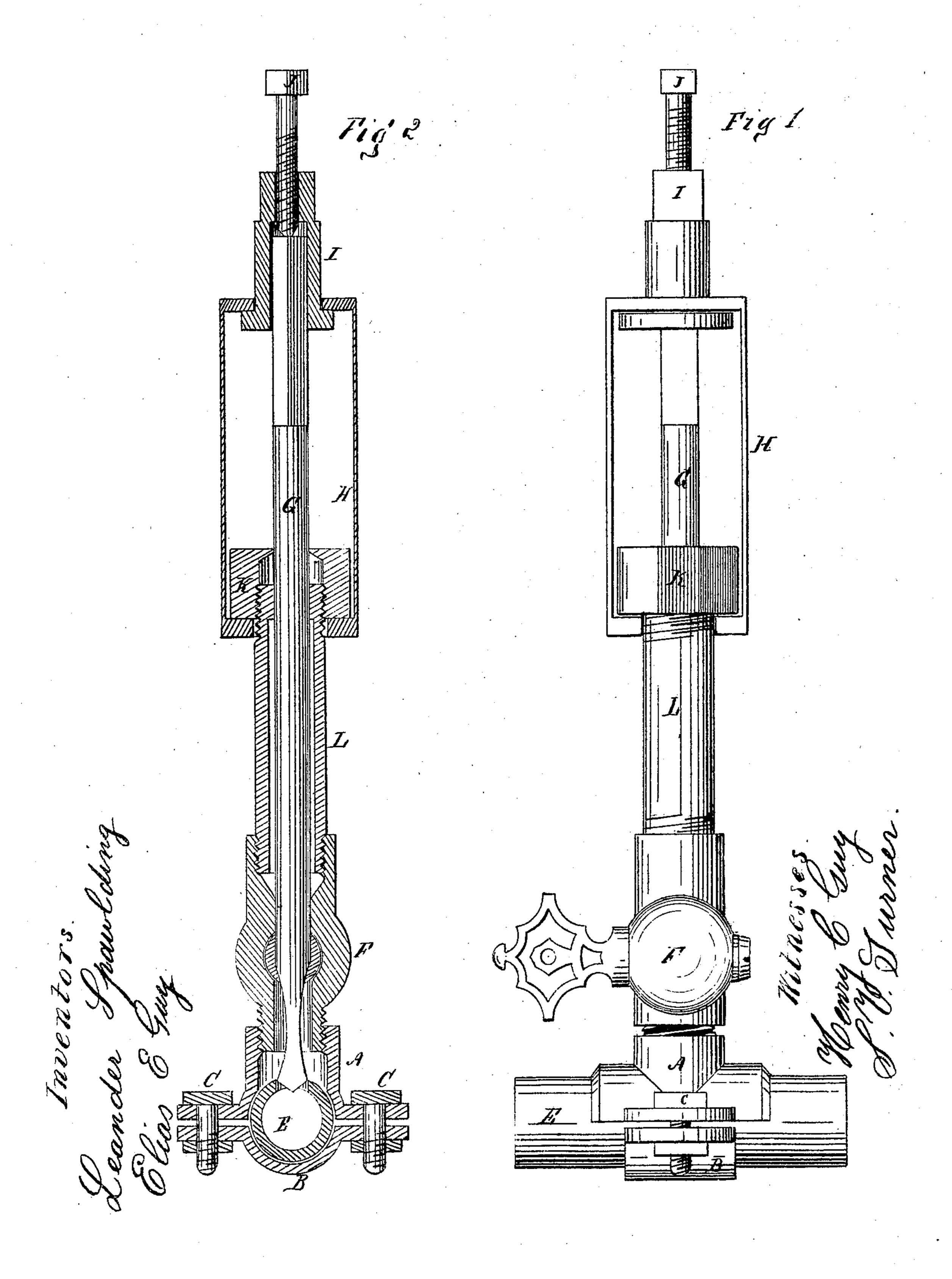
## LEANDER SPAULDING&ELIAS E. GUY.

Improvement in Devices for Tapping Gas and Water Pipes.

No. 119,895.

Patented Oct. 10, 1871.



## UNITED STATES PATENT OFFICE.

LEANDER SPAULDING AND ELIAS E. GUY, OF NORFOLK, VIRGINIA.

## IMPROVEMENT IN DEVICES FOR TAPPING GAS AND WATER-PIPES.

Specification forming part of Letters Patent No. 119,895, dated October 10, 1871.

To all whom it may concern:

Be it known that we, Leander Spaulding and Elias E. Guy, of the county and city of Norfolk, State of Virginia, have invented certain Improvements for Tapping Pipes, of which the following is a specification:

The first part of our invention consists of a fitting which can be attached to a water, gas, or steam-pipe, without removing the same, to cut off or cut thread. The second part of our invention consists of a combination drill, by means of which a water, gas, or steam-pipe may be tapped without allowing any of the contents to escape.

Figure 1 is a side elevation embodying our invention. Fig. 2 is a longitudinal section of same.

A is the fitting; B, the clamp; C C, the bolts for holding same together; E, the pipe to be tapped; F is the stop-cock, the play of which has a round port sufficiently large for the drill G to pass through. H is the yoke; I, the drill-chuck; J, set-screw for giving pressure to drill; K, nut forming stuffing at head of pipe L—also, acting as guide to drill G, and for holding down yoke H. For tapping water-mains the fitting A' is secured to the main to be tapped, making a water-tight joint with any suitable packings. The cock drill, &c., is then secured in place and the stuffing,

box packed; then, by giving motion to drill-chuck I, by means of a ratchet-wrench or other suitable appliance and setting up on set-screw J, the hole can be drilled through the pipe E. After drilling through, the drill can be pressed to the bottom of the pipe, after which the yoke and chuck can be removed at X; then the point of the drill can be raised above the plug in the cock and the water turned off, after which all above the cock F can be removed and the branch-pipe attached and run where desired. In case the water, gas, or steam-pipe is empty, the cock F can be dispensed with, in which case the branch can be run directly from the fitting.

We claim—

As an improvement in machines for tapping gas and water pipes and water-mains, the improved tool, constructed as shown, consisting of the set-screw J, drill-chuck I, yoke H, drill G, stuffing-box K, sleeve L, cock F, clamp A, fitting B, and clamping-screws C.

LEANDER SPAULDING. ELIAS E. GUY.

Witnesses:

HENRY C. GUY, S. V. TURNER.

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