

(No Model.)

J. A. & S. FLETCHER
VALVE.

No. 556,006.

Patented Mar. 10, 1896.

Fig. 1

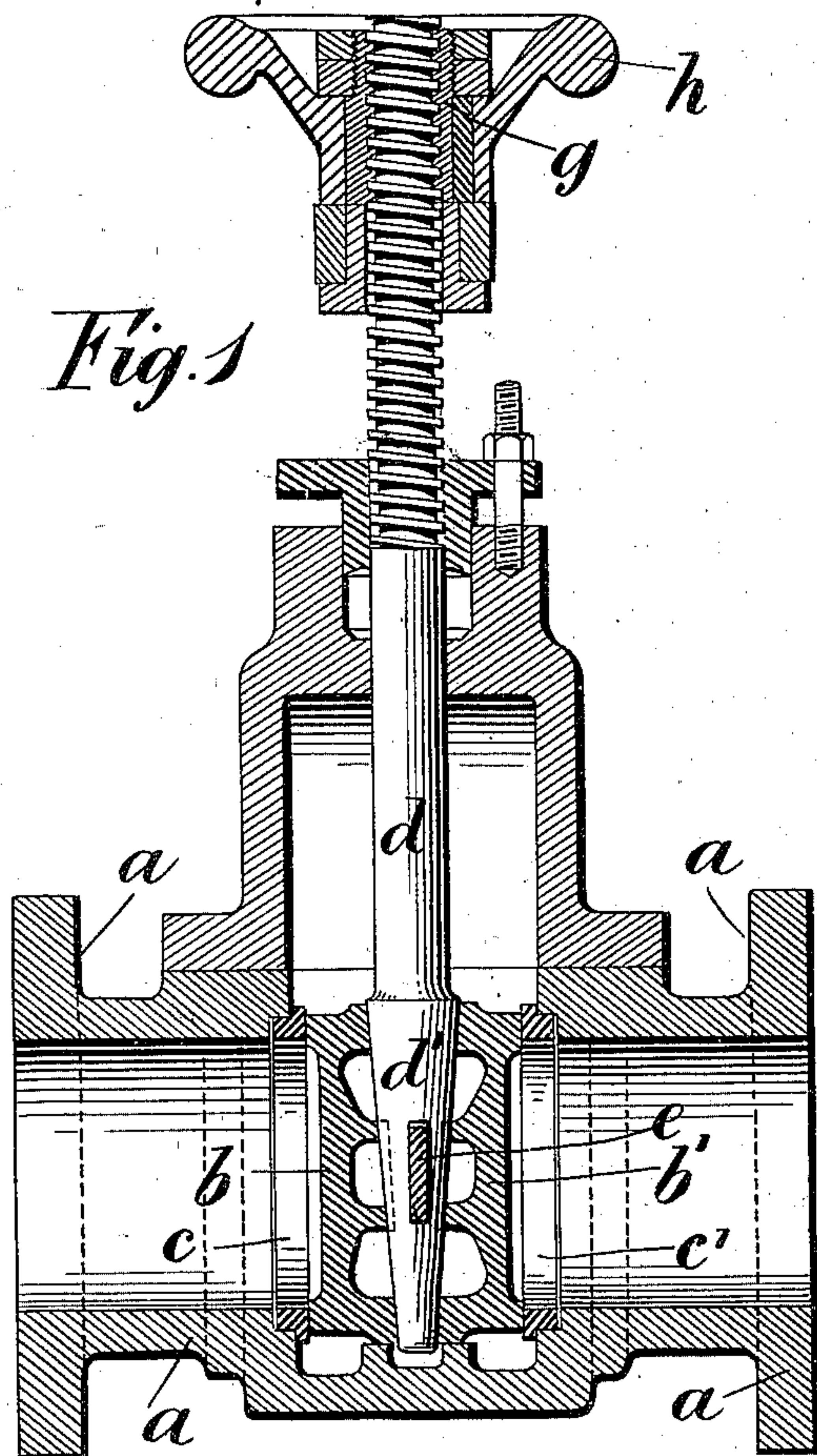


Fig. 2.

