

EDWARD WALSH.
Improvement in Pipe-Molds.

No. 126,354.

Patented April 30, 1872.

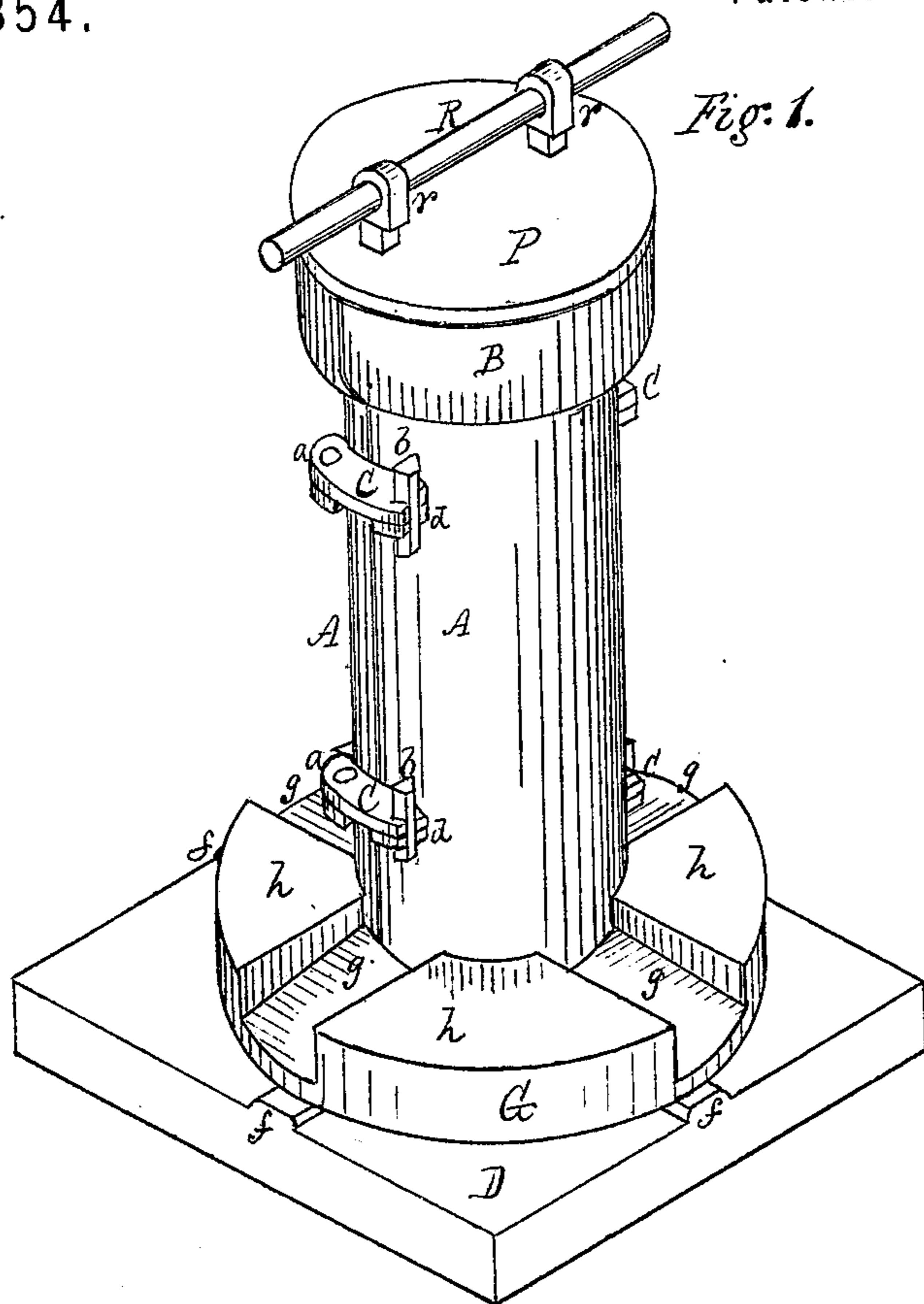


Fig. 1.

