

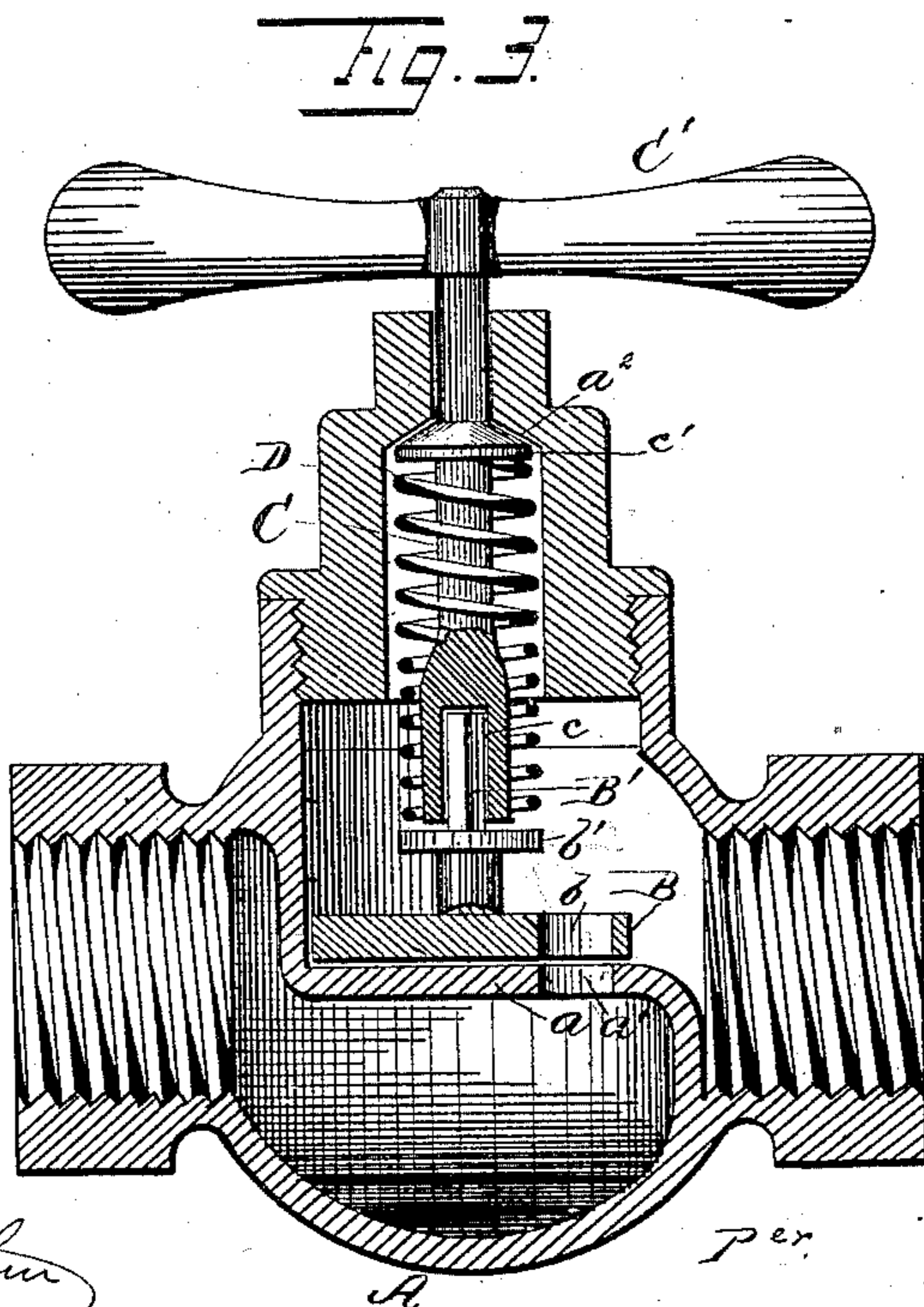
