(No Model.)

C. B. HEWITT.

MOLD FOR DRAIN TILES.

No. 297,995. Patented May 6, 1884.

Fig. 1.

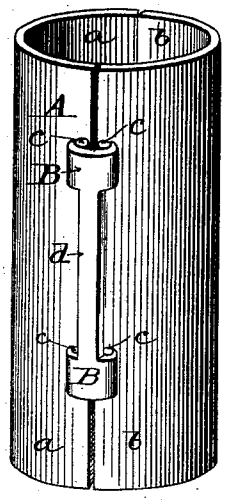


Fig. 3.

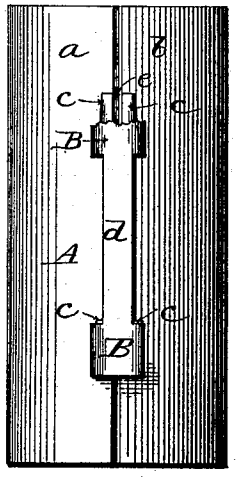
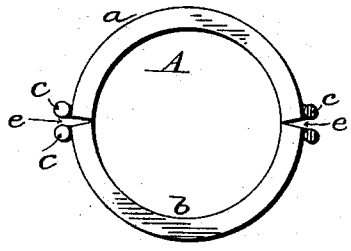


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES B. HEWITT, OF RACINE, WISCONSIN, ASSIGNOR TO THE RACINE CEMENT AND PIPE COMPANY, OF WISCONSIN.

MOLD FOR DRAIN-TILES.

SPECIFICATION forming part of Letters Patent No. 297,995, dated May 6, 1884.

Application filed February 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES B. HEWITT, of Racine, in the county of Racine and State of Wisconsin, have invented certain Improvements in Molds, of which the following is a specification.

My invention relates to flasks or molds for use in the manufacture of cement pipes; and it consists in a novel form of joint and clamp, whereby the flask is caused to automatically open a short distance and ease or release the pipe when the clamp at one end is removed.

In the accompanying drawings, Figure 1 represents a perspective view of a flask or mold constructed in accordance with my invention; Fig. 2, a top plan or end view of the same, and Fig. 3 a side elevation, with the clamp partly broken away.

As hitherto commonly constructed, flasks of this character have been formed of two semicircular parts, and united by independent clamps at suitable distances apart. Under my construction the several clamps at one side of the flask are formed in one continuous piece, or connected by an intermediate bar, so that they may be simultaneously and readily handled and applied, and the lugs to which the clamps are applied are made tapering, so that the sections can be drawn together as firmly as desired, and so also that when the clamps at one side are released or removed the tension or pressure of those at the opposite side shall cause the separation of the released side to a limited distance permitted by the peculiar form of the lugs.

In the drawings, A indicates the flask, composed of two semicircular parts, *a b*, of like size and form, brought together at their edges to form a hollow cylinder or mold. The parts *a b* are both formed with lugs *c* at or near their abutting edges, said lugs projecting from the outer faces of the flask-sections, extending longitudinally thereof, and made longitudinally tapering, as more plainly shown in Fig. 3, the rear faces being inclined relatively to the edges of the flask-sections. These lugs or ears *c* are rounded and undercut on their rear faces, as shown in Fig. 2, and their front or opposing faces are beveled slightly, as shown in the same figure, so that when the sections *a b* are put together a slight space is left between them at the outside. The lugs are designed to receive clamps or fastening devices B, and two or more of said lugs are formed near each edge of the sections, as shown in Figs. 1 and 3. The clamps consist merely of C-shaped clasps, made slightly tapering to correspond to the taper of the lugs *c*, and adapted to straddle and draw together opposing lugs of the abutting sections, and in order to avoid unnecessary multiplication of parts and undue labor of application and handling, I make two or more clamps in one piece or casting, uniting them by a connecting strip or bar, *d*, as shown in Fig. 1. This construction permits the simultaneous application or removal of the several clamps at either side of the flask.

As before mentioned, and as indicated in Fig. 2, the lugs and clamps are employed at both sides or joints of the flask, and when applied the flask is for the time a hollow cylinder closed on all sides, within which the pipe is formed in the usual manner. When the pipe is formed and ready for removal from the flask, the clamps at one side are driven back and withdrawn from the lugs, permitting the separation of the parts *a b* at that side, and as soon as thus released the sections open by reason of the strain or tension of the tightly-drawn clamps at the opposite side, but only to the short distance permitted by the space *e* between the lugs *c*. The opening or separation is sufficient to loosen the mold from the pipe, then the clamps on the other side being driven back, lifted off and removed, the two parts *a* and *b* are removed separately from the pipe, which is thus left standing in a perpendicular position.

It is found in practice that owing to the greater facility of manipulation of this flask, as compared with others, the product of each flask is nearly doubled.

I am aware that a mold has been made of sheet metal, open at one side only, and provided with lugs or studs over which slotted clamping-plates work to contract or expand the mold; but such mold cannot be removed from the pipe or the pipe from the mold, except longitudinally.

I am also aware that two mold-sections have been hinged together by a common hinge-joint and secured by pins passing through eyes at

the meeting-edges. These constructions I do not claim.

My clamps are removable both in front and in rear. Their construction is such that when the clamps at one side are removed those at the other side cause the sections to open, and the sections can be entirely disconnected in an instant, if desired.

Having thus described my invention, what I claim is—

1. In combination with flask-sections *a b*, having two or more pairs of lugs at the line of meeting, removable clamps B, connected by a strip or bar, substantially as shown, whereby the several clamps may be applied or removed simultaneously and by a single operation, and the mold-sections separated one from the other.

2. In combination with flask-sections *a b*, provided with two or more pairs of lugs, *c*, at the meeting line of the sections, clamp B, consisting of two or more clasps adapted to engage with or to be removed from the lugs at will, and connected by a bar, *d*, as shown.

3. In a flask, the combination of two sections, *a b*, completely separable from each other, each provided near their edges with one or more lugs, *c*, tapered in the direction of the length of the sections, and a clamp for each pair of said lugs, substantially as shown and described.

4. In combination with flask-sections *a b*, each provided with lugs *c*, having beveled front faces and undercut rear faces, clamps B, applied to said lugs, substantially as and for the purpose set forth.

5. The herein-described flask for use in the manufacture of cement pipe and like articles, consisting of sections *a b*, each provided with two or more lugs, *c*, at or near both edges, said lugs tapered longitudinally and beveled on their front faces, and clamps B, straddling and drawing together said lugs, as and for the purpose explained.

CHARLES B. HEWITT.

Witnesses:
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JOHN F. BICKEL.