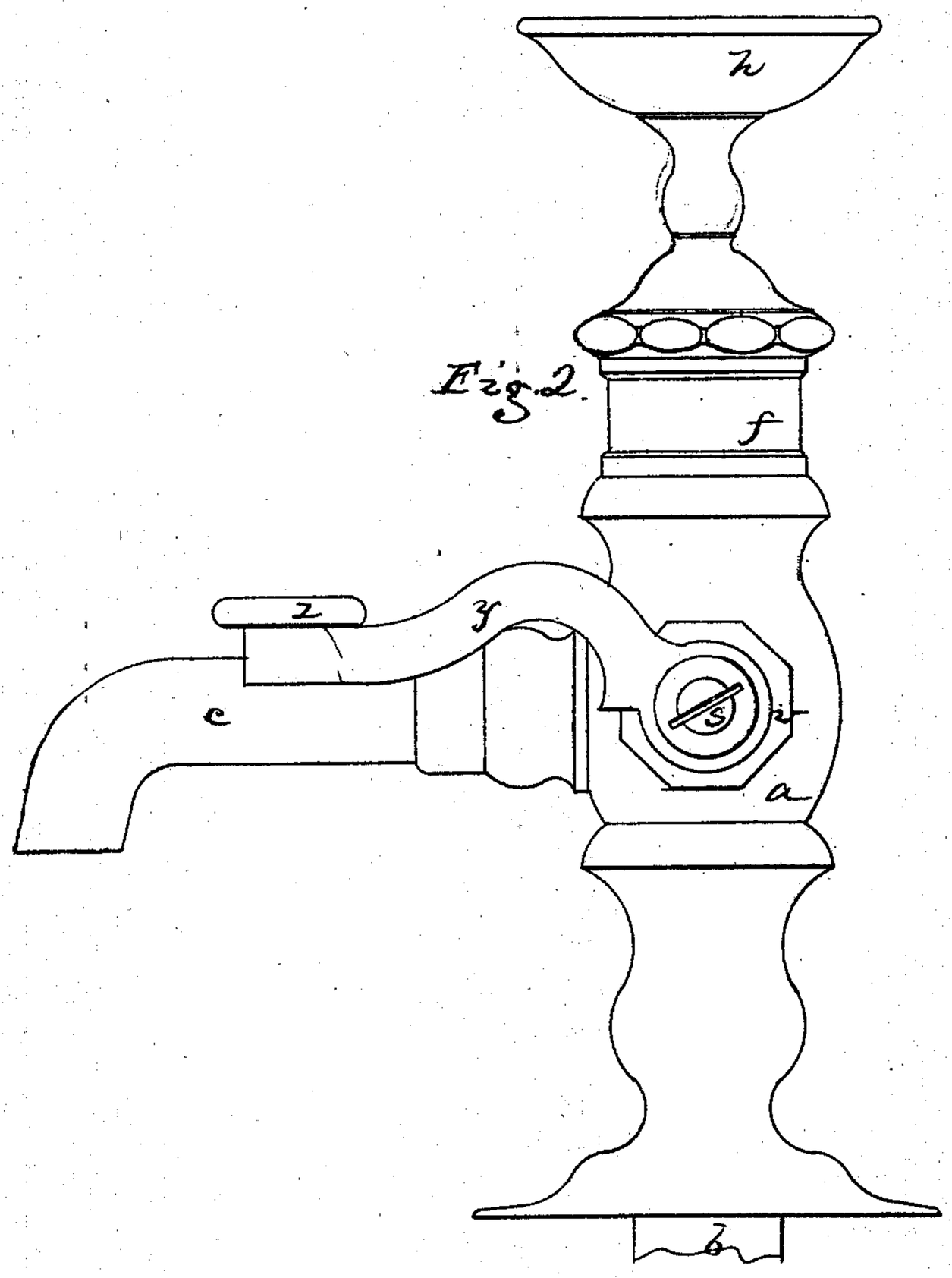
2 Sheets--Sheet 1.

J. T. HAYDEN.

Compression Basin-Cocks.

No. 146,452. Patented Jan. 13, 1874.

Fig. 2.