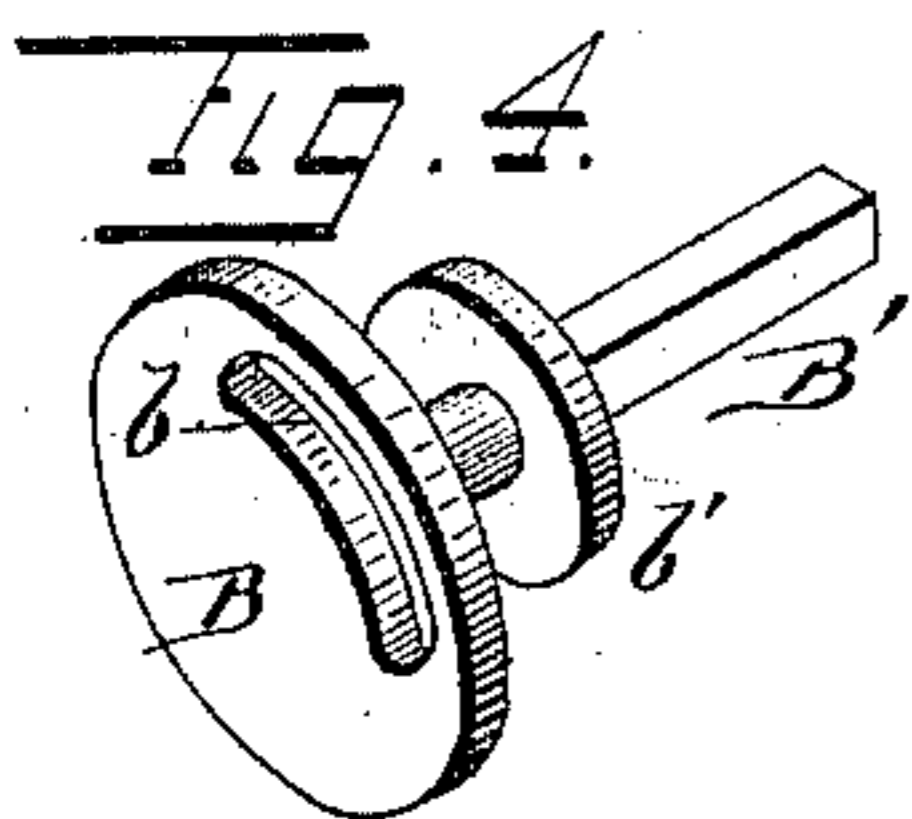
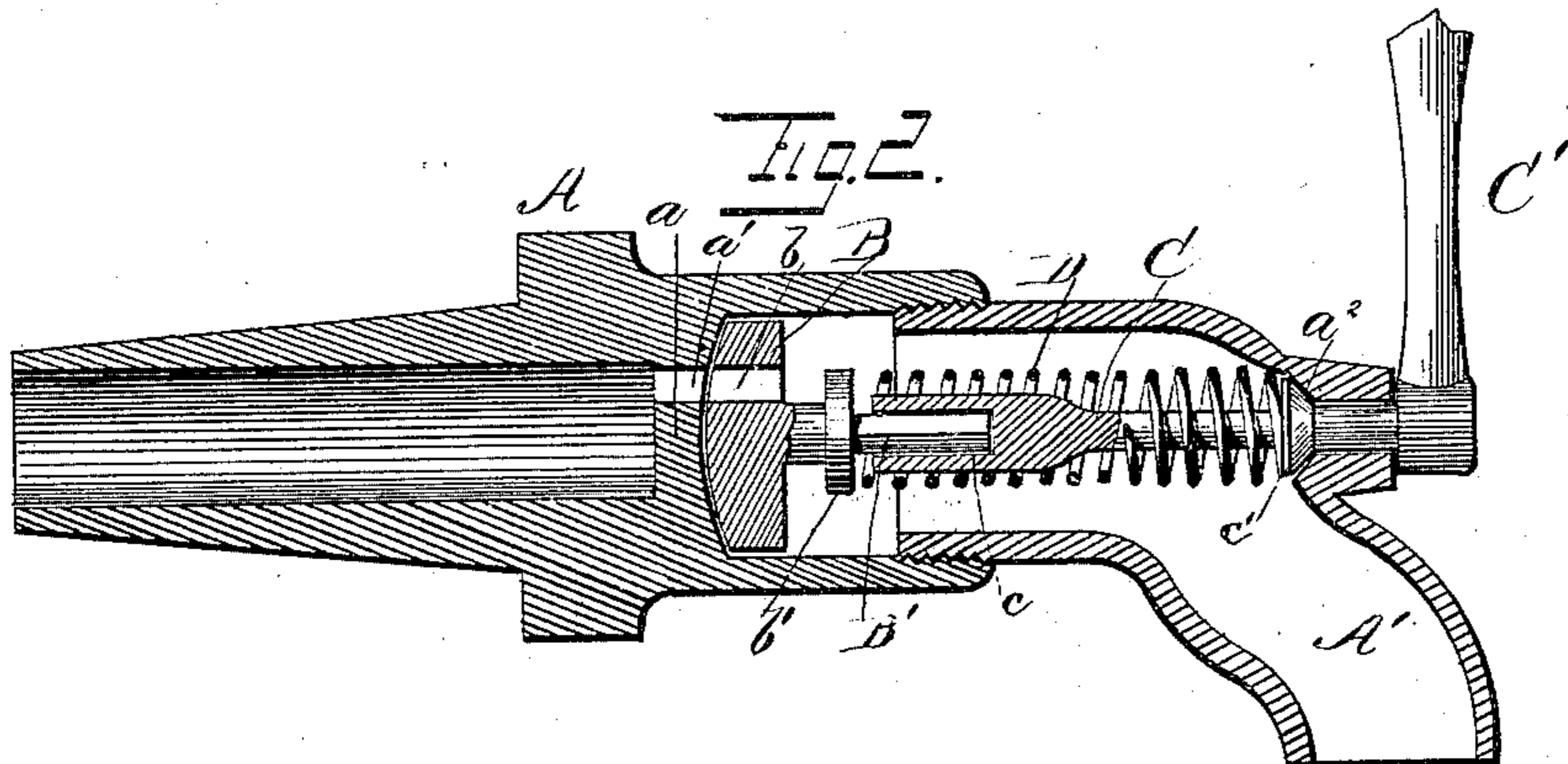
