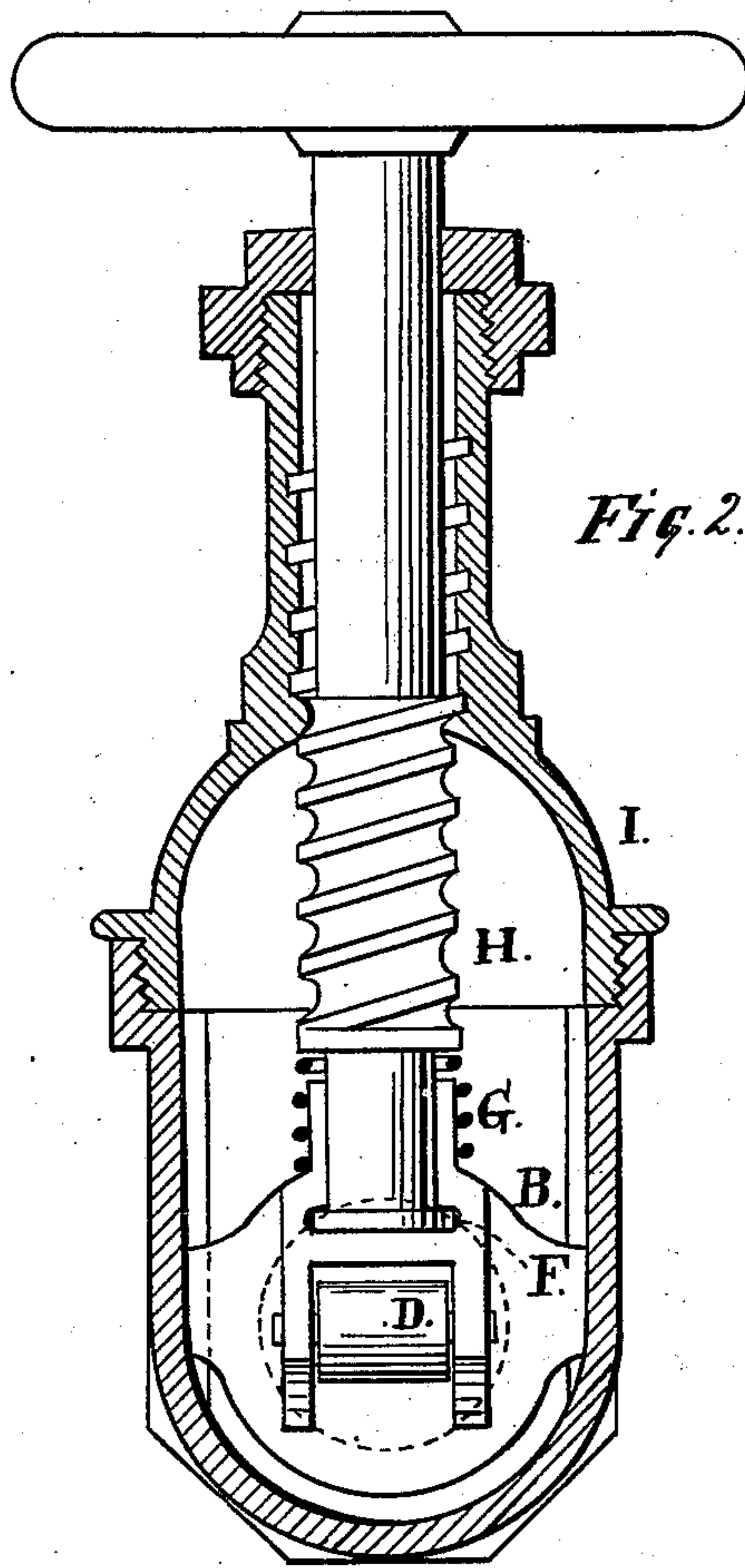
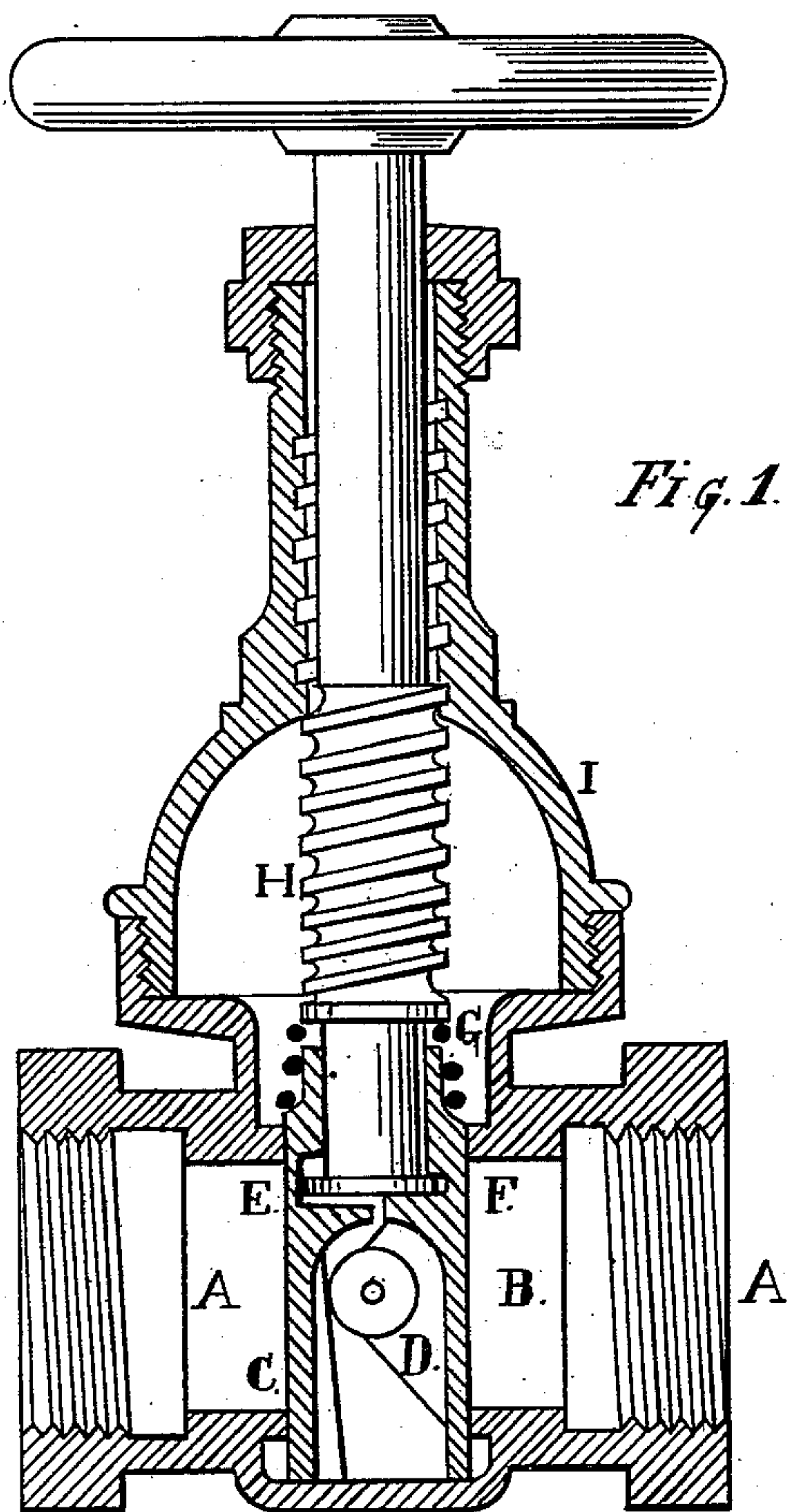