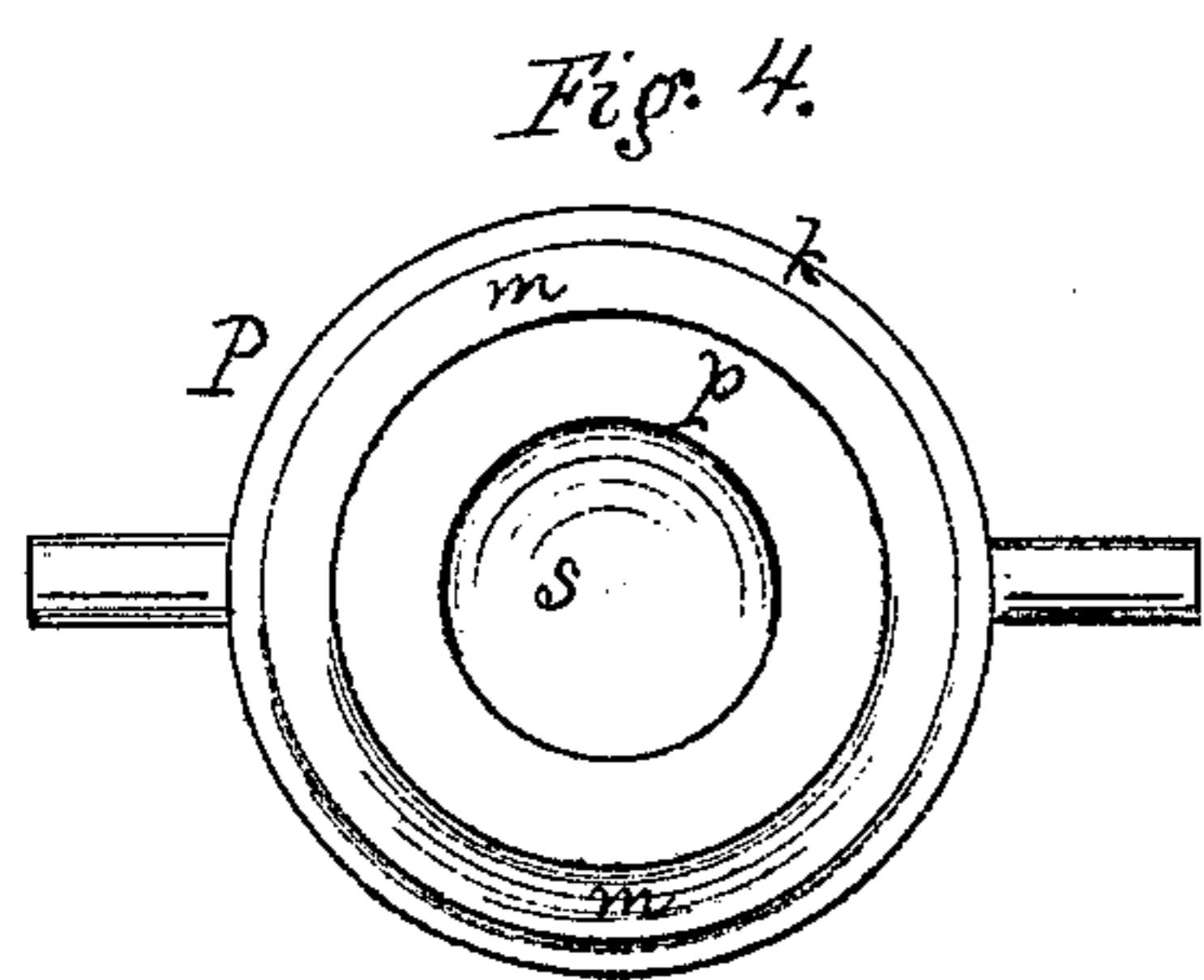


Fig. 4.