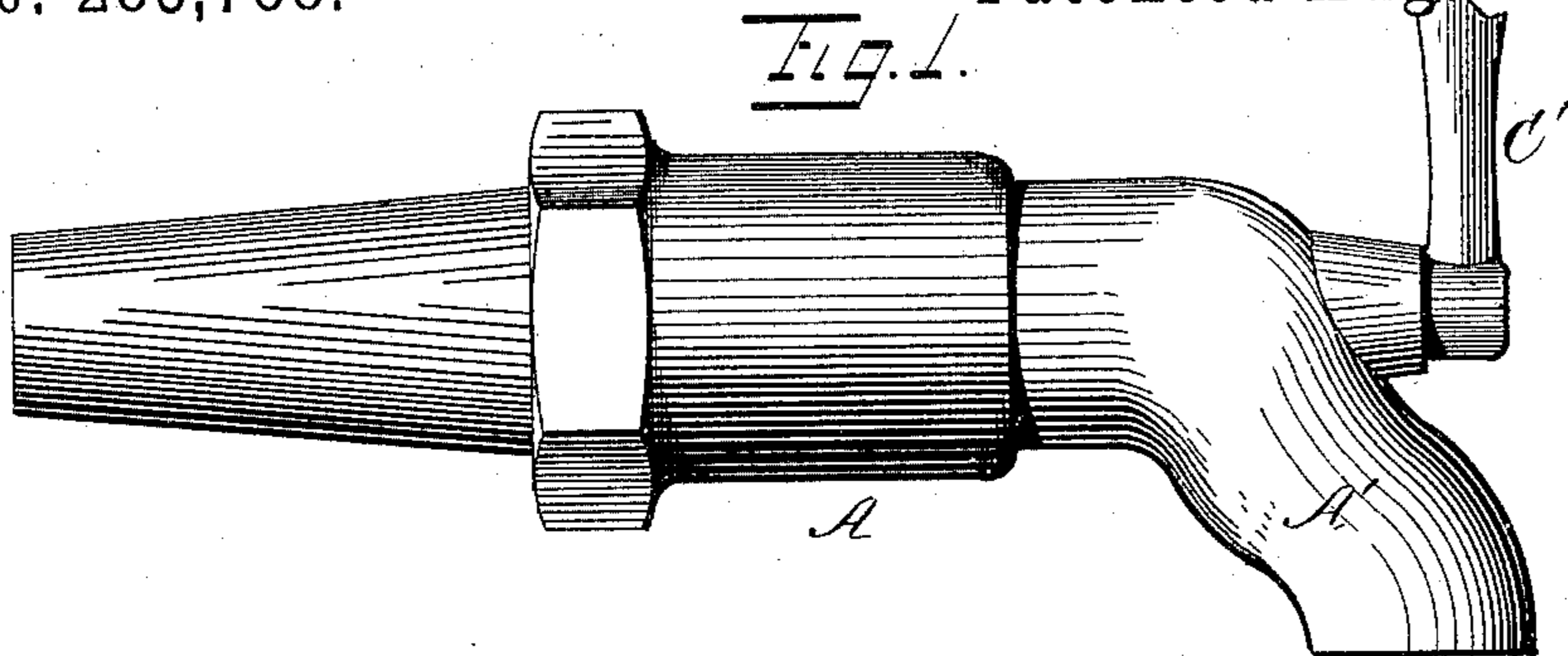
(No Model.)