R. J. THOMAS.  
Stop-Valve.

No. 208,214.

Patented Sept. 17. 1878.



WITNESSES:

*W. B. Smith*  
*E. Shan*

INVENTOR:

*Richard J. Thomas*

# UNITED STATES PATENT OFFICE.

RICHARD J. THOMAS, OF MILWAUKEE, WISCONSIN.

## IMPROVEMENT IN STOP-VALVES.

Specification forming part of Letters Patent No. **208,214**, dated September 17, 1878; application filed February 21, 1878.

*To all whom it may concern:*

Be it known that I, RICHARD J. THOMAS, of Milwaukee, in the county of Milwaukee, in the State of Wisconsin, have invented certain Improvements in Stop-Valves, of which the following is a specification:

My invention has for its object the stopping of steam from passing through a pipe. It is a valve constructed with two seats opposite each other, and two gates with a roller between them, which, working against an incline on one of the gates, forces them apart and against the seats.

Referring to the drawing forming part of this specification, Figure 1 is a sectional view of my invention, showing the gates across their centers; and Fig. 2, a sectional view of the same in reverse.

In the drawing, A A are the two valve-seats; B, a straight gate; C, a gate with an incline across its center, thicker at the bottom of the gate and thinner at its top; D, a roller on the straight gate, which presses against the incline on the gate C, and thus, as the straight gate goes down, presses the two gates against the two seats A A. E is a slot in the top of the gate with the incline on it. F is a slot in the top of the straight gate, narrower than the slot in the other gate; G, a spring round the top of the gates and the stem H, which holds them together, the stem H having a head on its lower end, which enters the slots in the two gates; I, the upper part of the shell of the valve.

This valve is operated as follows: When the valve is closed, to open the same, turn the

stem H, and the screw on the same will raise it, and the head on the same, pressing against the top of the slot in the gate B, will raise the same, while the wide slot in gate C will allow gate C to remain closed till the roller, rolling on the incline, will loosen the two gates, and then the head on the stem H will strike against the upper side of the slot in gate C, when the two gates will be raised together. To close the valve, reverse the motion of stem H, and the two gates will be closed. The straight gate, lagging behind a little, will, when the gate with the incline on it strikes the bottom, move on, and the roller, rolling against the incline, press the two gates tight against the two seats. The seats are made parallel to each other, so that, when needing repairs, they can be turned off true without trouble. The spring G is to hold the tops of the gates together, and also to press on the gate C, so that it shall reach its seat first.

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

1. Gates B and C, with slot E made deeper in the inclining gate than slot F in the straight gate, roller D, spring G, and valve-seats A A, in combination with stem H, substantially as described.

2. Spring G, in combination with gates B and C, with slot E in the inclining gate made deeper than slot F in the straight gate, and roller D, substantially as specified.

RICHARD J. THOMAS.

Witnesses:

J. B. SMITH,  
E. SHAW.