

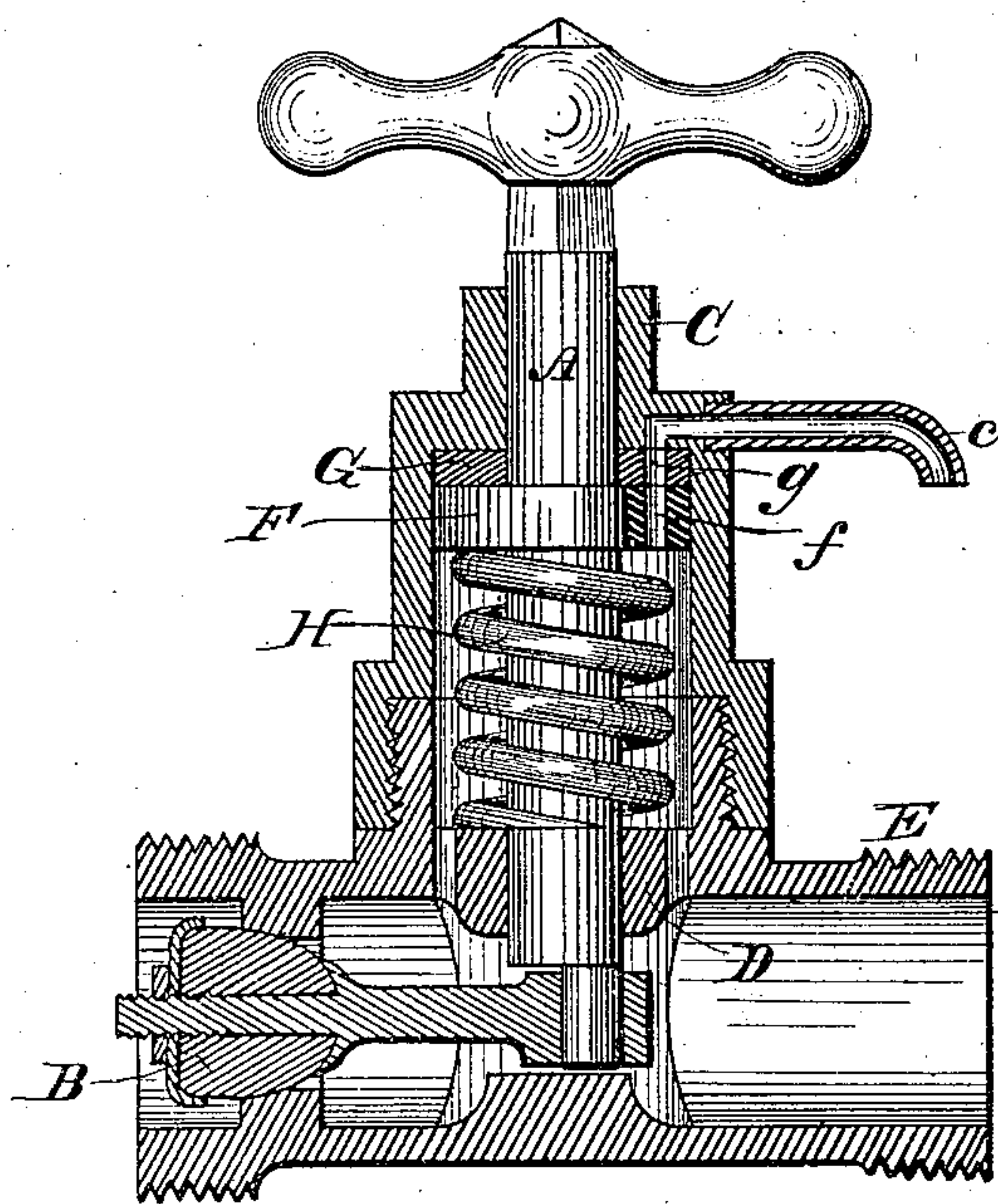
(No Model.)

W. RICKETTS.

STOP COCK.

No. 312,165.

Patented Feb. 10, 1885.



Witnesses:
E. J. Walker
W. M. Hannay

Inventor.
William Ricketts
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UNITED STATES PATENT OFFICE.

WILLIAM RICKETTS, OF CINCINNATI, OHIO.

STOP-COCK.

SPECIFICATION forming part of Letters Patent No. 312,165, dated February 10, 1885.

Application filed June 11, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM RICKETTS, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Stop-Cocks; 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.

This invention relates to such stop-cocks as are constructed with a waste-valve which opens on closing the cock to let the water out of the pipes above the cock. One object of my
15 improvement is to so construct the waste-valve that it shall be less liable to leak or to injury due to the cutting action of sand or grit in the water. Another object is to so construct and apply the waste-valve that it
20 forms at the same time a packing for the spindle of the cock. These objects I accomplish by the construction specifically pointed out in the claims at the close of this specification.

In order that my invention may be clearly
25 understood, I have illustrated it in the annexed drawing, and will proceed to describe it, as applied to a stop-cock the main valve of which consists of a rubber plug, the stem of which is engaged by an eccentric on a spin-
30 dle at right angles to it—an old style of stop-cock.

The drawing represents a sectional elevation of such a stop-cock.

The spindle A, for operating the main rubber plug-valve B, is fitted near its upper end in the cap C, and at its lower end in the perforated diaphragm D of the case E of the stop-cock. The spindle is provided with a collar, F, having a port, *f*. This perforated collar of the spindle constitutes the
35 waste-valve proper, and is seated against a ring-seat, G, which has a port, *g*, and is secured

against the top of cap C, around the hole through which the spindle passes. Port *g* registers with a passage in the cap leading to the waste-pipe *c* thereof. The ring-seat G
45 may be made of leather or rubber, or of metal, in which case it is ground to make a close joint with the collar F. In every case the ring-seat is fitted close against the cap to prevent leakage past it.

In order to hold waste-valve close against its seat, I apply a stiff spiral spring, H, to the spindle between the diaphragm D and collar or valve F, the spring being so long that it
55 will be somewhat compressed when the cap is screwed home. The waste-ports *f* and *g* are so arranged that they register when the main valve B is shut, as shown in the drawing. When the main valve is open by spindle A,
60 the port *f* moves over a solid portion of the ring-seat.

It will be readily observed that no sediment can lodge between the flat waste-valve and its flat seat to cause a leakage or cut the
65 valve.

I claim as my invention—

1. The combination, substantially as before set forth, of the spindle of a stop-cock, provided with a collar having a waste-port, and
70 a fixed ring-seat having a similar waste-port.

2. The combination, substantially as before set forth, of the spindle of a stop-cock, provided with a collar having a waste-port, the fixed ring-seat having a similar waste port,
75 and being arranged above the collar against the cap, and the spring which holds the collar in close contact with the ring-seat.

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

WILLIAM RICKETTS.

Witnesses:

EDWARD GILLIGAN,

WM. A. ARMSTRONG.