

(No Model.)

M. A. MILLS.
CORE BOX.

No. 484,940.

Patented Oct. 25, 1892.

Fig. 1.

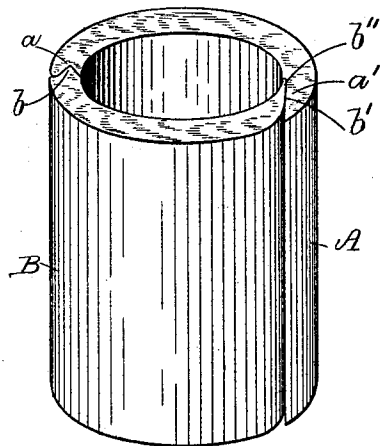


Fig. 3.

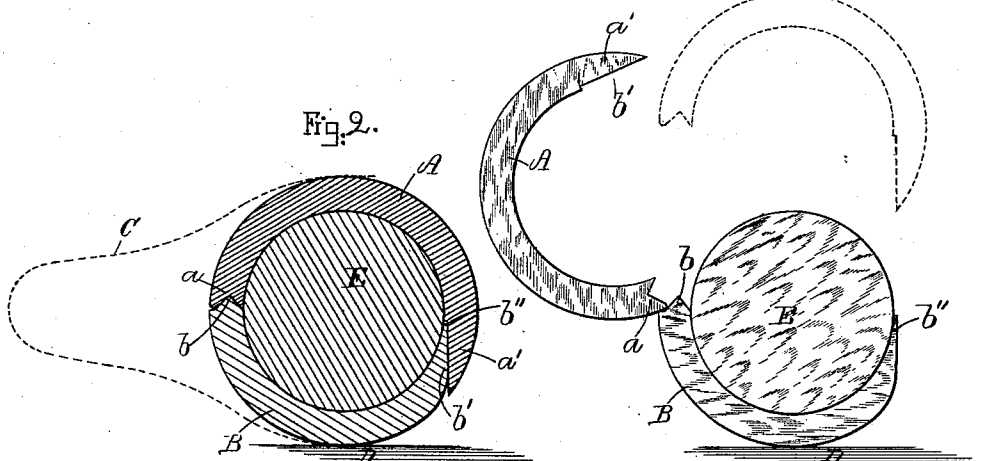
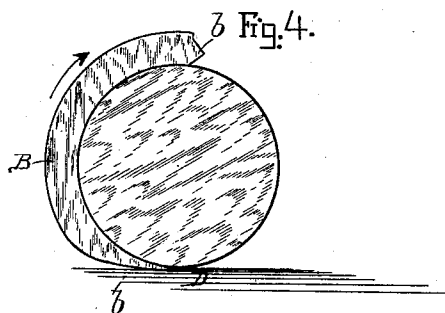


Fig. 4.



Witnesses.

Lauritz W. Möller.
Alice A. Perkins.

Inventor.

Melvin A. Mills.
by *Alvan Andrew*
his atty.

UNITED STATES PATENT OFFICE.

MELVIN A. MILLS, OF LAWRENCE, MASSACHUSETTS.

CORE-BOX.

SPECIFICATION forming part of Letters Patent No. 484,940, dated October 25, 1892.

Application filed July 8, 1892. Serial No. 439,391. (No model.)

To all whom it may concern:

Be it known that I, MELVIN A. MILLS, a citizen of the United States, and a resident of Lawrence, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Core-Boxes, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to improvements in core-boxes for making cores for foundry purposes, as will hereinafter be more fully shown and described, reference being had to the accompanying drawings, wherein—

Figure 1 represents a perspective view of my improved core-box. Fig. 2 represents a cross-section of the same. Fig. 3 represents an end view of the invention, showing one-half of the core-box as removed preparatory to discharging the core; and Fig. 4 represents a similar view showing manner of discharging the core after being molded in the core-box.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

My improved core-box consists of two semi-cylindrical, polygonal, or otherwise shaped shells A and B, according to the shape, size, or form to be given to the core. The shell A is provided with a longitudinal concave or V-shaped groove *a*, adapted to receive a corresponding longitudinal convex or V-shaped rib *b* on the shell B, as shown in Fig. 2. Opposite to the joint *a b* the shells are divided by inclined abutting faces *a' b'*, the inclination of which is tangential, or nearly so, to the inner curvature of the box, the shell B terminating at this point as a thin sharp edge *b''*, which is located diametrically opposite, or nearly so, to the joint *a b*, as shown in Figs. 1 and 2.

In using the improved core-box the parts A and B are placed in position relative to each other, as shown in Figs. 1 and 2, and temporarily held in such a position preferably by means of a spring-clamp C. (Shown in dot-

ted lines in Fig. 2.) The core-box is then placed in a vertical position on a horizontal plate or table D and the core E is rammed into the core-box and its top struck off even with the upper edge of the core-box. The clamp is then removed and the box is laid on its side on the table D, preferably with the shell portion B resting on said table, as shown in Fig. 3, after which the shell portion A is removed either by swinging or lifting it out of position, as shown in said Fig. 3. After the part A has thus been removed the part B (in which the core is contained) is rolled on the table D in the direction of the arrow shown in Fig. 3 until the core E is supported and made to rest on the table D, as shown in Fig. 4, when the part B of the core-box can easily be removed, leaving the finished core on the table ready for such subsequent treatment as may be needed in drying or baking it preparatory to inserting it in the flask where the casting is to be made. By this simple construction I dispense with the usual locking-pins and recesses on core-boxes, and I also provide a simple and effective means for discharging the core from the box without breaking or in any manner injuring such core.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent, and claim—

The herein-described core-box, consisting of two parts A and B, having at one place a V-shaped or concavo-convex longitudinal joint *a b* and having diametrically opposite thereto tangential or inclined meeting edges *a' b'*, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 21st day of June, A. D. 1892.

MELVIN A. MILLS.

Witnesses:

ALBAN ANDRÉN,
ALICE A. PERKINS.