

E. B. WARREN & J. C. NIPPES.
VESSELS FOR MOLDING PITCH.

No. 195,063.

Patented Sept. 11, 1877.

FIG. 1

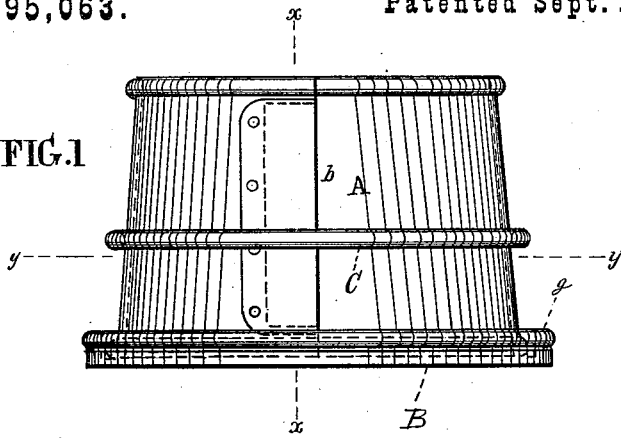


FIG. 2

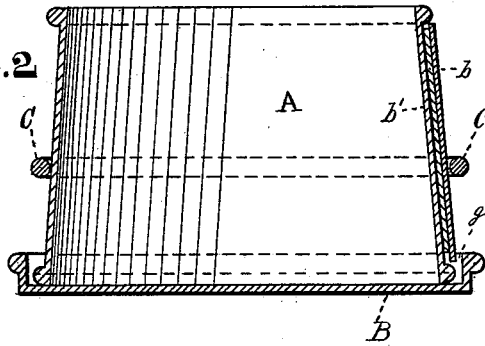
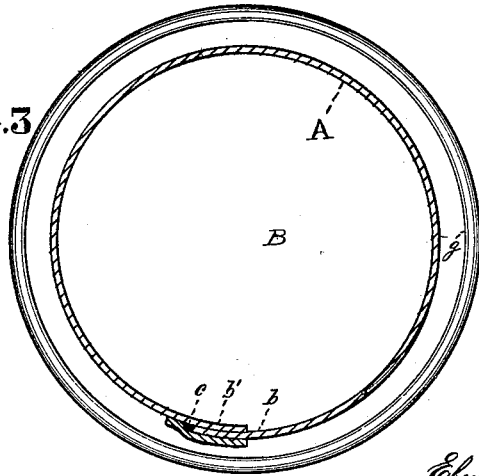


FIG. 3



Witnesses.

Thomas B. Dewley.
W. H. Lathrop

Inventors

Ebenzer Burgess Warren

John C. Nippes

per Stephen (Nitch) Attorney

UNITED STATES PATENT OFFICE.

EBENEZER B. WARREN AND JOHN C. NIPPES, OF PHILADELPHIA, PA.

IMPROVEMENT IN VESSELS FOR MOLDING PITCH.

Specification forming part of Letters Patent No. 195,063, dated September 11, 1877; application filed June 1, 1877.

To all whom it may concern:

Be it known that we, EBENEZER BURGESS WARREN and JOHN C. NIPPES, of the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Molding Pitch and other material that solidifies in cooling, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of our improved mold. Fig. 2 is a vertical section at the line *x x* of Fig. 1. Fig. 3 is a cross-section at the line *y y* of Fig. 1.

Like letters of reference in all the figures indicate the same parts.

Our invention consists of a mold composed of an open and expanding ring, formed of a sheet of metal having in one of its joint vertical edges a groove in line with the plane of the sheet to receive the other and plain edge of the same into connection therewith, a hoop for drawing the edges together and holding the ring in its closed position to form the wall of the mold, and a loose bottom with which the lower end of the ring forms a butt-joint, as hereinafter fully described.

The mold, with the exception of the loose bottom and its mode of connection with the ring, is the same as set forth in our application for Letters Patent for a like invention filed April 5, 1877.

A represents an open ring, formed of a sheet of metal, and constitutes the continuous wall of the mold. B is the bottom of the mold, and C a hoop, which encircles the ring A, to confine the vertical edges *b* and *b'* together during the liquid state of the pitch. In order to form a close joint with said edges the edge *b'* has a vertical groove, *c*, in line with the plane of the sheet which forms the ring to receive the edge *b*.

The bottom B is made in any suitable manner so as to be level, or nearly so, to receive the ring A, which is placed loosely upon it.

It should be sufficiently stiff to prevent it yielding to the weight of the melted pitch or other material when poured into the mold.

In order to give proper stiffness to a minimum thickness of metal, and to form a rim for expediting the process of luting, and giving greater efficiency thereto, we prefer turning up the edge, as shown in the drawings, not confining ourselves, however, to any particular plan in the construction or form of the edge or rim.

In preparing the mold for the reception of the melted material the bottom B is laid down on a level surface, and the ring A, which is closed, with the hoop C, placed thereon. Then the vertical joint of the ring is luted, and the lower end of the ring is luted to the bottom, to prevent the pitch or other material running out while hot, the turned up edge or rim *g* facilitating making a perfect luting of the points of contact of the bottom joint.

By making the bottom B loose from the ring A the parts of the mold are easily closed, ready to receive the melted pitch; and when the material cools the mold is readily removed therefrom by knocking off the hoop C. The joint vertical edges of the ring, being thus unconfined, spring apart and from the molded block, so as to completely skin the ring therefrom.

We claim as our invention—

In a vessel for molding pitch or other material that solidifies in cooling, the combination of the open and expanding ring A, having in its joint *b'* a groove, *c*, for connecting the edge *b* therewith, and the bottom B forming a butt-joint with the lower end of the ring, substantially in the manner and for the purpose set forth.

E. BURGESS WARREN.
JOHN C. NIPPES.

Witnesses:

THOMAS J. BEWLEY,
STEPHEN USTICK.