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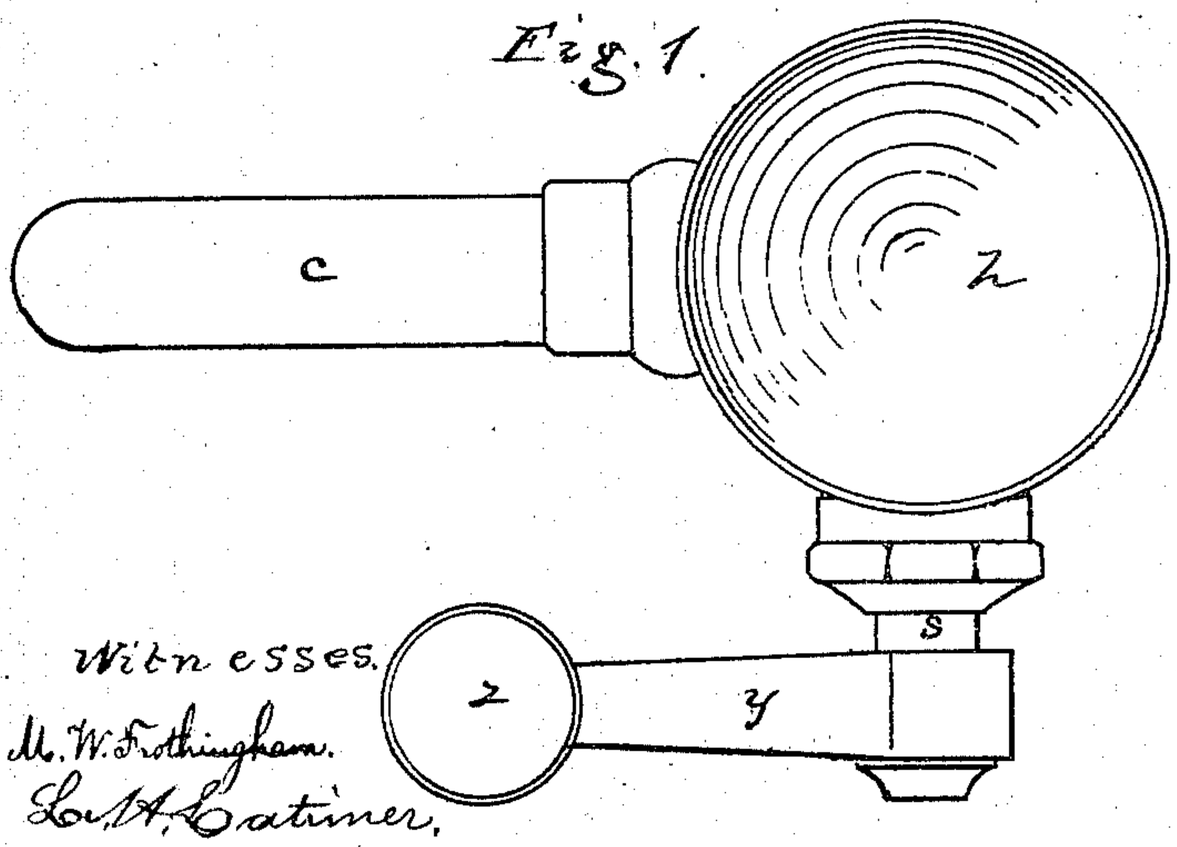

Witnesses.

M. W. Fothingham.

Lew. A. Latimer.

Inventor.

James T. Hayden.

By his Attys.

