(Model.)

J. LOGAN.

PORTABLE MOLD FOR CISTERNS.

No. 265,522. Patented Oct. 3, 1882.

Fig. 1.

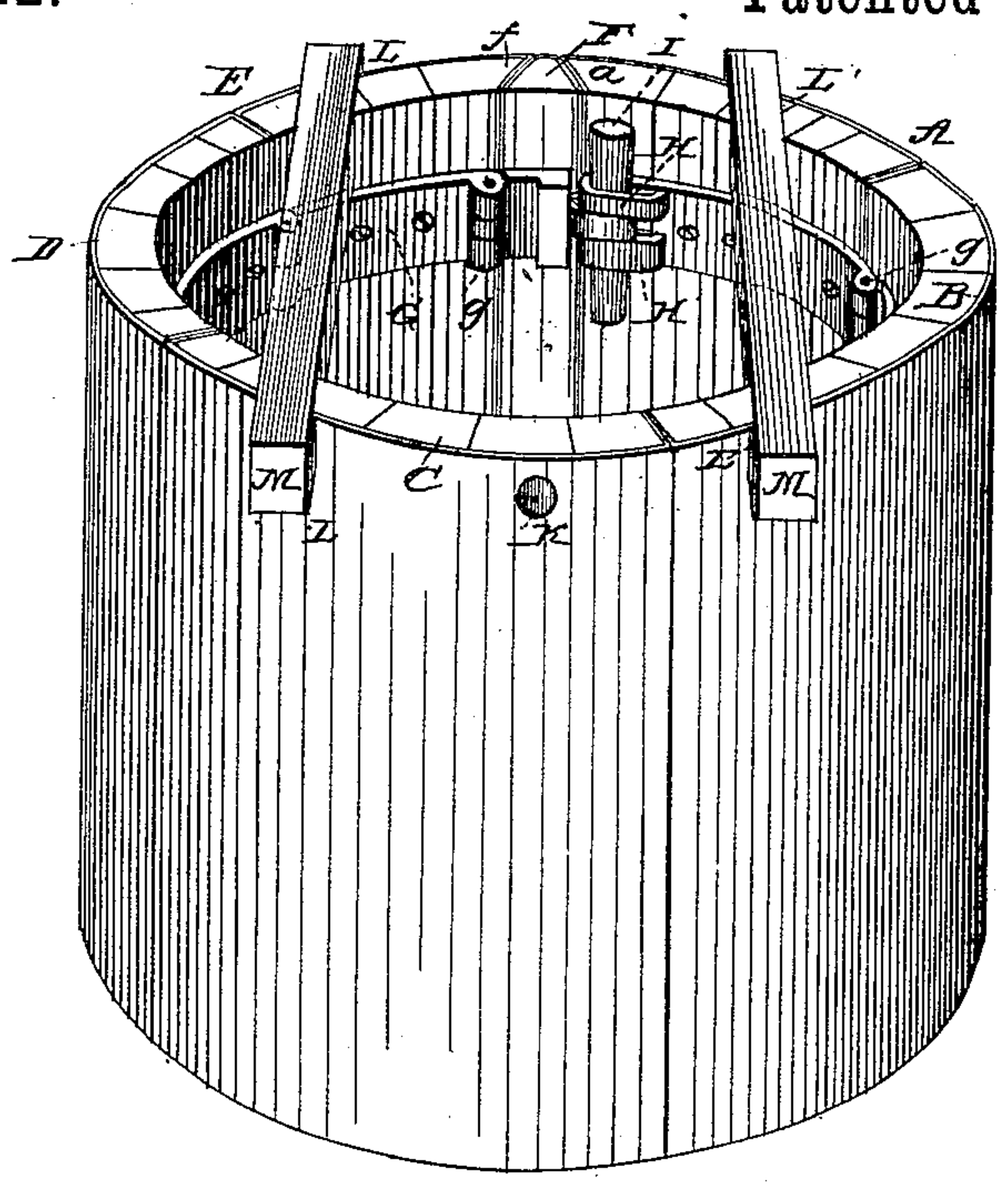


Fig. 2.

