

G. C. BAILEY.  
STOP-COCKS.

No. 194,321.

Patented Aug. 21, 1877.

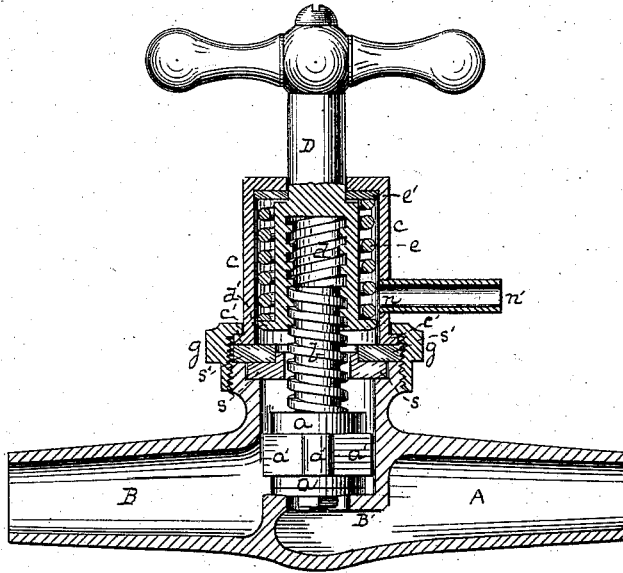


Fig. 1.

Witnesses

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# UNITED STATES PATENT OFFICE.

GEORGE C. BAILEY, OF PITTSBURG, PENNSYLVANIA.

## IMPROVEMENT IN STOP-COCKS.

Specification forming part of Letters Patent No. **194,321**, dated August 21, 1877; application filed May 19, 1877.

*To all whom it may concern:*

Be it known that I, GEORGE C. BAILEY, of Pittsburg, county of Allegheny, State of Pennsylvania, have invented or discovered a new and useful Improvement in Stop-Cocks; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—like letters indicating like parts—

Figure 1 is a sectional elevation of my improved bib or stop cock.

My present invention relates to an improvement in the class of cocks referred to in Letters Patent granted to me June 4, 1872, No. 127,547, by means of which a swiveled cap, having a waste port or tube, is adjustably combined with the valve and case, so that the direction of the discharge of the waste may be varied or regulated at pleasure.

Such cocks, in practical use, have to be arranged in various positions, sometimes horizontal, sometimes vertical, and sometimes oblique; and hence, in the absence of means of adjusting and regulating the position of its waste-port, such port not unfrequently discharges in a direction or in a place where the presence of water is highly objectionable.

In the drawing, A represents the supply-pipe, and B the discharge-pipe. The usual valve-seat is made in the diaphragm B', and the valve *a*, of suitable form, with suitable packing, is guided in its motion by wings *a'*.

The stem *b* of the valve is threaded, as shown, and works in a tapped socket, *d*, of the operating-stem D.

The swiveled cap is represented at *c*. It is flanged at its lower end, as shown at *c'*, and an ordinary threaded flange-union, *g*, connects it with the valve-case.

A packing-ring, *s'*, is interposed between the flange *c'* and the valve-case, and this packing-ring is further supported, if need be, by a metallic washer, *s*, the threaded valve-stem *b* playing loosely through both.

The lower end of the operating stem D is flanged, as at *d'*, and between such flange and the top of the cap I arrange a spiral spring, *e*, which is so adjusted as to its elastic force as, when free so to act, to force the lower end of the operating-stem into close contact with the packing-ring *s'*.

The stem D is itself properly packed, where

it passes through the cap *c*, by suitable packing, as at *e'*.

At any desired point in the periphery of the cap *c*, I make a waste-port, *n*, either with or without a short waste-tube, *n'*.

The first effect of turning the stem D in the proper direction for opening the valve is to relieve the compression on the spring *e*, so that the lower end of socket-stem shall be seated on the packing-ring *s'*. The waste is thus cut off. The turning motion being continued, the valve is opened.

In closing the valve the reverse action takes place. The valve is first seated, then the socket-stem is raised, and the waste is open to the discharge-pipe. The water in the discharge-pipe will then escape at the waste-port *n*.

Now, in putting up the cock, before the flange-union *g* is tightened down, the swiveled cap *c* is to be turned to such position that its waste-port *n* will discharge the waste water in a direction or in a place where its presence is least objectionable. This being done, the union *g* is screwed down, so as to lock or secure the cap in that position of adjustment. The jet of waste water will not then interfere with the convenient use of the cock under any ordinary circumstances.

A swiveled cap having a waste-port may be combined with valves and valve-cases of other constructions, and having other means of opening and closing the waste, without any substantial departure from the scope of my invention, and such modifications are hereby included herein.

I claim herein as my invention—

1. In a stop or bib cock, the combination of a swiveled cap having a waste-port therein, with a valve and valve-case, substantially as set forth.

2. The combination of swiveled cap *c*, having waste-port *n*, socketed and flanged operating-stem D, valve *a*, having threaded stem *b*, packing-ring *s'*, and flange-union *g*, with a valve-case, substantially as set forth.

In testimony whereof I have hereunto set my hand.

GEORGE C. BAILEY.

Witnesses:

J. J. MCCORMICK,  
CLAUDIUS L. PARKER.