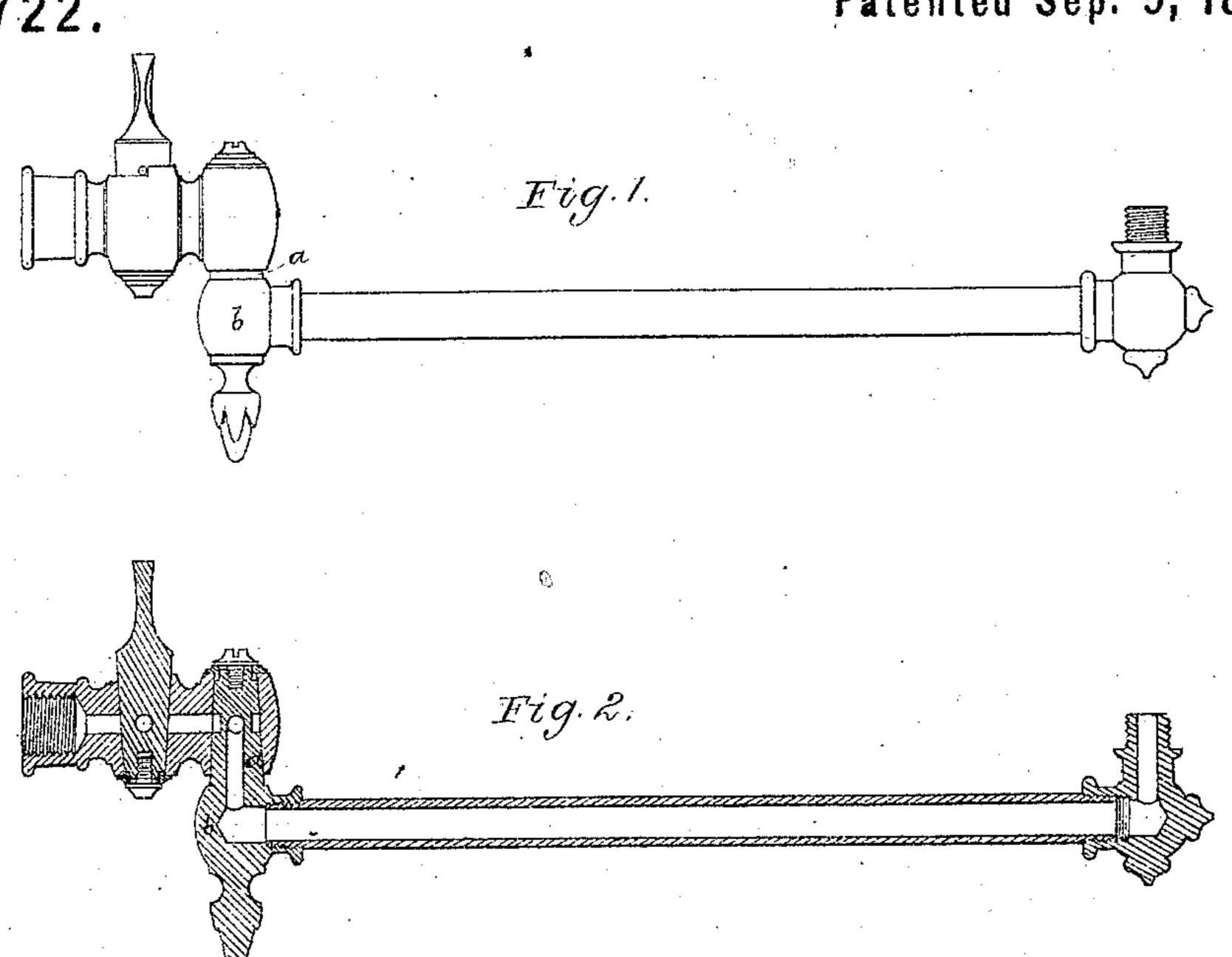
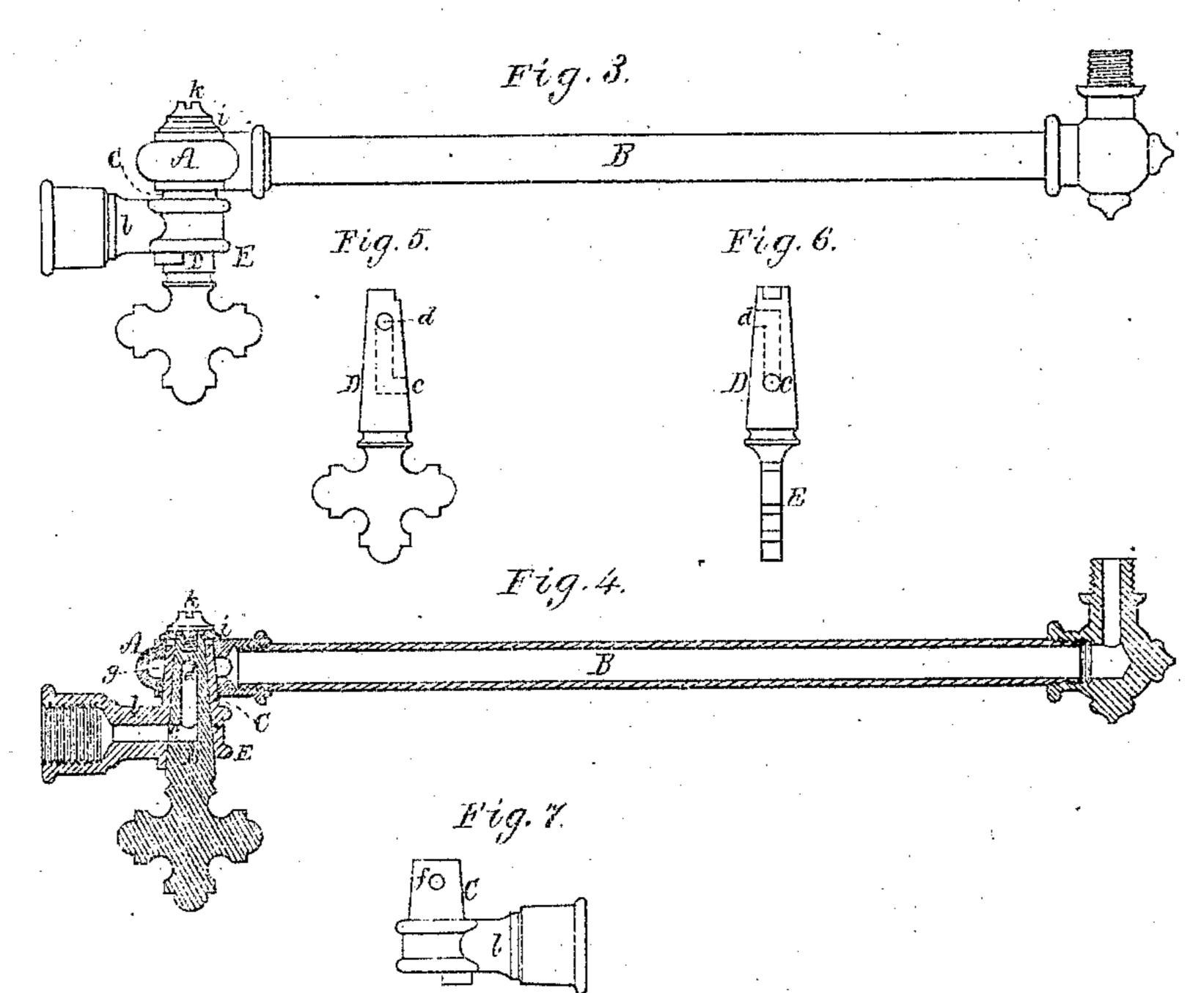
## LIVERUS HULL.

