

(No Model.)

L. B. BATTIN.

MOLD FOR CEMENT WROUGHT IRON PIPES.

No. 412,319.

Patented Oct. 8, 1889.

Fig. 1.

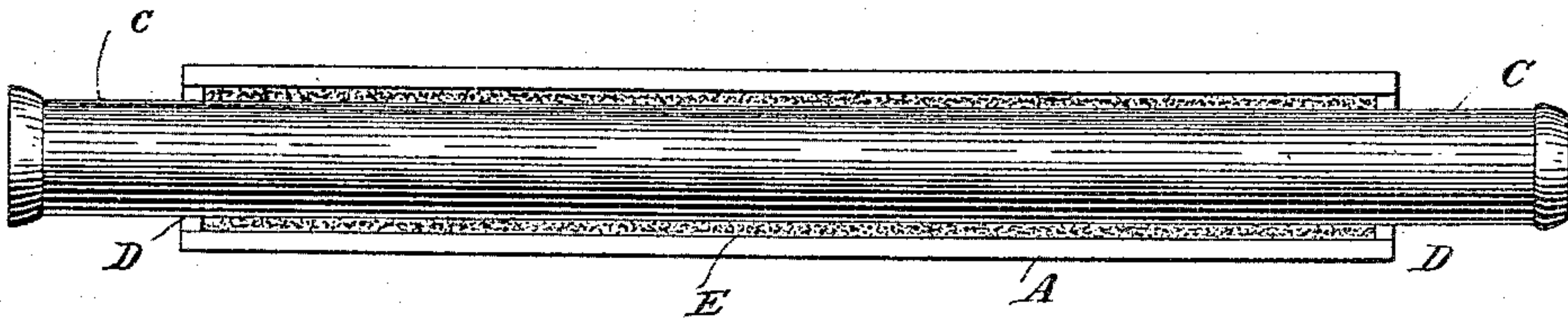


Fig. 2.

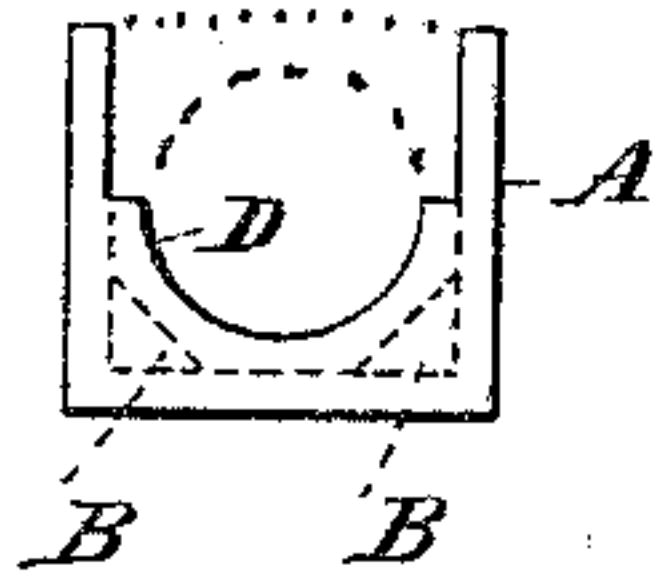


Fig. 3.

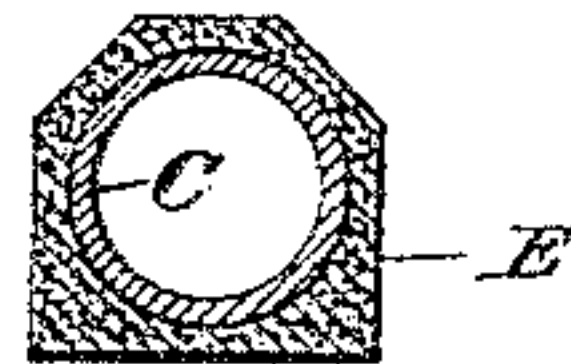
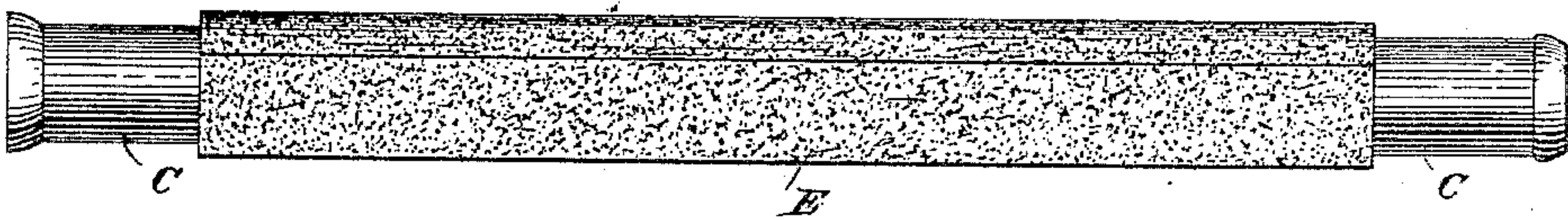


Fig. 4.



