

S. Williams,
Casting Curred Pipe.

No 54,826.

Patented May 15, 1866.

Fig 2.

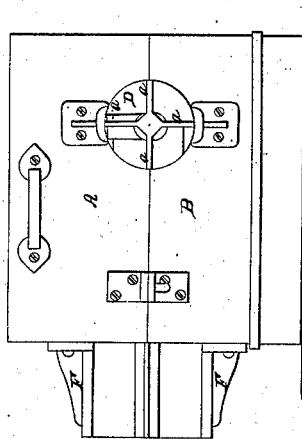


Fig 4.

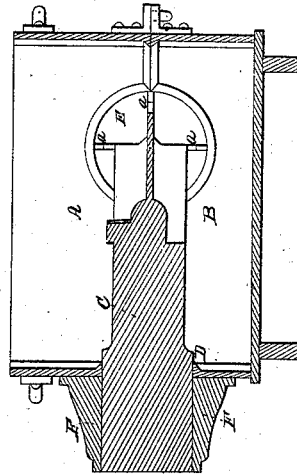


Fig 3.

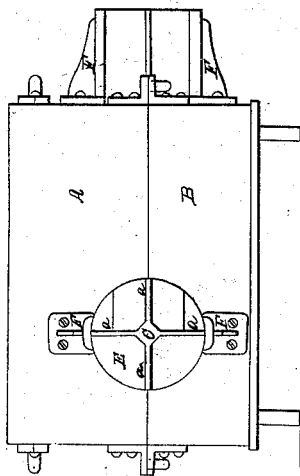
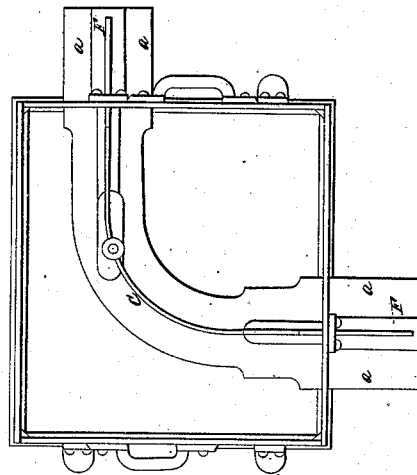


Fig 1.



Witnesses.
Samuel St. Pierre.
George Andrews

Inventor.
Seth Williams
by his attorney
H. C. Eddy

UNITED STATES PATENT OFFICE.

SETH WILLIAMS, OF FOXBOROUGH, MASSACHUSETTS, ASSIGNOR TO HENRY C. AND C. T. WILLIAMS, OF SAME PLACE.

IMPROVEMENT IN MOLDS FOR CASTING CURVED PIPES.

Specification forming part of Letters Patent No. 54,826, dated May 15, 1866.

To all whom it may concern:

Be it known that I, SETH WILLIAMS, of Foxborough, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Molds for Casting Curved Pipes; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view of a molding-flask and core-stock as provided with my invention. Fig. 2 is an end view, and Fig. 3 a side elevation, and Fig. 4 a longitudinal section, of the same.

Heretofore there has been much difficulty experienced in properly adjusting and supporting in its mold the core of a curved pipe. Unless the core be arranged concentrically in the mold or matrix, the pipe will be of an unequal thickness, and consequently defective. To effect the correct arrangement of the core, iron supports to suspend or sustain it in the matrix are commonly employed, such supports being retained in whole or in part in the pipe after the founding of it. It has been very desirable to find some means of otherwise fixing the core, such as will dispense with the iron supports. My invention enables me to accomplish this.

In the drawings, A and B are the two halves of a common molding-flask, and C is the stock of the core, the remainder of the core consisting of molding-sand applied to and duly formed in the stock.

The stock is to be made in the usual manner, except it is to be extended so as to pass through two circular openings, D E, one of which is made in one end and the other in one side of the flask, one half of each opening being formed in the upper and the other in the

lower part of the flask. There are two brackets, F F, extended from the flask and with respect to each of the openings in manner as represented.

The core-stock is formed, where it goes through each opening and between its two brackets, with four wings, *a a a a*, projecting radially from it and at right angles with each other, the whole being as shown in the drawings. The opposite edges of each two wings in one plane are parallel, and their distance apart is equal to the diameter of the opening, which is also equal to the distance between the two parallel brackets of such openings.

After the matrix may have been formed in the sand held by the two parts of the flask, and so as to be duly centralized with respect to the openings through the side and end of the flask, or, in other words, so that the axis of the matrix prolonged would pass through the centers or axes of the two openings, we have only to lay the core-stock in the two half-openings of the lower portion of the flask and next put the upper portion of the flask in place, when the core-stock will at once be brought into its correct position and be there held by the action of the openings, or the same and its brackets on its wings or extensions.

What, therefore, I claim as my invention is—

The arrangement and combination of the wings or extensions of the core-stock with the two openings, or the same and the brackets applied to the two parts of the flask, substantially as specified.

SETH WILLIAMS.

Witnesses:

R. H. EDDY,
FREDERICK CURTIS.