Improvement in Connecting Joints in Cocks of Gas Brackets.

No. 118,722.

Patented Sep. 5, 1871.





Witnesses S. M. Phaz. L. N. Möller Tiverus Hull

by his attorney.

R.M. Lay

## UNITED STATES PATENT OFFICE.

LIVERUS HULL, OF CHARLESTOWN, MASSACHUSETTS.

## IMPROVEMENT IN CONNECTING JOINTS AND COCKS OF GAS-BRACKETS.

Specification forming part of Letters Patent No. 118,722, dated September 5, 1871.

To all whom it may concern:

Be it known that I, LIVERUS HULL, of Charlestown, of the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in the Connecting Joints and Cocks of Gas-Brackets; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a side view, and Fig. 2 a vertical section of a gas-bracket joint and cock as here-tofore constructed and in use. Fig. 3 is a side view, and Fig. 4 a vertical section of a bracket

with my improved joint and cock.

In the old gas-bracket joint, as shown in Figs. 1 and 2, a pivot, a, extends from the rotary head b of the branch pipe into a socket arranged aside of and parallel with the gas-cock and its socket; but in my improved arrangement the rotary head A of the branch pipe B is arranged upon and so as to revolve on a tubular pivot, C, concentric with the plug or key D of the cock E. This plug D, shown in side view in Fig. 5 and in edge view in Fig. 6, is hollow or chambered, closed at top, and provided with induction and eduction-openings, as shown at c d. The body l of the cock, represented in side view in Fig. 7, has the tubular pivot C extended up from it, and to sur-

round the upper portion of the plug, there being an educt, f, in one side of the pivot on a level with the educt d of the plug or key. The head A is provided on its interior surface with a continuous groove, g, which extends around it and opens into the branch pipe B. The head A rests on the outer surface of the pivot, and is held in connection with such pivot by means of a washer, i, and a screw, k, arranged as shown, the screw being screwed into the upper end of the plug.

My invention has important advantages, it rendering the joint and cock much simpler, and consequently cheaper of construction relatively to the other, as shown in Figs. 1 and 2. It requires but one screw and washer to hold the

parts in connection.

I claim—

The branch-pipe head A, as provided with the groove g, and arranged upon a tubular pivot, C, extended up from the body of the cock and concentric with the plug thereof, all being substantially as described.

LIVERUS HULL.

Witnesses:

R. H. Eddy, J. R. Snow.