

W. Rogers,  
Molding Hollow-Ware.  
No 5,442. Patented Feb. 8, 1848.

Fig: 1.

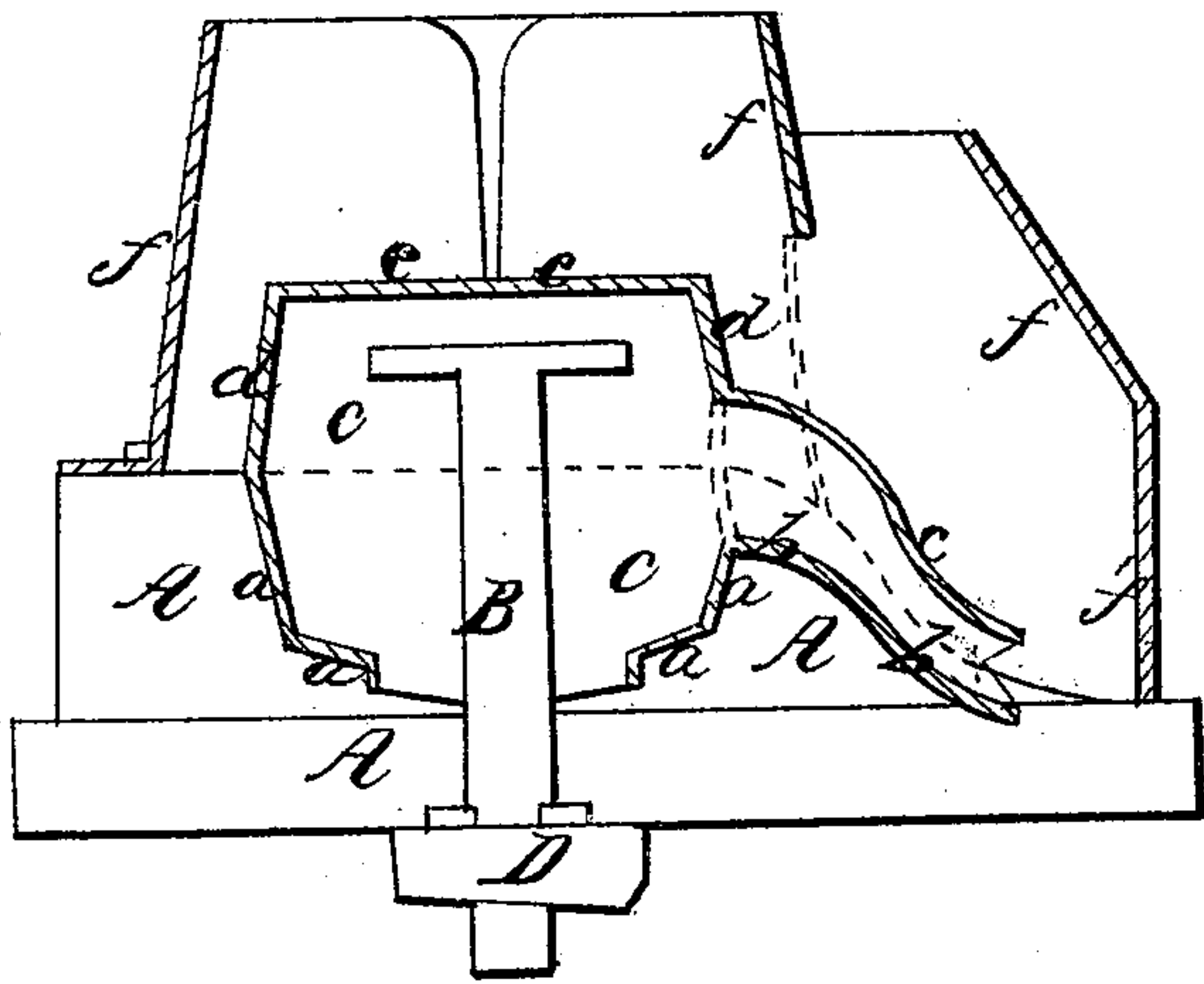


Fig: 2.