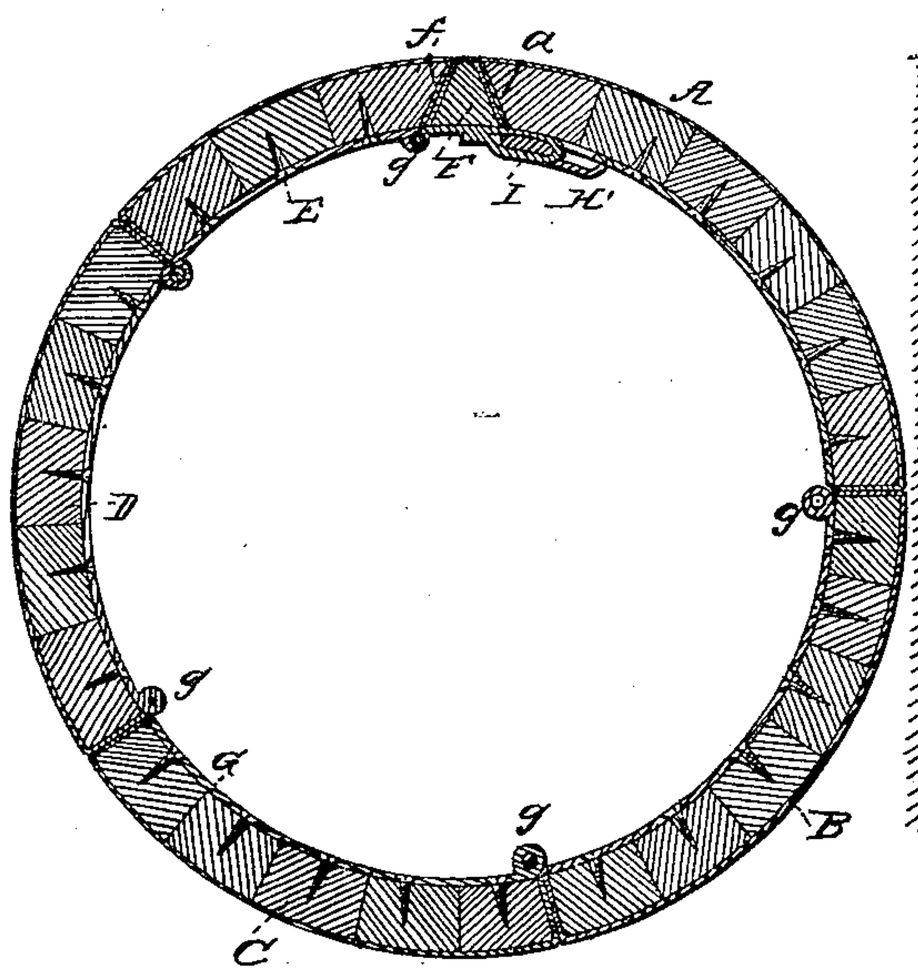
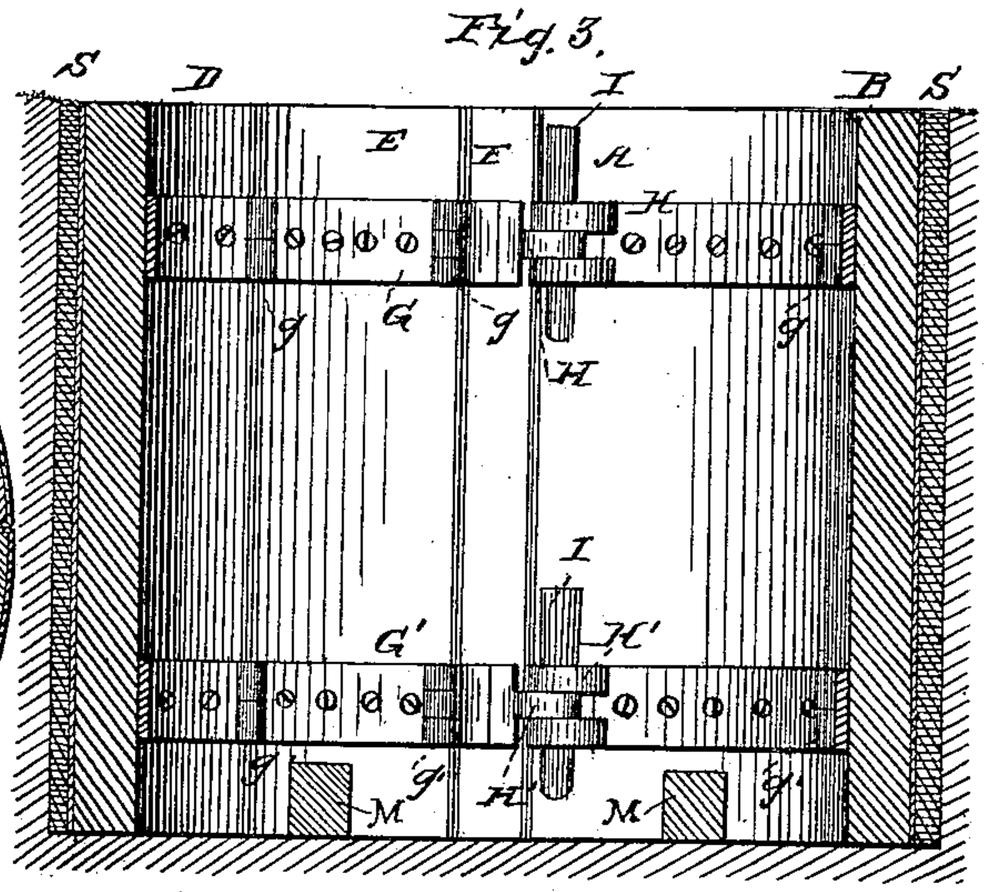


Fig. 3.



