

C. A. EVANS.
Mold for the Manufacture of Heat-Retaining Covering
for Steam-Pipes, &c.

No. 213,883.

Patented April 1, 1879.

FIG. I.

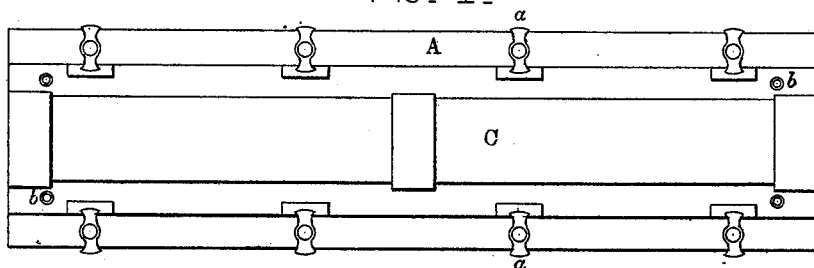


FIG. II.

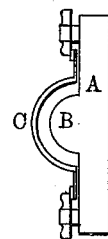


FIG. III.

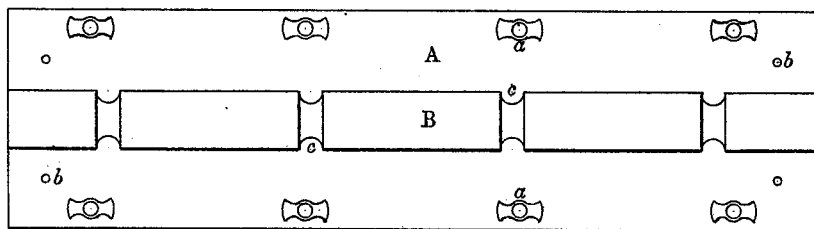


FIG. IV.

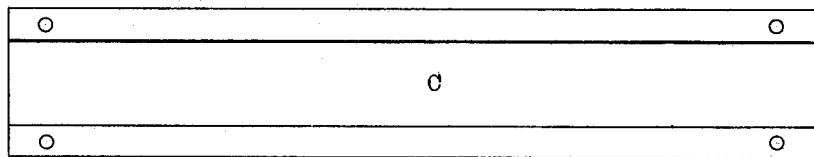


FIG. V.

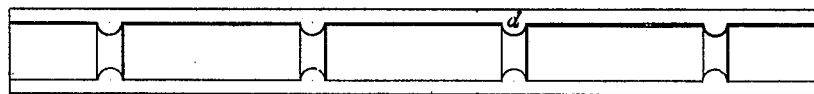
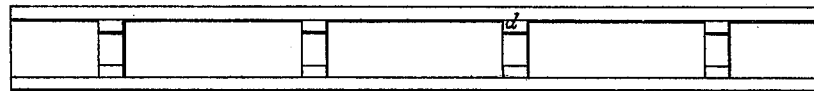


FIG. VI.



FIG. VII.



—WITNESSES—

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UNITED STATES PATENT OFFICE

CLARENCE A. EVANS, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN MOLDS FOR THE MANUFACTURE OF HEAT-RETAINING COVERINGS FOR STEAM-PIPES, &c.

Specification forming part of Letters Patent No. **213,883**, dated April 1, 1879; application filed December 23, 1878.

To all whom it may concern:

Be it known that I, CLARENCE A. EVANS, of the city of Baltimore and State of Maryland, have invented certain Improvements in Molds used in the Manufacture of Heat-Retaining Coverings for Steam-Pipes, &c., of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description of my said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The invention relates to a mold used in the formation of a sectional heat-retaining covering for steam-pipes, &c., which covering, though not claimed as a part of the present invention, is shown and described herein for the better understanding of the construction and use of the mold.

The said covering consists of a series of blocks, corresponding to each other in size and shape, of some heat-retaining material, adapted to be applied to, and secured around, a steam-pipe to form a complete envelope. The said blocks are provided with depressed inner surfaces at regular distances apart to form spaces in which air is confined. These air-spaces add to the heat-retaining properties of the covering; and the annular projections between the spaces prevent any water resulting from the condensation of steam exuding from a defective joint in the covered pipe from flowing longitudinally of the pipe farther than one section of the covering or the longitudinal extent of a single cavity of the same.

My improvement has for its object the production of such a covering as that above described; and to this end the said invention consists in constructing one portion of the mold—viz., that part thereof which forms the exterior surface of the covering-block—in such manner as to admit of its being slightly distorted or closed when secured in place or to the secondary member of the mold. This slightly distorted or closed section of the mold, in its removal from the rigid one, immediately opens or assumes its original shape, and thereby releases the material which has been previously poured into the mold in a liquid or plastic con-

dition. The springing of the removable section of the mold on its release from the rigid section of the same obviates the necessity of using oil or other lubricant on the inner surface of the said removable section when the plastic material is composed wholly or in part of plaster-of-paris or other substance which adheres closely to surfaces against which it is poured.

It will be understood that the use of oil in the mold renders the surface of the blocks unsuitable for the adhesion of a paper or felt covering, which is subsequently applied to them when in place upon the pipe.

In the drawings forming a part hereof, Figure I is a top view of the mold closed, and Fig. II an end view of the same. Fig. III is a top view of the lower or rigid part of the mold. Fig. IV is a view of the under side of the upper or flexible portion of the mold. Figs. V and VI are exterior views of the block produced in the said mold. Fig. VII illustrates a modified construction of the said block.

Similar letters of reference indicate similar parts in all the views.

A is the plate of the lower or rigid part of the mold, having the core B secured thereto. C is the flexible member or upper portion of the mold, which is secured, when in place, by means of the buttons *a* and steady-pins *b*. The member C of the mold is made of tin-plate, galvanized sheet-iron, or other material which will admit of the member being sprung slightly out of shape without being permanently set or bent.

The core B has grooves *c* extending entirely around its curved surface, which form correspondingly-shaped projections *d* in the product of the mold.

In Fig. VI the annular projections are separate from the remaining portion of the block.

The heat-retaining blocks, when in position around the pipe, are covered with paper, felt, or other similar material, and united by wire wrapped around them.

Having thus described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

A mold for producing blocks suitable for

covering steam-pipes, &c., having one member thereof constructed of some rigid material, and the other member thereof made of tin-plate, galvanized sheet-iron, or other similar material which will admit of the said member of the mold being slightly distorted in shape or closed in securing it to the said rigid member, substantially as and for the purpose herein set forth.

In testimony whereof I have hereunto subscribed my name this 20th day of December, A. D. 1878.

CLARENCE A. EVANS.

Witnesses:

WM. T. HOWARD,
THOS. MURDOCH.