

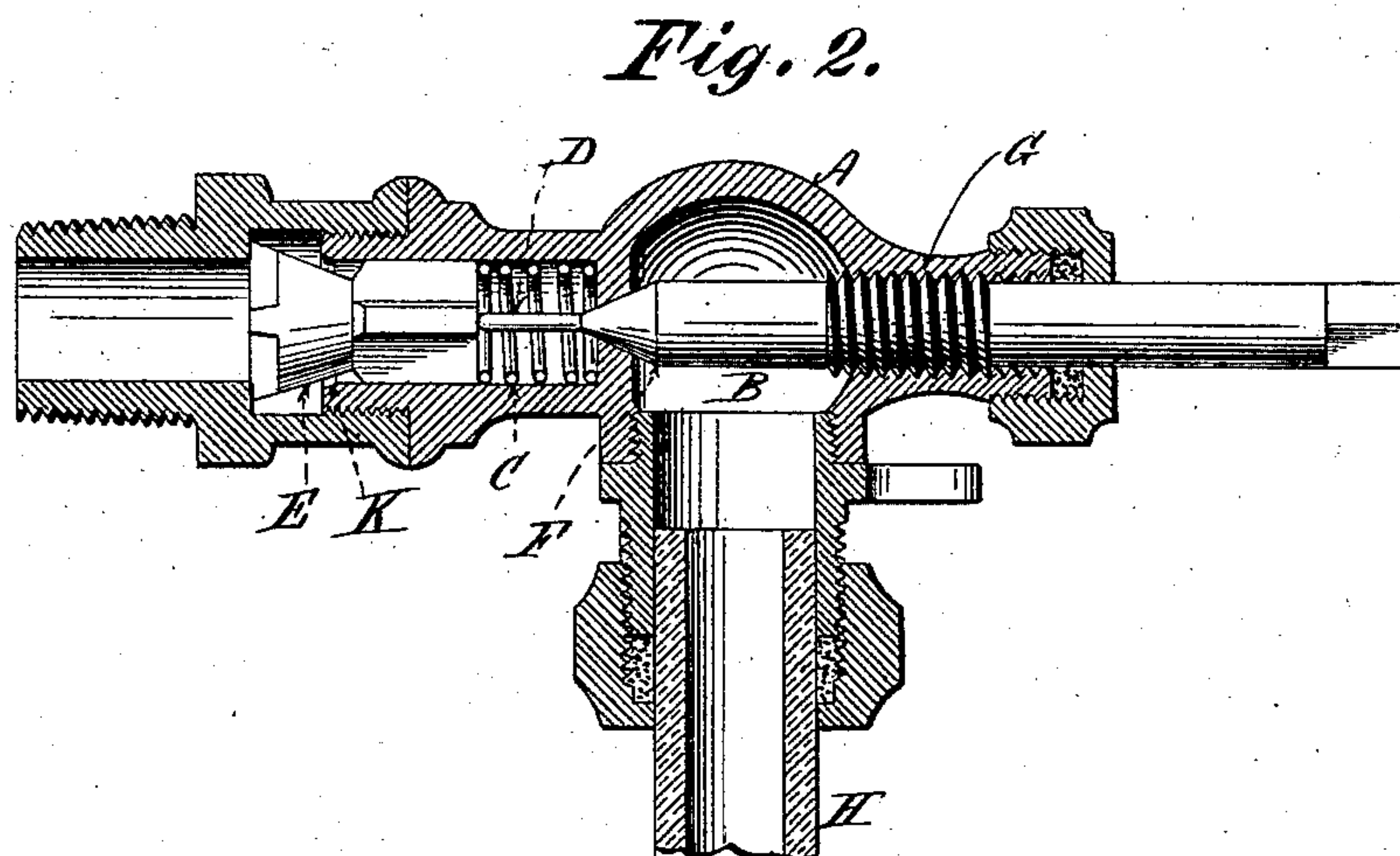
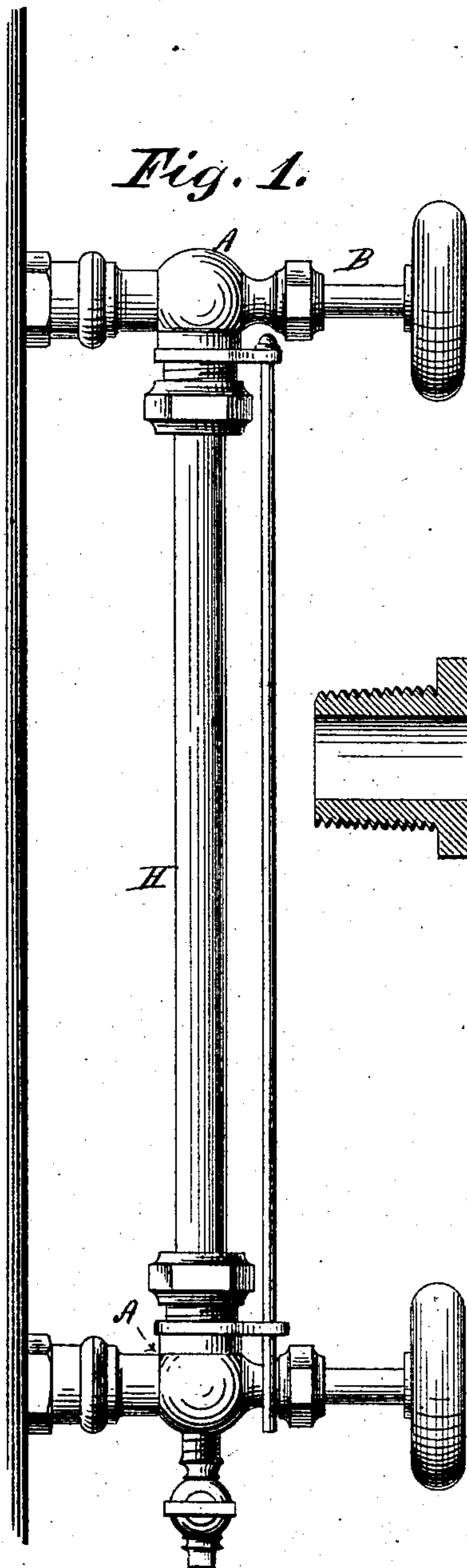
(No. Model.)