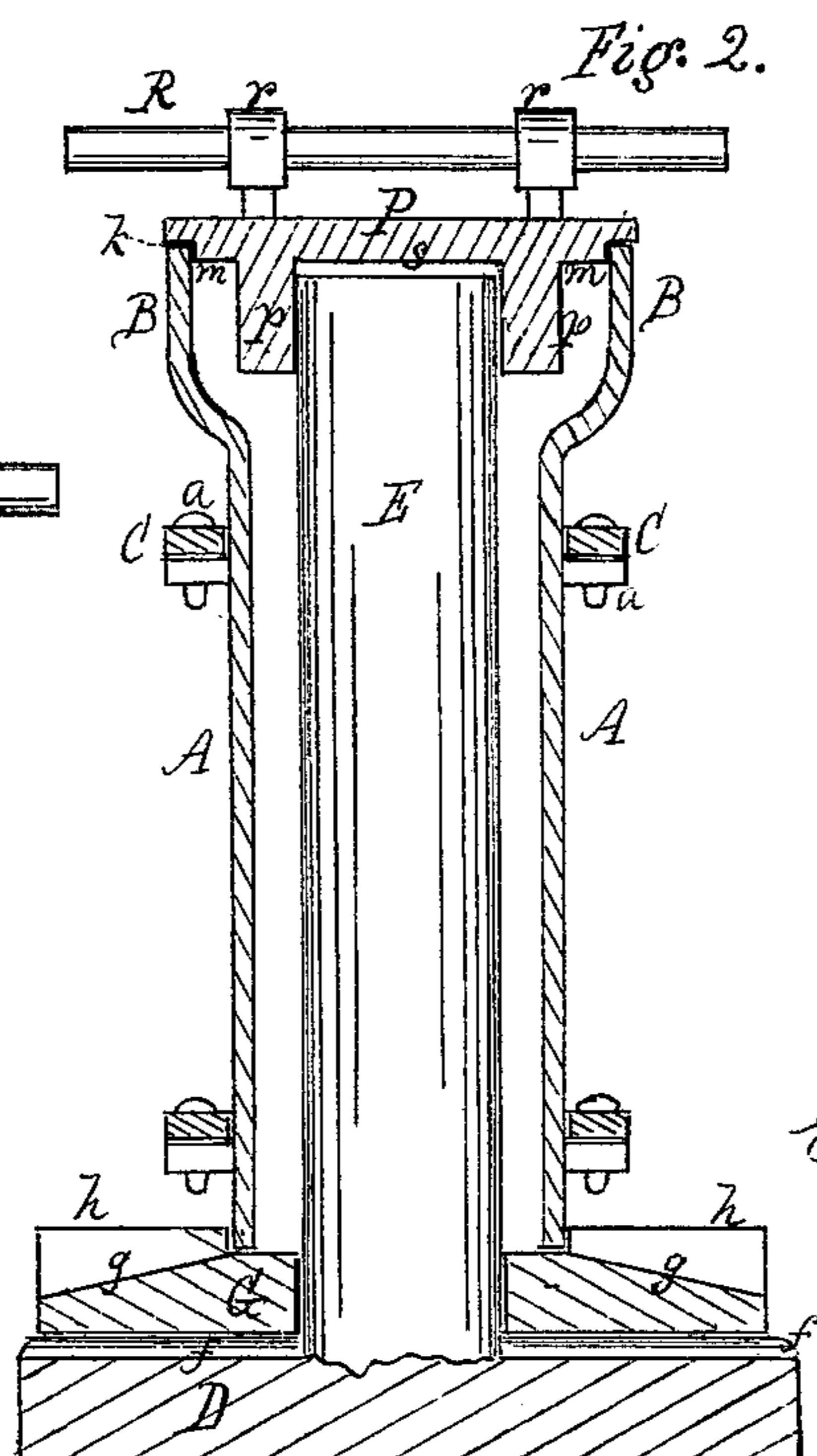


Fig. 2.

Fig. 3.



Witnesses.
A. Q. Allis
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UNITED STATES PATENT OFFICE.

EDWARD WALSH, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN PIPE-MOLDS.

Specification forming part of Letters Patent No. 126,354, dated April 30, 1872.