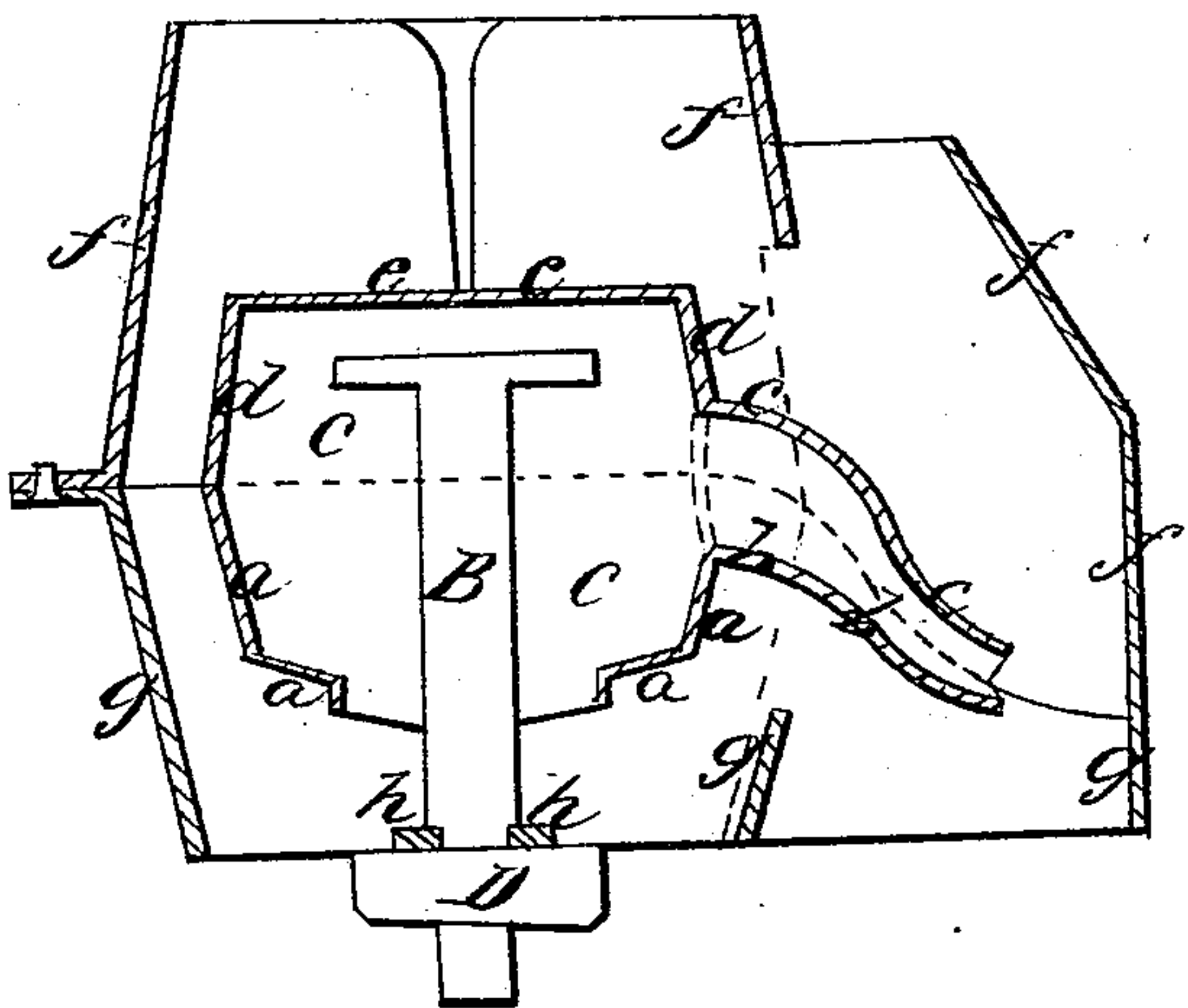
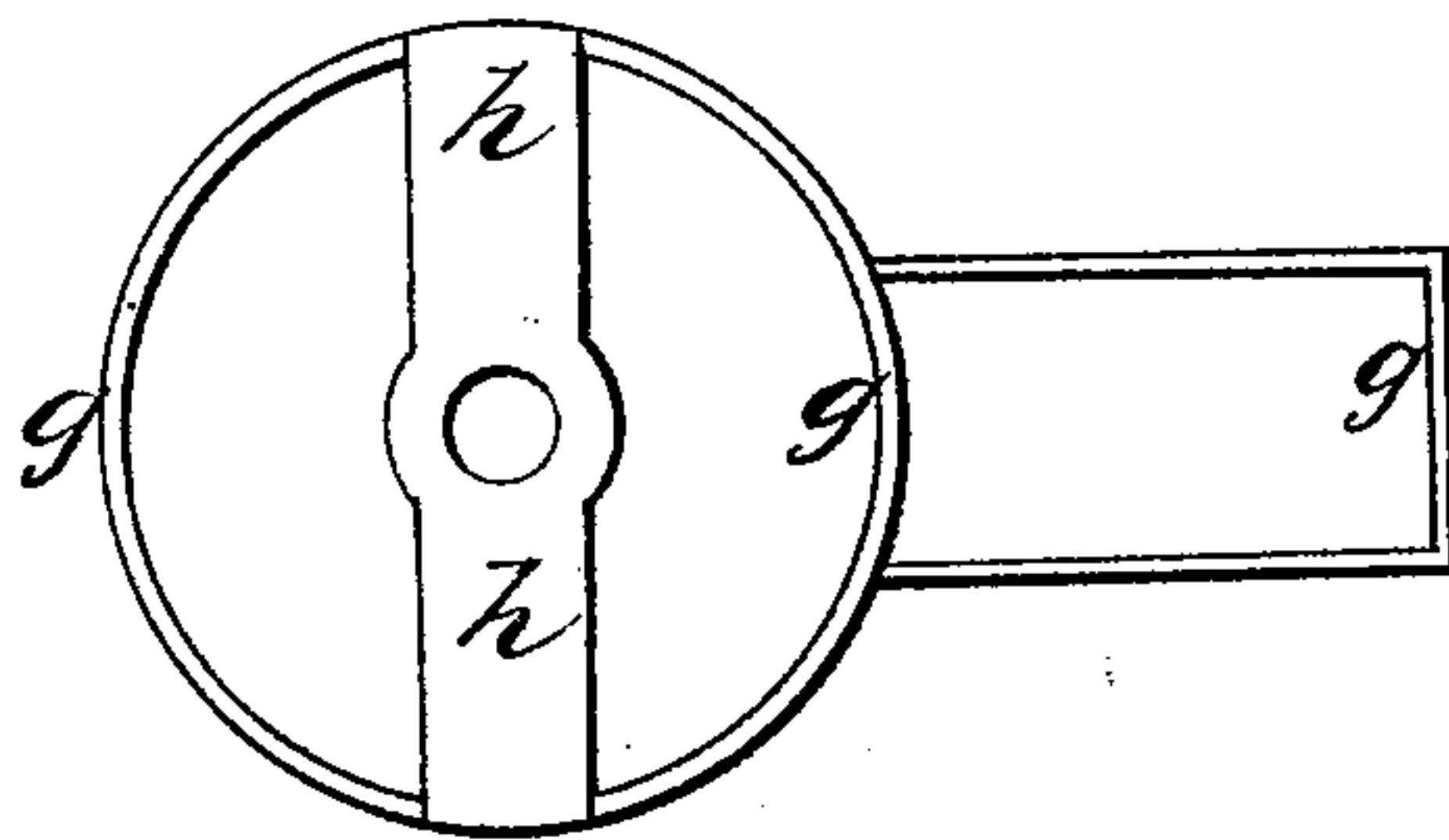