J. KAYSER.

AUTOMATIC WATER GAGE VALVE.

No. 365,475.

Patented June 28, 1887.



Witnesses:
Geo. W. Smith
Wm. A. Belock

Inventor:
Joseph Kayser
By his Attorney,
E. N. Dickerson

UNITED STATES PATENT OFFICE.

JOSEPH KAYSER, OF NEW YORK, N. Y.

AUTOMATIC WATER-GAGE VALVE.

SPECIFICATION forming part of Letters Patent No. 365,475, dated June 28, 1887.

Application filed February 3, 1886. Serial No. 190,685. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH KAYSER, of the city, county, and State of New York, have invented a new and useful Improvement in Automatic Water-Gage Valves, of which the following is a full, true, and exact description, reference being had to the accompanying drawings.

This invention relates to an automatic water-gage valve which, in case of the breakage of the glass, will automatically close the steam or water port and prevent the escape of steam into the apartment. This principle is analogous to that of the valve patented to me on the 16th day of September, 1879, No. 219,735. The present valve is so combined with the ordinary conical valve of the glass gage as that said valve may be operated independent of my new automatic valve, while at the same time said valve will serve to open my automatic valve when a new glass has been inserted.

My invention will be readily understood from the accompanying drawings, in which—
Figure 1 represents a general view of a glass water-gage with my improvement applied; Fig. 2, the details of the construction.

A represents the valve-box; B, the ordinary screw-stem, the inner end of which is provided with a conical valve, F. A conical check-valve, E, seats against the seat K, as shown. This valve is normally held away from its seat by the light spring C. A pin, D, attached to the stem B, passes through the center of the spring C and abuts against a suitable portion of the valve E. The stem B is operated by a handle and screw-thread, G, in the usual way.

The operation of the valve can now be

readily understood. Normally the check-valve E is in the position shown in Fig. 2, suitable slots being provided, as shown, to allow the passage of the steam or water past it. The stem B being withdrawn, water will flow freely into the glass tube H. If at any time the glass tube should break while a pressure was on the boiler, the check-valves E at the upper and lower ends would instantly close, and thereby prevent any further escape. A new glass can then be inserted; and when this is done, by simply screwing in the handles, the check-valves will be moved away from their seats and come under the action of the spring again, and by again opening the valves F water will resume its place within the tube.

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

1. The combination of the automatic check-valve E, the valve F, the pin D, and the spring C, whereby the closing of the valve F automatically opens the valve E, while the opening of the valve F does not close the valve E, substantially as described.

2. In an automatic gage-cock, the combination of the valve E and its seat F with the screw-stem B, having the pin D, and the spring C, surrounding the pin D and bearing against the outer portion of the valve E, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH KAYSER.

Witnesses:

GEO. H. EVANS,
WM. A. POLLOCK.