Specification describing a certain Improvement in Pipe-Molds, invented by EDWARD WALSH, of the city of Rochester, in the county of Monroe and State of New York.

This mold is designed for making sewer and drain pipe; and the invention consists in the devices for finishing the coupling-heads of the pipe, for clamping the halves of the mold together, and for draining off the surplus water at the bottom, as hereinafter described.

In the drawing, Figure 1 is a perspective view of my improved mold; Fig. 2, a vertical section of the same; Fig. 3, a plan of one of the clamps; Fig. 4, a bottom view of the finishing head or block.

A A are the two halves or sections of the mold, provided with the ordinary enlarged head B for forming the coupling-heads of the pipes. These halves are coupled together by means of concentric clamps C C, pivoted at *a a* to one-half, and connected, by means of wedging and dovetailed keys *b b* passing through corresponding holes *c c* of the ends of the clamps and lugs *d d*, to the other half. By this means the clamps may be swung around out of the way in uncoupling the parts to remove the cast; and in coupling they fit closely to the sides of the molds and produce an extended bearing, which always keeps the parts in place under all circumstances, and they can be drawn up as closely as possible. They are used on opposite sides, both at the top and bottom, as shown. They also furnish holds by which to lift the mold. This arrangement forms one feature of my invention. Inside the mold, and attached fast to the fixed base D, is the ordinary core E, which extends nearly to the top of the mold, leaving space between itself and the side of the molds to form the cast. The base is provided with a series of raised ribs, *f f*, on which rests a collar-block, G, that forms the base for the bottom of the mold to rest on. This block slides loosely over the core, to which it fits closely, and has a series of water-ways, *g g*, leading from the center outward (preferably inclined) from the level on which the bottom of the mold rests. The intermediate elevations *h h* simply inclose the socket in which the mold rests, and thus keeps the latter in place. The

object of this collar-block is to allow the surplus water to escape through the channels *g g*, thereby leaving the lower end of the cast dry when removed from place, and preventing the roughness and breakage of the edge that invariably occurs in common molds. It also furnishes the hold by which the mold is lifted from the core when the cast is formed. The use of this block resting upon the ribs *f f* enables the cast to be started easily from the core by simply placing a lever in the space between the collar-block and base and raising upward, after which the whole is easily raised by hand. This block also forms one feature of my invention. On top the mold a finishing-block, P, is employed, which consists of a disk with an outer seat, *k*, which rests on the top edge of the mold. Inside this is a finishing-face, *m*, whose width is the same as the upper edge of the cast to be formed. This face is perfectly smooth and flat. Within this is a depending collar, *p*, which forms the core to the enlargement of the mold or head of the mold, and which has a central socket, *f*, in which fits the upper end of the main core. On top the finishing-block is mounted a cross-handle or lever, R, resting in bearings *r r*. When the mold has been filled with clay the finishing-block is applied on top and pressed into its seat. This action compresses the material closely in the mold. The cross-handle is then seized in the hands of the operator and turned one way and the other. By this action the finishing-face *m* is swept over the upper end of the cast, which is thereby made square and smooth and finished up to form the coupling. This finishing-block is of much importance, as it enables me to produce the head of the pipe in a finished and much better form than it has heretofore been done, and without the use of a trowel.

What I claim, and desire to secure by Letters Patent, is—

1. In a pipe-mold, I claim the finishing-block P provided with the seat *k*, finishing-face *m*, depending collar *p*, and socket *s*, in combination with the molds A A and the core E, all constructed and operating substantially as set forth.

2. In a pipe-mold, I claim the loose collar-block G provided with the water-ways *g g*,

when combined with the mold A A and ribbed brace D, as herein described.

3. In a pipe mold, I claim the concentric coupling clamps C C, combined with the halves A A of the mold, and secured by the dovetailed keys *b b*, as herein described.

In witness whereof I have hereunto signed

my name in the presence of two subscribing witnesses.

EDWARD WALSH.

Witnesses:

R. F. OSGOOD,
ARCHIE BAINE.