Witnesses

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MOLD FOR CEMENT WROUGHT-IRON PIPES.

SPECIFICATION forming part of Letters Patent No. 412,319, dated October 8, 1889.

Application filed October 16, 1888. Serial No. 288,224. (No model.)

To all whom it may concern:

Be it known that I, LAMBERT BERGMAN BATTIN, a citizen of the United States, residing at Elizabeth, county of Union, and State of New Jersey, have invented a new and Improved Mold for Making Cement Wrought-Iron Pipes, of which the following is a specification.

This invention relates to an improved mold for constructing and forming the outside cement covering of what is known as "cement wrought-iron pipes." Heretofore in the construction of this class of pipes, which are usually employed in subterraneous works—such as drains, &c.—it has been customary to place the cement covering upon the pipes by means of troweling. Subsequent to this a method was devised for retaining the cement covering upon the pipe by means of a wrought-iron jacket, which was improved upon later by providing a jacket that was perforated, so as to permit the escape of air through the perforated parts, said perforated parts thus serving as vents during the process of construction. Neither of these two later modes have been as successful as the old mode of troweling, for the reason that both have retained the objectionable feature of air-holes and vacant spaces in the cement filling between the pipe and the jacket, thus creating a condition fatal to the pipe.

My improved mold is intended to overcome the objection stated; and its object is to provide an economical method of constructing these cement wrought-iron pipes more quickly than by the old method, and to make the outside cement covering perfect and satisfactory.

To these ends my invention consists of a mold having a three-sided box, preferably made of wood, each end of the box being provided with a semicircle corresponding with the diameter of the pipe to be covered. The semicircle is of a sufficient height to give about three-quarters of an inch of space between the pipe and the bottom of the mold when the pipe is suspended in the semicircular bearings or pockets. This space between the pipe and sides of the mold constitutes the filling-in place for the cement. When the pipe is placed in this position—viz., each end resting on the semicircular end or bearing—

the cement or mortar is filled into the mold in the manner hereinafter described.

Referring to the accompanying drawings, Figure 1 is a plan view of one of my improved molds, showing the pipe resting therein and the cement partially filled in at the sides of the pipe between the pipe and the mold. Figure 2 is an end view of the mold, the pipe in this case being omitted. Figure 3 is a cross-section view of the completed pipe with the cement covering. Figure 4 is a longitudinal or side view of the same.

It will be seen by referring to the drawings that the ends of the pipe resting on the seats or bearings will extend some distance beyond each of said ends, and that when the pipe is so placed in position, as shown in Fig. 1, the cement or mortar can be easily and quickly inserted.

In Fig. 2 the construction of the mold is more plainly shown, and it will be seen that I prefer to fill in the lower corners on both sides, so as to prevent any undue waste of cement, the object being to create a uniform or nearly uniform thickness of cement or mortar all around the pipe. The pipe is finished by covering the upper part with cement, and is leveled off at the top even with the top of the mold.

The mold is shown at A, and the corners B are filled in, as above described and for the purposes given. The pipe C is laid on the semicircular seats or bearings D, and the mortar or cement E is filled in and around the same and finished as above described. When completed, the smooth portions of the pipe are flush with the top of the mold, thereby forming a bottom to the same, as shown in Fig. 3. It should be understood, however, that before I begin to fill in around the pipe I first fill the bottom of the mold, so that the pipe may be pressed down into its open top bearings, and thus insure the exclusion of air around its lower side, and when the pipe has been well seated in its bearings I proceed to cover it over even with the top of the mold, whose sides extend a distance above the top of the pipe. The cement may then be smoothed off with a paddle or other implement, to produce the flat bottom represented in Fig. 3.

I am aware that it is not new to construct

a pipe-mold of sections and to provide it with bearings or seats for the pipe or core, which forms the bore of the pipe, and I do not wish to broadly claim the same; but I am not
5 aware that it has ever been proposed to form a mold for the purpose set forth in the foregoing specification, with its sides projecting perpendicularly from the horizontal diameter of the mold, with its top open and its ends
10 divided horizontally through the center of the bearings or seats, so that the molded pipe may be removed from the mold without having to draw it through contracted portions of the mold or through portions or openings
15 which are of smaller diameter than the largest diameter of the pipe, as has heretofore been the case.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

20 A mold for casting on the cement of "cement wrought-iron pipe," which consists of a box square in cross-section, the strips B B filling the lower corners of said box, and end pieces in said box having circular bearings
25 divided horizontally through the center for support of the iron pipe, and the sides of said box being sufficiently high to extend a distance above said iron pipe when the latter is in its place, as set forth.

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Witnesses:

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