Fig: 3.



# UNITED STATES PATENT OFFICE.

WILLIAM ROGERS, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN MOLDING HOLLOW WARE.

Specification forming part of Letters Patent No. 5,442, dated February 8, 1848.

*To all whom it may concern:*

Be it known that I, WILLIAM ROGERS, of the district of Southwark, in the county of Philadelphia and State of Pennsylvania, iron-founder, have invented a new and improved manner of preparing the flasks and patterns for the molding of tea-kettles and of other kinds of bellied hollow ware; and I do hereby declare that the following is a full and exact description thereof.

In the accompanying drawings, Figure 1 represents a vertical section through the middle of the pattern of the kettle, of one-half of the flask, and of the follow-board, showing the lower half of the kettle, its inside, and the inner part of the spout as molded. Fig. 2 is a similar section through the flask and pattern after the molding has been completed and the flask is ready to be separated for the removal of said pattern.

A A is the follow-board, which is hollowed to receive that part of the pattern which is to constitute the top half of the kettle and of the spout. B is the anchor for supporting the core C, which anchor is keyed to the follow-board by a wedge at D. The part *a a* of the pattern is placed in the hollow in the follow-board, which is prepared to receive it. The lower half, *b b*, of the spout-pattern is also laid within an excavation adapted to it, and the other half-pattern, *c c*, of the spout and *d d* of the kettle placed on the lower halves. The pattern forming the bottom part of the kettle is in itself in two parts, the larger portion of the bottom of said pattern consisting of a circular plate or disk, *e e*, which is to be left out until the core C C is molded, when said plate *e e* is to be put in place. The cope or upper portion, *f f f*, of the flask is then put on the follow-board, as shown in Fig. 1, and the molding of the lower portion of the kettle completed. The core of the spout is to be managed in the usual way. This completes the operation, so far as Fig. 1 is concerned. The whole is then to be inverted, the key D of the anchor taken out, and the follow-board A A

removed. The drag or lower portion, *g g*, of the flask is then to be placed on the part *d d*, and the molding effected around the part *a a b b* of the pattern. The anchor B is then to be made fast to the drag or part *g g* of the flask, for which purpose there is a bar, *h*, that crosses the mouth of said drag, as seen distinctly in Fig. 3, which is a view of the outer edge of that half of the flask. The flasks may then be taken apart and the pattern removed, and on putting and securing them together the mold is ready for the pouring.

My tea-kettle pattern, as represented, is in five parts; but there are two pieces not shown in the drawings, which pieces form the ears to which the handles are attached. These it has not been thought necessary to exhibit, as they are arranged and managed in the same way with those in kettles molded from patterns otherwise constructed, and have not anything therefore to do with the principle on which I proceed, which is applicable to bellied hollow ware of various kinds, whether furnished with ears or not.

Having thus fully described the manner in which I construct my patterns and flasks for the molding of tea-kettles and other hollow ware of a like character, what I claim therein as new, and desire to secure by Letters Patent, is—

The forming of the patterns in the manner set forth in their principal parts, there being a movable piece or disk, *e e*, in the bottom of the pattern, for the purpose of molding the core on the anchor B, which anchor, after the lower half of the kettle has been molded, is unkeyed, and then keyed to the bar *h*, which crosses the mouth of the drag, for the purpose and in the manner described, the pattern and flask being, as a whole, constructed, arranged, and combined as herein fully set forth.

WM. ROGERS.

Witnesses:

ROBERT HOFFMAN,  
WM. J. YOUNG.