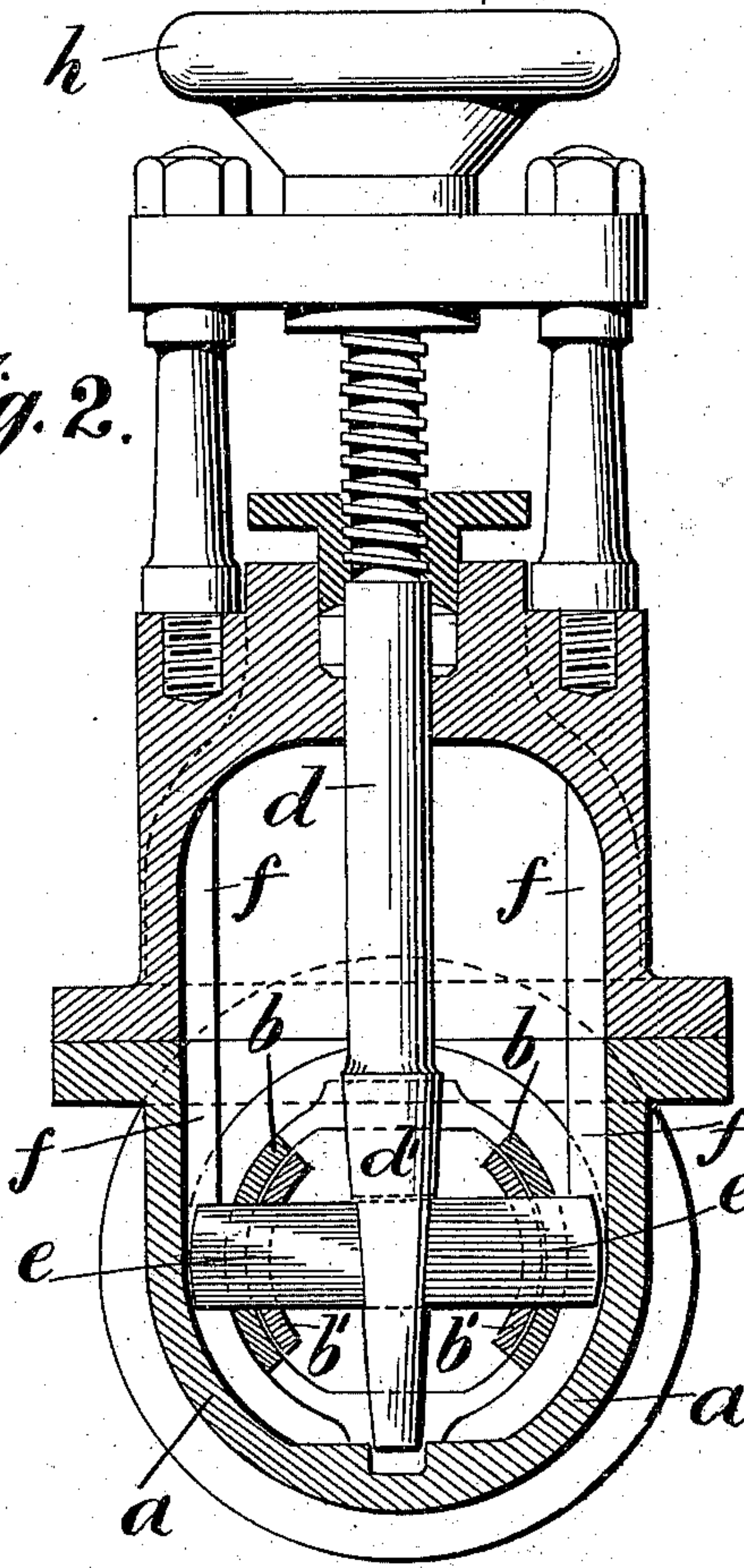
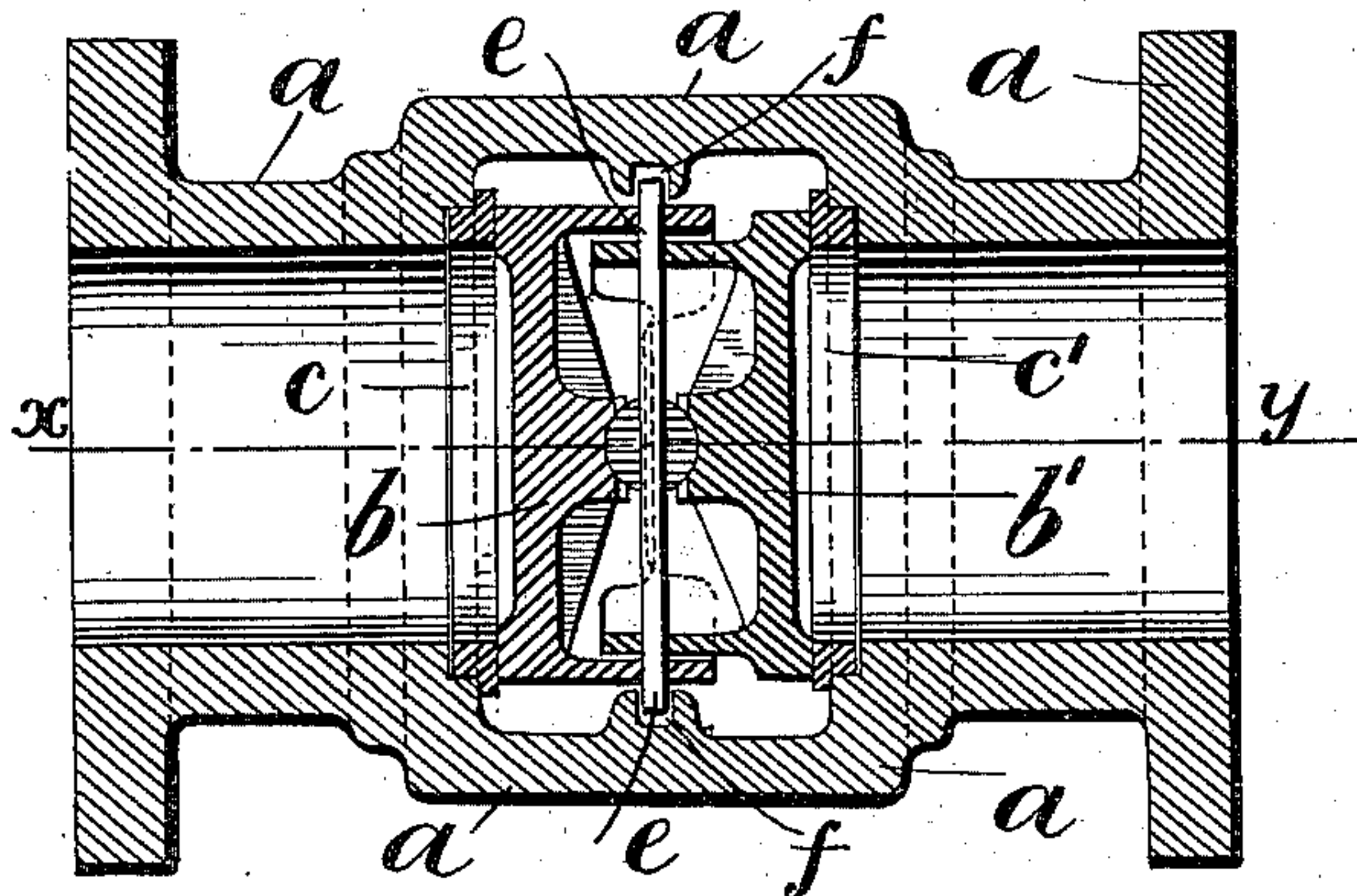


