

W. A. BUTLER.

Molds for Casting Water-Traps.

No. 143,327.

Patented September 30, 1873.

Fig. 1.

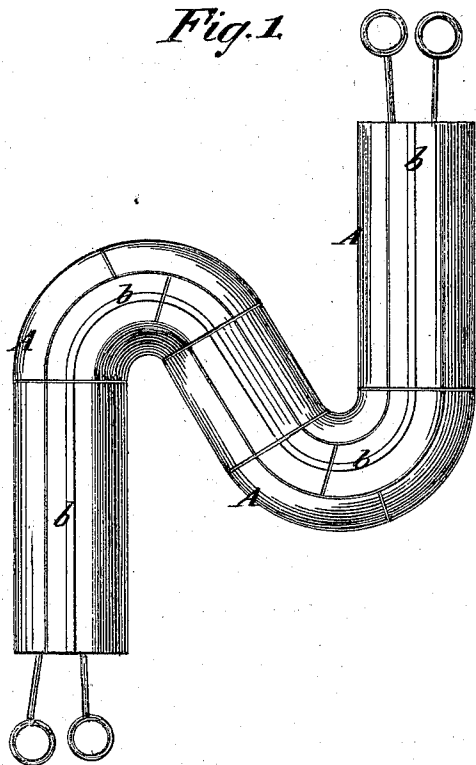


Fig. 3.

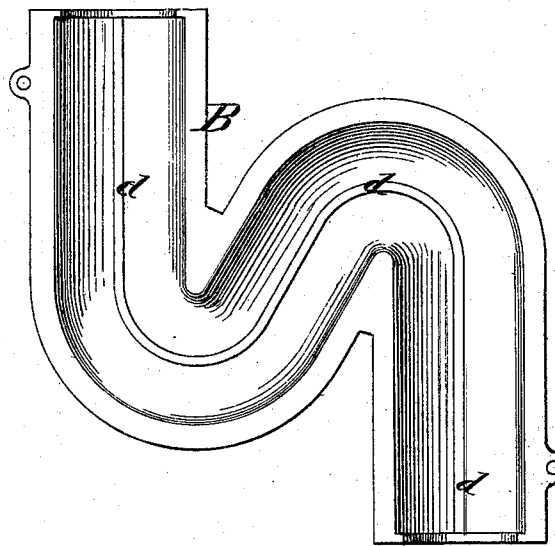


Fig. 2.

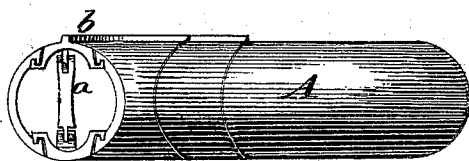
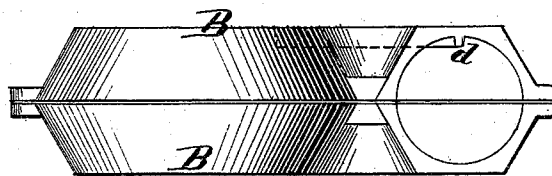


Fig. 4.



Witnesses

John Becker
Fred Haynes

Wm A. Butler
by his Attorneys
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UNITED STATES PATENT OFFICE.

WILLIAM A. BUTLER, OF NEW YORK, N. Y.

IMPROVEMENT IN MOLDS FOR CASTING WATER-TRAPS.

Specification forming part of Letters Patent No. **143,327**, dated September 30, 1873; application filed June 5, 1873.

To all whom it may concern:

Be it known that I, WILLIAM A. BUTLER, of the city, county, and State of New York, have invented an Improvement in Cores for Casting Water-Traps, of which the following is a specification:

Figure 1 is a face view of a core of my improved construction; Fig. 2, a side view thereof. Fig. 3 is a face view of one-half of the mold of my improved construction; Fig. 4, a side view of the same.

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

The object of this invention is to so construct a core or mold, or both, wherein water-traps are cast, that seams or openings may be left in such traps for promoting the convenient loosening of the sections of the core. In employing sectional cores for casting water-traps it frequently occurs that the lead or other metal used for the trap, will enter between the crevices of the sections of the core, and thereby bind such sections together so thoroughly that it is exceedingly difficult to cause them to collapse; and the devices employed for drawing or collapsing the core are oftentimes broken or injured when the core is so bound by the trap. My invention consists in leaving a projecting rib along the entire length, or a portion of the length, of the core, so that such rib, reaching to the mold, will cause a seam or aperture through the trap, permitting, after the mold has been opened, instruments to be introduced from without through the trap, and against the exposed sections of the core, for forcing them inward and insuring the prompt and convenient collapse of the core. Such projecting rib may as well, however, be formed on the mold to reach as far as the core, or part of the projection may be formed on the mold and part on the core—always, however, securing the same result.

In the accompanying drawing, the letter A represents the core of a mold for casting the ordinary S-shaped traps, which traps are usually cast of lead or other soft metal. B is the mold embracing the core. This core is usually made of two halves, or otherwise, of convenient construction. The core is composed of small sections of plates, which are held in shape by inner links *a*, as indicated in Fig. 2, and as described with reference to a former

invention made by me, and for which Letters Patent have been allowed. On the core, at any convenient part thereof, but, by preference, on one of the plane surfaces of the same, is formed a projecting rib, *b*, which extends along the entire length of the core, as shown in Fig. 1, but which may as well be made in smaller sections, its object being to form a slot or seam through the trap. When the rib *b* extends along the entire length of the core the seam will also be along the entire length of the trap, such seam being subsequently closed by soldering, or otherwise, after the core has been removed. It is evident that, for this purpose, the rib *b* must extend from the core against the inner face of the mold. Instead of forming a projection, *b*, on the core, I may as well arrange an inwardly-projecting rib, *d*, on the mold, as shown in Fig. 3, said rib *d* reaching the core and producing the same effect as the rib *b*. Either one or the other of the ribs may be used, or there may be a rib, *b*, formed on the core, but extending only a part of its length, and also, at the same time, in the mold appertaining thereto, an inwardly-projecting rib, *d*, extending over that part where the rib *b* does not reach, Figs. 2 and 4 showing the core and mold, respectively, provided with ribs that extend half their length. Such sectional ribs may, if desired, also be on opposite sides of core and mold. When the trap is cast in a mold, B, having a sectional core, A, the system of projections or ribs will cause continuous or intermittent apertures or seams to be formed in such trap, through which apertures or seams tools can be introduced to reach against the exposed sections of the core, and to force these sections inward, permitting, therefore, the ready removal of the sectional core from within the completed trap. Afterward—that is to say, after the core has been removed—the seams or apertures of the trap are closed by soldering, or otherwise.

What I claim as my invention is—

The combination of the sectional core A and mold B with the projections *b* or *d*, as specified.

WM. A. BUTLER.

Witnesses:

HENRY T. BROWN,
MICHAEL RYAN.