it does not reach to the bottom of the chamber, leaving a space between the bottom F of said plug and the bottom C of said chamber. In this space is placed a spring, H, by the elasticity of which the plug E is forced up against the cover or cap D, so as to prevent any leak-

age between the cap or cover D and the upper edge of the plug E.

As the plug E becomes loose by wear it can be forced farther down into the chamber by screwing down the cap or cover D, thus compensating for said wear and keeping the faucet or valve always steam-tight.

A passage, I, is made across or through the plug E in one direction in the ordinary way, so that when the plug is in one position an uninterrupted flow through the faucet is permitted, and when the plug is turned one-quarter round the flow will be entirely stopped.

The upper part of the plug E is also chambered, forming a reservoir, J, in which the lubricating material may be placed, said material finding its way out to lubricate the wearing-surfaces of the faucet or valve through the small holes *a*.

To the bottom K of the reservoir, which also forms the upper wall of the passage I through the plug, is attached the shaft L, which passes out through the cover D, and to which is attached the handle M.

The part of the plug below the passage I may be made solid, or it may be chambered, as represented in the drawing; or a reservoir may be formed therein for the lubricating material by extending a partition across the lower part of the plug similar to the partition K, said partition forming the lower wall of the passage I, the lubricating material being allowed to escape through the small holes *c* for lubricating the wearing-surfaces of the lower part of the faucet or valve. This latter construction I prefer, as by employing the two reservoirs the entire wearing-surface of the faucet or valve is kept constantly lubricated.

What I claim as new, and desire to secure by Letters Patent, is—

1. The arrangement, in connection with the pipe A, of the conical enlargement B, conical plug E, spring H, and screw-cover D, when the parts are constructed and combined as described and represented.

2. The combination of the reservoir J (one or more) with the conical plug E, substantially as described, and for the purpose set forth.

RUSSEL BURTON.

Witnesses:

HENRY J. BLISS,  
C. F. SAYLES.