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UNITED STATES PATENT OFFICE.

JAMES LOGAN, OF WATERLOO, NEW YORK.

PORTABLE MOLD FOR CISTERNS.

SPECIFICATION forming part of Letters Patent No. 265,522, dated October 3, 1882.

Application filed July 15, 1882. (Model.)

To all whom it may concern:

Be it known that I, JAMES LOGAN, of Waterloo, in the county of Seneca and State of New York, have invented certain new and useful Improvements in Portable Molds for Cisterns; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my portable mold for cisterns. Fig. 2 is a cross-section of the same; and Fig. 3 is a vertical sectional view, showing the manner of its use or application.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to devices for molding cisterns in pits excavated for them in the ground, the molding material being cement, hydraulic lime, or some other suitable compound or composition which will "set" readily and become impervious to water when set; and it consists in the detailed construction and combination of parts of a separable mold, around which the cistern is cast or molded, as hereinafter more fully described and claimed.

In the present illustration of my invention I have shown a mold composed of five parts or sections, besides the key or binding piece; but there may be a greater or smaller number of sections, according to the size of the mold, which will of course depend upon the diameter which the finished cistern is to have. These parts or sections are respectively designated by the letters A, B, C, D, and E, the letter F designating the key-piece. Each part or section except the key-piece has a top and bottom band (shown at G and G′) bolted to its inner or concave face, and these bands are provided with separable pintle-hinges *g g′*, by means of which the several sections are connected movably and detachably to one another. The first and last sections—viz., A and E—are provided at the outer ends of their bands G G′ with interlocking loop-hinges H H′, which are adapted to be locked together by wedge-shaped keys I. The key-piece F is beveled to fit between the beveled edges *a* and *f* of the outer sections, A and E, as shown clearly in Figs. 1 and 2 of the drawings, the hinges H and H′ overlapping said key-piece and binding it firmly in its place when the mold is locked for casting.

K is a hole through which the discharge-pipe is inserted through the mold, and L L L′ L′ are notches cut so as to register by pairs, for the insertions of beams or planks M, the use of which will be described hereinafter.

The several sections which constitute the mold may be made of wood or metal, or of wood lined with zinc or other sheet metal on the outside. In the present illustration of my invention I have shown a mold of circular shape; but I do not confine myself to this or any other particular shape, so that the essential features in the construction of the mold are retained.

The mold is used as follows: A hole or pit is dug in the ground of a depth corresponding to that which the cistern is to have, but of a greater diameter. The bottom of this hole or pit is cleaned, leveled, and grouted, or covered with a layer of cement or concrete, after which the mold is placed vertically in the pit, with the parallel beams M M resting in the notches L L and L′ L′. Cement, béton, (concrete,) or any other suitable semi-fluid or plastic composition is poured into the space (designated by the letter S in Fig. 3) between the mold and the sides of the pit; and when this composition has set the mold may be withdrawn by first removing the wedges I and then the key-piece F, after which the other sections, A, B, C, D, and E, can readily be collapsed by folding on their hinges or detaching them from one another, for their ready removal, without injury to the sides of the newly-cast cistern.

It is obvious that the mold may be used above ground, if desired, by erecting a dirt wall around it, leaving a space between said wall and the mold, into which space the cement is poured; or it may be used in the casting of a cistern which shall be partially below and partially above ground by erecting a dirt wall around the pit in which the mold is to be sunk, of such a height as to reach up flush with the top of the mold.

I am aware that it is not new to construct portable cistern-molds in separable sections for the purpose of facilitating the withdrawal

of the mold after the cistern has been cast around it; nor do I claim broadly a separable or sectional cistern-mold.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a portable mold for cisterns, the combination, with the separable sections A, B, C, D, and E, of the detachable key-piece F, having sides tapering toward the outside of the mold, adapting it to be wedged between the beveled sides *a* and *f* of the sections upon which it impinges, substantially as and for the purpose shown and set forth.

2. In a portable mold for cisterns, two or more pairs of separable sections having notches registering in pairs with each other, and adapted to receive the parallel beams or cross-bars M M, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JAMES LOGAN.

Witnesses:
ALBERT LUCAS CHILDS,
HORATIO A. MARSHALL.