Crosby & Gould

2 Sheets--Sheet 2.

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Fig. 3

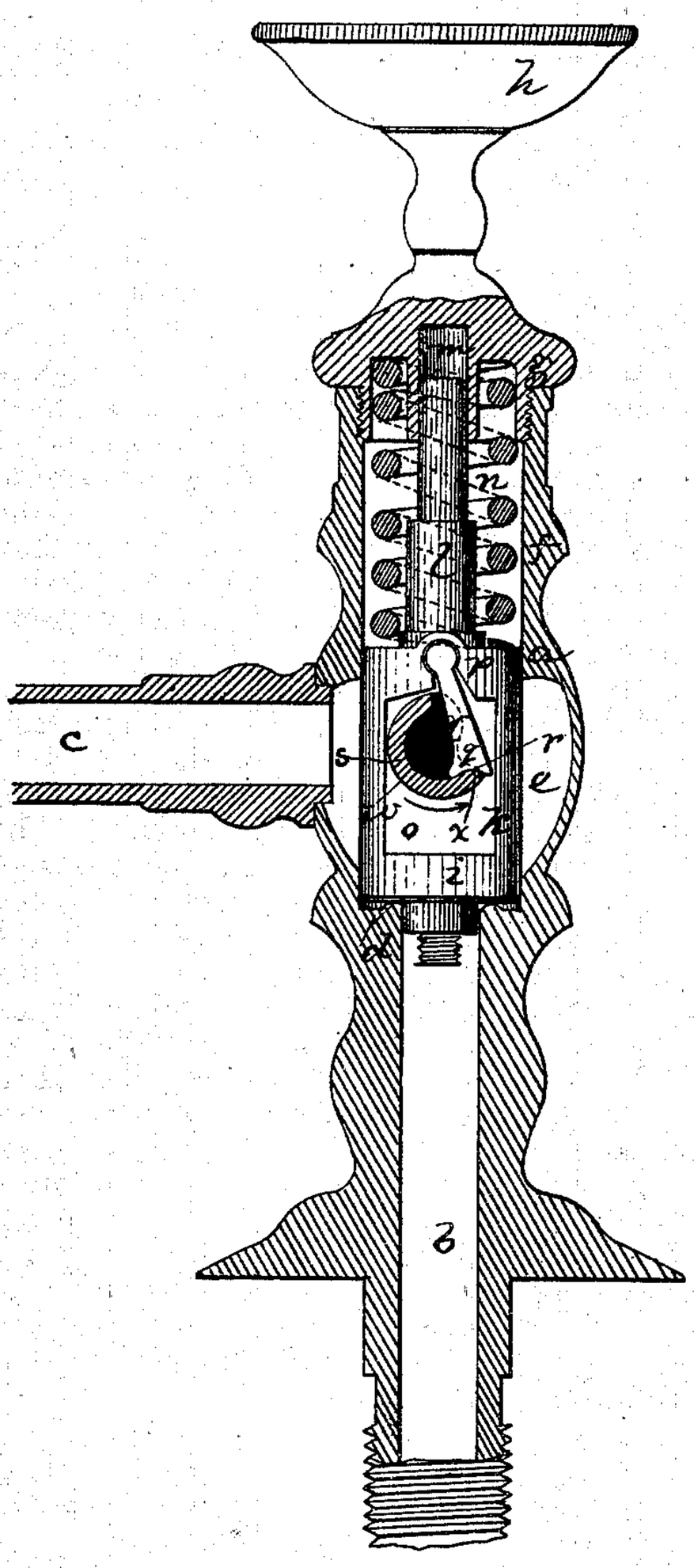
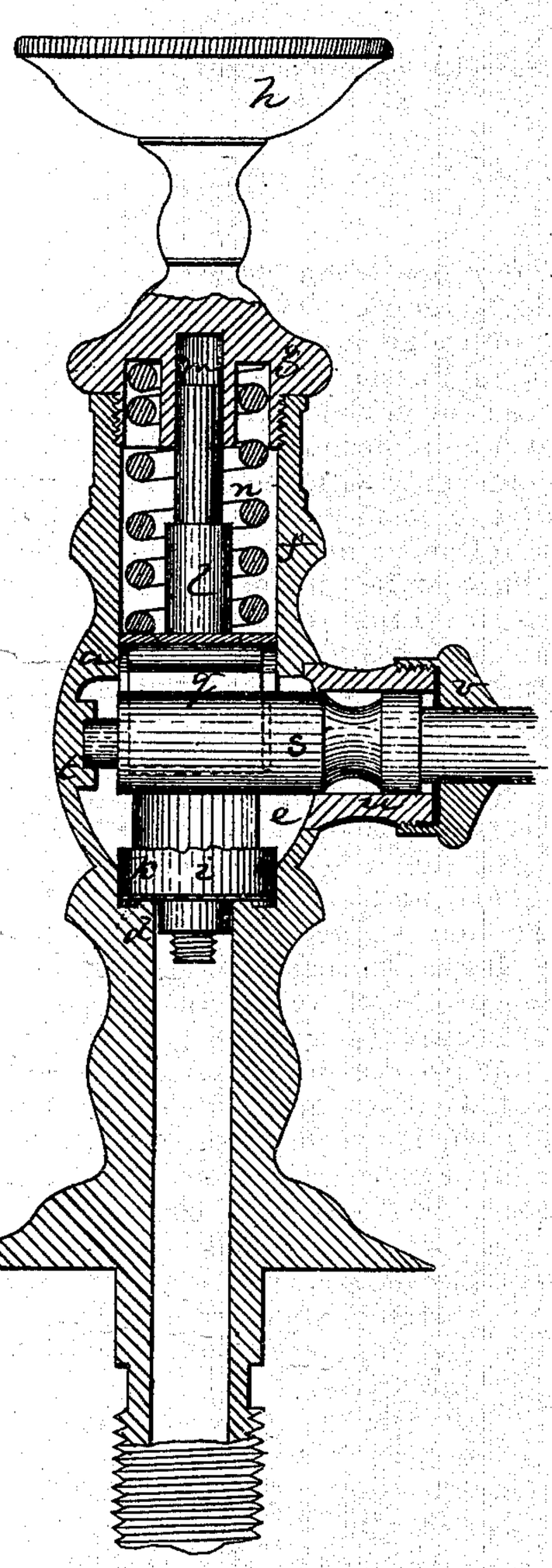


