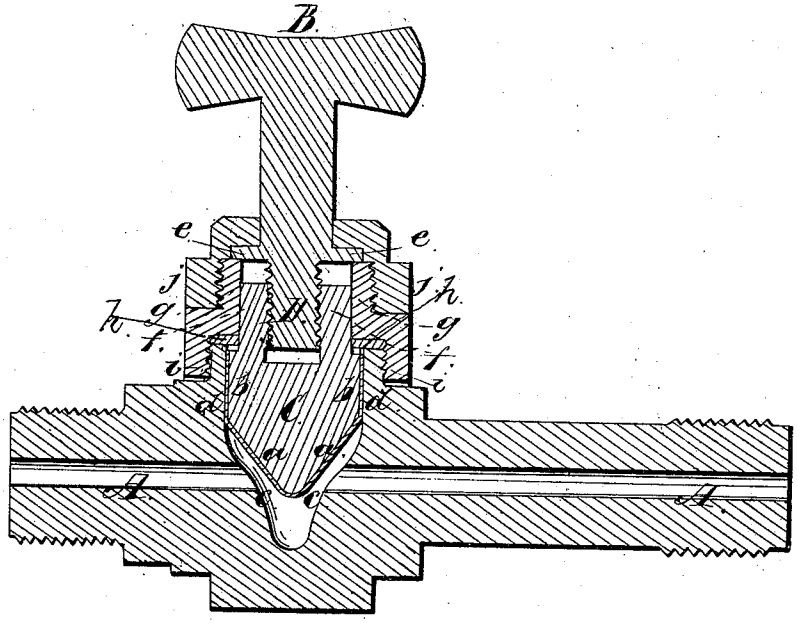
J. L. Chapman,

Cock,

No. 2,304, Patented Oct. 11, 1841.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN LEE CHAPMAN, OF BALTIMORE, MARYLAND.

CONSTRUCTION OF COCKS FOR HYDRAULIC AND PNEUMATIC PURPOSES.

Specification of Letters Patent No. 2,304, dated October 11, 1841.

To all whom it may concern:

Be it known that I, JOHN LEE CHAPMAN, of the city of Baltimore, in the State of Maryland, have invented a new and improved manner of constructing cocks for hydraulic and pneumatic purposes, and which is specially adapted to use in the apparatus employed with aerated waters and wherever the pressure of gases is concerned, and I do hereby declare that the following is a full and exact description thereof.

The accompanying drawing is a sectional view along the middle of the cock.

A, A, is the aperture for the passage of fluids; B, the key, or handle, by the turning of which the aperture is to be opened or closed.

C, is a plug which is made conical at its lower end *a*, *a*, and is cylindrical in the part *b*, *b*. This plug fits into a chamber in the body of the cock, prepared to receive it. The plug is represented as raised in the drawing, in which situation it would allow a fluid to pass along the aperture A, A, but were the plug forced down, the conical part *a*, *a*, would effectually close the opening A, A, it not only being well fitted to the conical aperture *c*, *c*, in the body of the cock, but being, also, covered with leather, or other elastic or yielding material adapted to the nature of the fluid to be drawn. The cylindrical part *b*, *b*, of the plug C, fits into and moves up and down in, a cylindrical cavity *d*, *d*, in the head of the cock; and this part, also, is covered with leather, or other elastic packing, by means of which it is rendered air and water-tight, and yet works up and down with facility, in the manner of a piston. The key B, swivels in the head of the cock, a collar *e*, *e*, being received in a recess formed for that purpose. A screw D, on the lower end of the key is tapped into the plug C, and by turning the key, said plug may be made to be raised or lowered. The upper end *f*, *f*, of the plug is made square, the part *g*, *g*, of the head forming a square socket adapted to it; *h*, *h*, is a washer of leather, or other suitable material, embraced between the two portions of the head which screw together at *i*, *i*, and which may be unscrewed for the purpose of renewing the packing on the plug. The head is also screwed together at *j*, *j*, for the purpose of admitting the collar *e*, *e*.

Having thus fully described the manner in which I construct my hydraulic and pneumatic cock, and combine the respective parts thereof with each other, what I claim therein as new, and desire to secure by Letters Patent, is—

1. The manner of forming the plug C, and the chamber within which it operates; the lower part of said plug being made conical, and adapted to the closing of the passage of fluids through the cock; and the upper portion thereof being cylindrical, and so packed as to be rendered air and water tight, substantially in the manner, and for the purpose, herein described.

2. And I do hereby declare that although I have represented and described the particular manner in which I put the respective parts of the instrument together, and which I consider to be the best arrangement thereof, I do not intend to limit or confine myself to this precise mode, but to vary the same as I may think proper, while the parts upon which the secure action of the cock is dependent are combined, and operate, substantially as set forth.

JOHN LEE CHAPMAN.

Witnesses:

THOS. P. JONES,

PETER HOGG.