Fig. 3.



WITNESSES

Richard Longfellow
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AGENT

UNITED STATES PATENT OFFICE.

JAMES ASHTON FLETCHER AND SAMUEL FLETCHER, OF ASHTON-UNDER-LYNE, ENGLAND.

VALVE.

SPECIFICATION forming part of Letters Patent No. 556,006, dated March 10, 1896.

Application filed October 24, 1895. Serial No. 566,729. (No model.) Patented in England December 17, 1894, No. 24,489.

To all whom it may concern:

Be it known that we, JAMES ASHTON FLETCHER and SAMUEL FLETCHER, subjects of the Queen of Great Britain, and residents of
5 Borough Brass Works, Cavendish Street and Blandford Street, Ashton-under-Lyne, in the county of Lancaster, England, have invented certain new and useful Improvements in Valves, (for which we have received a patent
10 in Great Britain, No. 24,489, dated December 17, 1894,) of which the following is a specification.

Our said invention relates to improvements in valves having sliding parts which may be
15 partially or wholly withdrawn from the valve-seating in order to provide a free passage for the fluid controlled by the valve.

Our invention consists in making two half-valves with overlapping sides, connected by
20 a transverse key which also passes through the operating-rod, said key having a slight play in the rod in order that at the first part of the action the rod lifts without affecting the valve, which enables the valve to move
25 laterally under the pressure of the liquid or fluid from its seating just prior to the actual lift motion of the valve, the reverse action taking place on the valve being returned—
30 *i. e.*, the valve is lowered to the seating and then thrust into contact.

By this invention it is impossible for the valve to stick from any cause, nor is the action dependent upon a sliding motion only, as with such valves at present constructed.

35 The accompanying drawings, to which reference is hereinafter made, represent a valve made in accordance with our said invention.

Of the said drawings, Figure 1 is a longitudinal section. Fig. 2 is a transverse section. Fig. 3 is a sectional plan through *x y*
40 of Fig. 1.

Mounted in a suitable casing or seating *a* is a sliding valve made in two parts *b b'*, which overlap at the sides, as shown at Figs. 2 and 3. The two parts *b b'* of the valve are pressed
45 asunder and tightly against their respective seatings *c c'* in the casing *a* by a conical or wedge-shaped prolongation *d'* of the valve-rod *d* when the latter is screwed down.

A transverse key or bar *e* passes through
50 the overlapping parts of the valve and also through the valve-rod. A slight amount of play of the bar is allowed in the slots, so that the wedging action of the valve-rod may come into force.

We prefer to so construct the casing *a* that
55 the ends of the key *e* engage with guides or grooves *f* in the casing *a*, thus guiding the valve as it slides and at the same time preventing the turning of the valve-rod. Other
60 modes of guiding the valve may, however, be used.

A nut *g* and hand-wheel *h* for rotating the same, as usual in valves, are employed for raising and lowering the rod, and form no
65 part of our said invention.

What we claim, and desire to secure by Letters Patent, is—

The combination of a valve constructed in
70 separate overlapping halves, a valve-rod having a conical or wedge-shaped termination lying between the two halves of the valve and a transverse bar or key connecting the valve and rod substantially as set forth and shown.

In witness whereof we have hereto signed
75 our names this 7th day of October, 1895.

JAMES ASHTON FLETCHER.
SAMUEL FLETCHER.

In presence of—
JOSEPH GILL,
H. MOTTRAM.