Fig. 4



Witnesses.
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Inventor.
James T. Hayden.
By his Attys
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UNITED STATES PATENT OFFICE.

JAMES T. HAYDEN, OF CAMBRIDGE, MASSACHUSETTS.

IMPROVEMENT IN COMPRESSION BASIN-COCKS.

Specification forming part of Letters Patent No. **146,452**, dated January 13, 1874; application filed November 12, 1873.

CASE A.

To all whom it may concern:

Be it known that I, JAMES T. HAYDEN, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Compression Basin-Cocks; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

The invention relates to a new construction of a compression basin cock or faucet, and particularly to a peculiar arrangement of devices for raising the valve against the stress of the spring to open the faucet. The valve is connected to its stem by an open piston, through which extends a horizontal plug, and in this piston is pivoted a pendent arm, notched at its foot, and having extending into the notch a shoulder on the plug, which shoulder, when the plug is turned, lifts against the arm and forces up the piston, thereby opening the faucet, the arm, by the stress of the spring acting against the shoulder, and the spring forcing down the valve-piston and closing the valve, whenever downward pressure upon the handle or lever at the end of the plug is withdrawn. The invention consists, primarily, in this valve-operating mechanism, and also in the employment of the finger-lever at the end of the valve-operating plug.

The drawing represents a cock embodying my invention.

Figure 1 shows a plan of the faucet. Fig. 2 is a side elevation of it. Figs. 3 and 4 show the construction in sectional elevation.

a denotes the vertical body of the faucet; *b*, the inlet-passage; *c*, the outlet-pipe; *d*, the valve-seat; *e*, the valve and piston chamber; *f*, the neck of the faucet; *g*, the screw-cap, which cap may be surmounted by a cup, *h*, for holding finger-rings, &c. *i* denotes the valve, formed by the bottom of an open piston or cylinder, *k*, fitting loosely in the chamber *e*. Extending from the top of the valve-piston is the stem *l*, which extends into a guide-tube, *m*, of the cap, sliding freely in said tube. Between the top of the piston *k* and the cap is placed the spring *n*, the stress of which holds the valve normally upon its seat. The valve-piston is open, as seen at *o*, and hung from a recess, *p*, is an arm, *q*, extending down into the opening *o* and notched, as seen at *r*, the recess *p* being circular in cross-section, and the top of the arm *q* fitting into and being held by such recess, but sliding freely therefrom for dismemberment of the faucet. Extending through the valve-piston is a horizontal plug, *s*, journaled in bearings *t u* and fastened by a screw-cap, *v*, and in the plug is a recess, *w*, one edge of which forms a shoulder, *x*, said shoulder entering the notch *r* of the arm *q*, and the connection being on one side of the center of the piston, so that by the stress of the spring the arm presses down the shoulder, and by such pressure turns the plug, the pressure that forces down the piston bringing the valve against its seat to close the valve. At the outer end of the plug is a lever arm or handle, *y*, and at the end of this lever is a finger-piece, *z*. By downward pressure upon this finger-piece the plug is turned and forces up the arm *y*, thereby raising the valve-piston and valve against the stress of the spring, the valve being only so far opened as the lever is more or less pressed down, and being returned instantly to its seat as soon as the hand is withdrawn.

I claim—

1. The plug *s*, plug-shoulder *x*, and arm *q*, in combination with and for operating the valve, substantially as described.

2. The combination, with the valve, of the plug *s*, the lever-arm *y* and its shaft, and the arm *q* within the valve, these parts operating substantially as and for the purpose set forth.

JAS. T. HAYDEN.

Witnesses:

FRANCIS GOULD,

M. W. FROTHINGHAM.