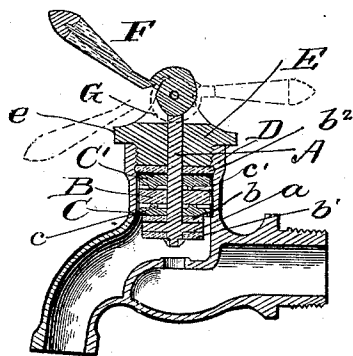


(No Model.)

A. ROEKEL, Jr.
VALVE.

No. 465,803.

Patented Dec. 22, 1891.



WITNESSES

J. L. Curran
H. Walter D. Dwy

INVENTOR

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UNITED STATES PATENT OFFICE.

AUGUSTUS ROEKEL, JR., OF FINDLAY, OHIO, ASSIGNOR OF ONE-HALF TO
H. WALTER DOTY, OF SAME PLACE.

VALVE.

SPECIFICATION forming part of Letters Patent No. 465,803, dated December 22, 1891.

Application filed June 20, 1891. Serial No. 396,992. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS ROEKEL, JR., a citizen of the United States, residing at Findlay, in the county of Hancock and State of Ohio, have invented certain new and useful Improvements in Valves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-

10 pertains to make and use the same.

My invention relates to a valve for hydrants, streets-washers, stop and water cocks, &c.; and the object of my invention is, first, to provide a valve that will require no stuffing or packing boxes, cup, or ring-leather to prevent the same from leaking at the top or at waste-outlets; second, to provide a valve having an elastic packer, and, third, to provide a valve that is simple, durable, easy to repair, and can be repaired when used in hydrants, &c., without digging up the same. I attain said objects by a certain construction, combination, and arrangement of parts fully described in this specification, and illustrated in the accompanying drawing, in which the figure is a vertical cross-sectional view of my valve, illustrating the same where used as an ordinary stop or waste cock.

Referring to the drawing, the dotted lines in the figure represent the relative positions the eccentric-lever assumes in operation, and the letter A designates the valve-stem, which is constructed with the raised or enlarged portion *a*, which has located above and below it the leather gaskets *b b'*. Upon the lower end of said stem there is a threaded cap *a'*, which holds the lower gasket *b'* securely in place. Upon the top of the leather gasket *b* the compressor C rests, which is constructed with a cone-shaped rim *c*.

B represents a piece of elastic, which lies between the compressor C and a similarly-formed compressor C'. It will readily be observed that as the cone-shaped rims *c* and *c'* of the compressors C and C', respectively, are forced in between the valve-stem and the edges of the elastic B surrounding said stem by either the pressure of the water or that of the eccentric lever F, said elastic will expand until the rim of same will closely press

against the inner walls of the valve-chest D, thereby preventing the water from being forced upward and out at the top of the valve, as is so often the case with ordinary valves. I attach special importance to this feature of my invention, because it obviates said difficulty or prevents the water from being forced out at the top of the valve. In other words, it provides a valve having an elastic packing and one which will not blow out at the top. There is another leather gasket *b²* upon the top of the compressor C', which fits closely between said valve and the plug or cap E upon the top of the valve-chest D. This gasket fits closely against the walls of the valve-chest and prevents the slightest escape at the top of any water that possibly might get above the elastic packing B.

The cap or valve-plug E upon the top of the valve-chest D has a raised seat *e*, and is screwed into the valve-chest D. In the top of said cap there is a slot G, in which the lower end of the eccentric-lever F is located and pivoted. Such being the case it will readily be observed that the only movement the valve-stem makes is vertical. This prevents the wearing away to any great extent of the leather gaskets or packing, which have to be so often replaced, when the valve is opened and closed by means of a circular movement owing to the friction occasioned thereby. This, including the novel features heretofore set forth in the specification, makes my invention a very valuable and practical affair.

What I claim is—

1. In a valve, the stem having the enlarged portion *a* near the lower end thereof, and the threaded cap upon said end, in combination with the gaskets *b b'*, located above and below and resting against the enlarged portion, the elastic packing located between the compressors C and C', the compressors C and C', located above and below and adjacent said packing, and the gasket *b²*, located between the compressor C' and the upper portion of the valve-chamber, substantially as described, and for the purpose set forth.

2. A valve comprising the stem, having the enlarged portion *a* near the lower end thereof, and the threaded cap upon said end, the gas-

kets b b' , located upon the top and bottom of
said enlarged portion, the elastic packing lo-
cated between the compressors C and C' , the
compressors C and C' , located above and be-
5 low and adjacent said packing, the gasket b^2 ,
located upon the top of the compressor C' , in
combination with the valve-chest and plug,
and the eccentric-lever pivoted in a slot in the

top of said plug, substantially as described,
and for the purpose set forth. 10

In testimony whereof I affix my signature in
presence of two witnesses.

AUGUSTUS ROEKEL, JR.

Witnesses:

W. W. SHULER,

H. WALTER DOTY.