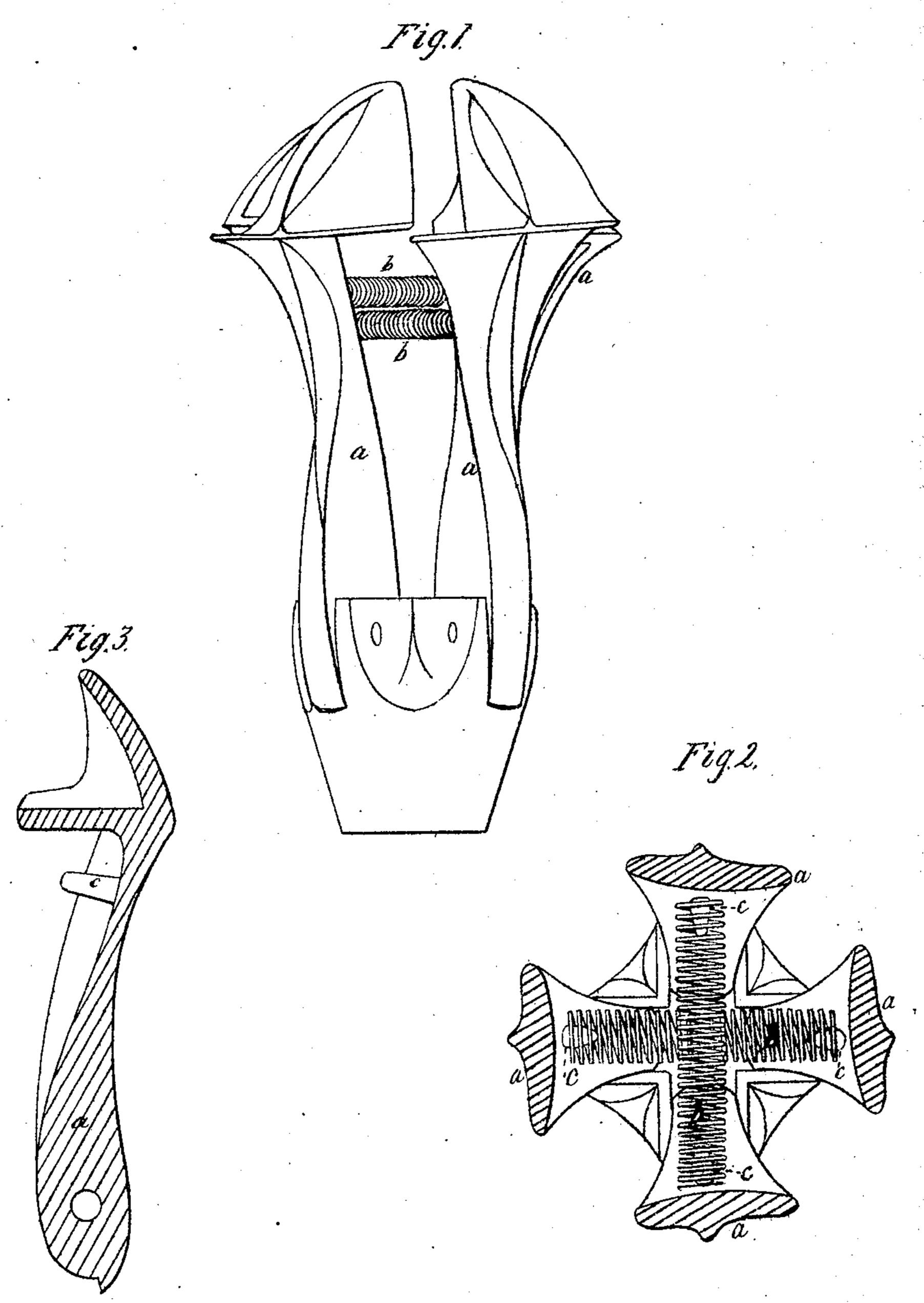
JOHN COLLICOTT.

Improvement in Boiler Tube Scraper.

124,421.

Patented March 12, 1872.



Witnesses Banus H. Robins Inventor
form Collicott.

Ty Henry Williams Hear attyr.

UNITED STATES PATENT OFFICE.

JOHN COLLICOTT, OF WEST ROXBURY, MASSACHUSETTS.

IMPROVEMENT IN BOILER-TUBE SCRAPERS.

Specification forming part of Letters Patent No. 124,421, dated March 12, 1872.

To all whom it may concern:

Be it knon that I, John Collicott, of West Roxbury, in the county of Norfolk and State of Massachusetts, have invented an Improvement in connection with "Boiler-Tube Scrapers;" of which the following, when taken in connection with the accompanying drawing, is a full and exact specification:

My invention relates to a tube-scraper or flue-cleaner, and consists mainly in causing the arms to be spread by means of spiral springs set over or upon spurs, the said arms being provided with stops, as fully described below.

In the accompanying drawing, Figure 1 is a view of a boiler-tube scraper embodying my invention. Fig. 2 is a section of the same, showing the positions of the springs and spurs. Fig. 3 is a section of one of the arms.

a a are the arms. b b are spiral springs, setting over and held in place by the spurs c c c c d is a stop or ledge.

In practical operation, as the scraper, expanded by means of the spurs c c, enters the tube, it contracts to the size of the inside of the tube, scraping against all portions thereof, and removing entirely all deposit. The ledge

d prevents the arm from expanding too much, and the spurs c c c c prevent the springs from dropping out. The scraper is inserted by means of a long rod, as usual. Of course, scrapers of different sizes are manufactured to fit tubes of different or smaller diameters.

The accompanying drawing corresponds in size to some of the scrapers in use.

I do not claim anything new in the scraping-edge, the heads, ribs, or rod; neither do I claim anything covered by patents numbered 66,387 and 89,941.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination and arrangement of the stop or ledge d and arms a with the spiral springs b b and spurs c c c c, the whole being combined, arranged, and constructed for the purposes above described, and substantially in the manner hereinbefore specified.

JOHN COLLICOTT.

Witnesses:

HENRY W. WILLIAMS, B. W. WILLIAMS.