J. JOHNSON & L. WAGNER.

VALVE.

No. 283,788.

Patented Aug. 28, 1883.



Witnesses:

W. C. McArthur
Charles Carman

Inventor.

John Johnson
Louis Wagner

Per
Harrison
Attorney.

UNITED STATES PATENT OFFICE.

JOHN JOHNSON AND LOUIS WAGNER, OF CHICAGO, ILLINOIS, ASSIGNORS
OF ONE-THIRD TO GERALD ALLEN, OF SAME PLACE.

VALVE.

SPECIFICATION forming part of Letters Patent No. 283,788, dated August 28, 1883.

Application filed September 18, 1882. (No model.)

To all whom it may concern:

Be it known that we, JOHN JOHNSON and LOUIS WAGNER, citizens of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Valves, of which the following is a description.

Our invention relates to improvements in valves for faucets and stop-cocks; and it consists in a valve whose stem is constructed in two parts, and held in its seat by means of a spring, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to avail themselves of the benefits of our invention, we will now proceed to describe the construction and operation, referring to the accompanying drawings, in which—

Figure 1 is a side elevation of a faucet containing our improved valve. Fig. 2 is a central longitudinal section through the same. Fig. 3 is a vertical section of a globe-valve for steam or water pipes containing our improvements. Fig. 4 is a perspective view of part of our valve.

Similar letters denote similar parts throughout the several views.

A represents the main portion of a faucet, into the outer end of which is screwed the curved nose A'. The main portion A is provided on the inside with a web, *a*, having a port, *a'*, through one side for the passage of the water. The outer face of this web forms the seat for the valve, and may be either concaved, as shown, or flat. Against the seat bears a circular disk or plate, B, forming the valve, having on one side of its center a port, *b*, corresponding in size and shape with that in the web *a*.

The valve B is provided with a stem, B', squared on its outer end and provided with a shoulder, *b'*, near the valve. C is a stem having a square socket, *c*, at its inner end to engage with the square end of the stem B'. The

outer end of the stem C passes through the curved nose A' of the faucet, and is provided on its outer end with a handle, C'. The inner end of the opening through which this stem passes in the nose is a beveled seat, *a''*, against which bears a beveled shoulder, *c'*, on the stem C. The stems B' and C are surrounded by a spiral spring, D, which bears against the shoulders *c'* and *b'*, and keeps the stem and valve always properly seated. It will be seen that this device, having a jointed stem forced apart by the spring, always seats itself and the valve, no matter how much they may wear, and needs no stuffing-boxes to prevent leakage. A quarter-turn of the handle C' will turn on or shut off the water.

The valve represented by Fig. 3, it will be readily seen, is the same as that already described, applied to the shell of a globe-valve. Globe-valves, and in fact all of this class of valves or cocks, are rapidly rendered useless by the corrosion of the edges of the ports, and consequent leakage when the valve ceases to fit tightly in its seat; but the one we have described is not subject to this annoyance, and, indeed, may be readily fitted to such valves after they have been thrown away as useless.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination, with the circular valve B, having shoulder *b'* and squared stem B', of the socketed stem-section C, formed with the shoulder *c'*, and a spring, D, for forcing the two sections of the stem apart, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN JOHNSON.
LOUIS WAGNER.

Witnesses:

W. C. MCARTHUR,
FRANK JOHNSON.