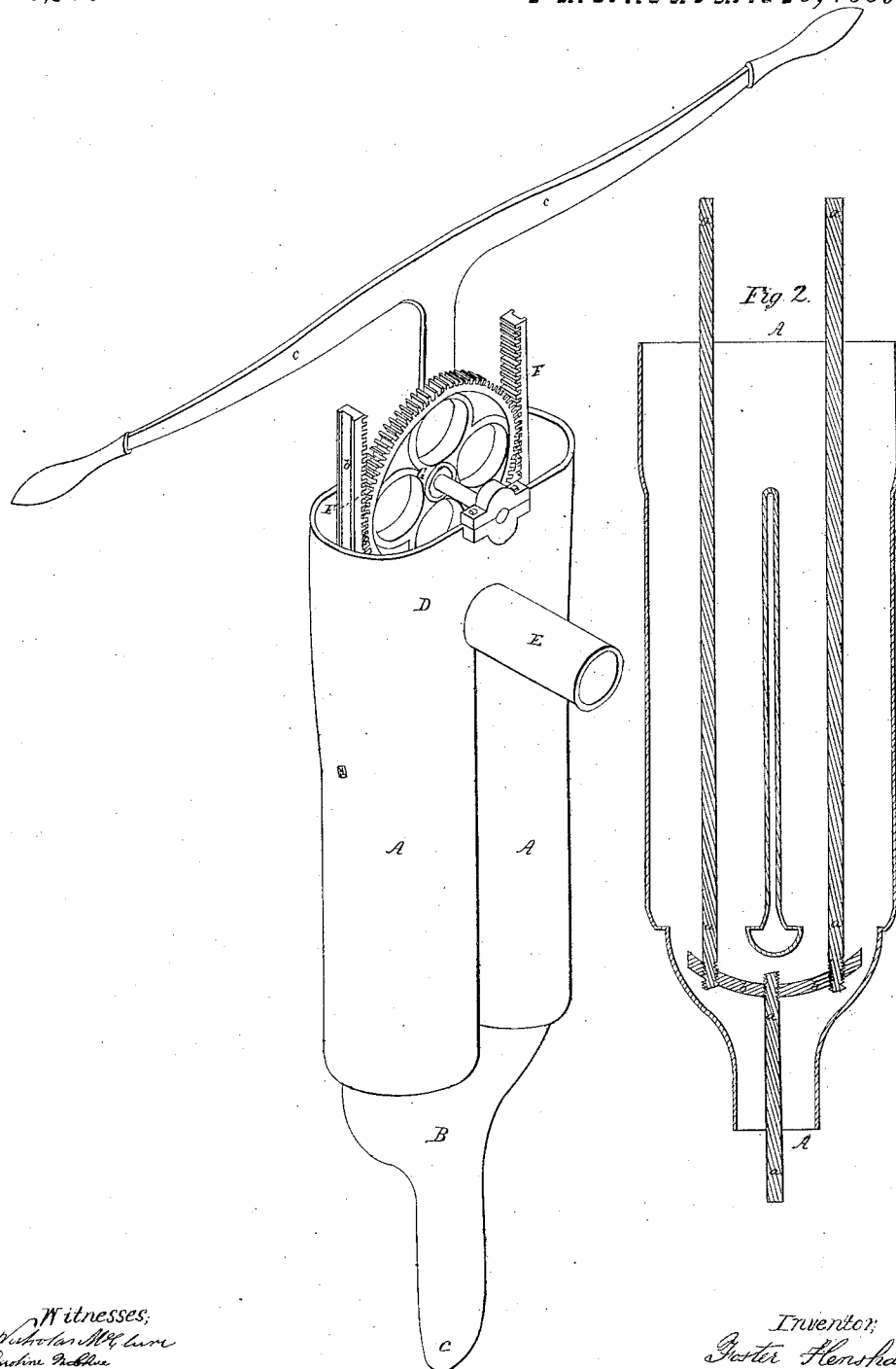


*F. Henshaw,
Casting Pumps.*

№ 1,206

Patented June 29, 1839.



*Witnesses,
Nicholas M. Lane
Richard P. Miller*

*Inventor,
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UNITED STATES PATENT OFFICE.

FOSTER HENSHAW, OF BROOKFIELD, MASSACHUSETTS.

IMPROVEMENT IN THE MODE OF PREPARING THE MOLDS FOR CASTING DOUBLE PUMPS.

Specification forming part of Letters Patent No. 1,206, dated June 29, 1839.

To all whom it may concern:

Be it known that I, FOSTER HENSHAW, of Brookfield, in the county of Worcester and State of Massachusetts, have invented a new and Improved Mode of Casting a Double Suction-Pump; and I do hereby declare that the following is a full and exact description thereof.

My invention consists in the process of manufacturing a double pump in one entire piece, as follows: I use a mold which gives the shape of the outside of the pump. I then proceed to make a core to shape the inside of the pump in the following manner: I make the core-shape in two parts, so that when they are put together the inside of the core-shape forms the shape of the inside of the pump. I then place iron rods, hereinafter described, in the inside of the core-shape. I use the common material for the core, which is rammed in around the rods, so that every part of the shape is perfectly filled, and when the core is thus made and dried it is placed in the mold upon which the metal is poured.

In order to obviate the difficulty of making a core in the crooked shape required, and to give it strength so that it can be taken out of the shape and placed in the mold without breaking, I make iron rods in four parts, so constructed that they can be screwed together or separated at pleasure. These rods are of such form and dimension that when connected together and placed in the core-shape they will occupy and coincide with the center of the hollow therein, or nearly so.

In the accompanying drawings, Figure 2, A A represent a portion of the core-shape. *a a* are three of the above-named iron rods, each having a screw, *c*, cut upon one extremity. *b b* is the fourth iron rod, which has three holes made through it transversely, one at its center and one near each end. These holes have female screws (cut in them so as to receive and fit the screws *c c*) on the ends of the other rods *a a*, so that by screwing or unscrewing the rods *a a* the whole can be connected or separated at pleasure. When the core is formed around these rods, as above described, they serve to strengthen and preserve it from breaking. When the casting is made around the core, it would be impossible to remove the rods if they were connected inseparably with each other; but by unscrewing the rods *a a*, respectively, from *b b*, the whole are separated and can be removed without difficulty.

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

The process of making a core in a double form upon the aforementioned iron rods or frame, and casting a double pump upon it in one entire piece, in the manner above described.

FOSTER HENSHAW.

Witnesses:

NICHOLAS MCCLURE,
CAROLINE MCCLURE.