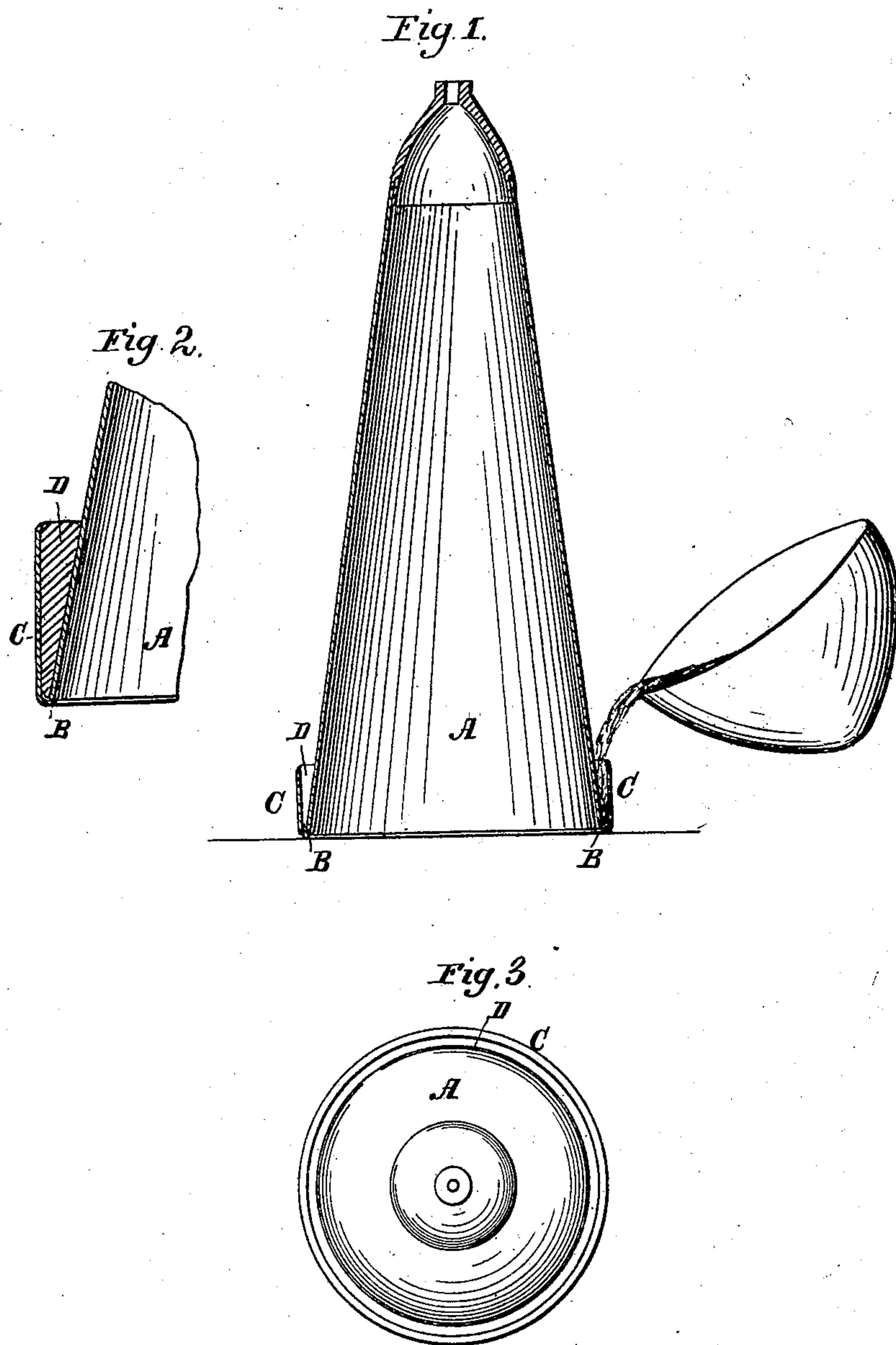


J. MYERS, Jr.
Sugar Mold.

No. 12,101.

Patented Dec. 19, 1854.



UNITED STATES PATENT OFFICE.

JAMES MYERS, JR., OF NEW YORK, N. Y.

IMPROVEMENT IN MAKING SUGAR-MOLDS.

Specification forming part of Letters Patent No. 12,101, dated December 19, 1854.

To all whom it may concern:

Be it known that I, JAMES MYERS, JR., of the city, county, and State of New York, have invented a new and useful Improvement in Sugar-Molds; and I do hereby declare that the following is a full, clear, and exact description of the same.

The nature of my invention consists in arming the bottom of the mold on its exterior with a ring of cast-iron, which is united to the mold-case and the base-band of the same by being poured in between the two when the cast-iron is in a molten state.

To enable others skilled in the art to make and use my improvement, I will proceed to describe its construction and operation, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side sectional elevation of my improvement; Fig. 2, enlarged sectional side elevation of a portion of the same; Fig. 3, top view of my improved mold.

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

A is the sugar-mold case; B, bottom flange of same; C, flanged base band; D, the cast-iron.

In the manufacture of crystallized sugar, when the workman separates the pyramidal loaf from its mold, he lifts up the latter in his hands and strikes its base down repeatedly upon a suitable block or bench until the loaf is loosened and comes out. It is evident that unless some means are devised to arm the base of the mold, it will, by frequent blows, under the momentum of its own weight and the gravity of the sugar contained within, become bent or broken and the mold rendered useless.

The common method of arming the base of the mold is to turn a short flange on the base

of the same and then girdle the base with a wrought-iron band secured to the bottom of the mold-case by means of rivets. This method of arming the base of sugar-molds is an improvement over a former method, which consisted in merely turning a short flange on the mold-case itself; but both plans are very defective, for under the harsh usage I have mentioned molds thus armed never last very long.

My improvement consists in girdling the base of the mold with a band of cast-iron, which, in a molten state, is poured into the space between the band C and the mold-case A, and thus caused to unite by fusion with the sides of the mold and the band, as shown at D. Prior to pouring in the cast-iron the surfaces of the band C and base of mold A must be perfectly cleansed from all oxide, otherwise the union of the molten metal with the other surfaces will not be complete, and the cast-iron armor will not be firmly attached. If care is taken, however, in the operation, the cast-iron will unite with the mold and the band C in the manner described, and form a protection to the base of the mold, which the severest blows will never be able to break or destroy.

What I claim as my invention, and desire to secure by Letters Patent, is—

Filling the space between the base-band and the mold-case with molten iron or other suitable metal in such a manner that the metal, by uniting with the base of the mold-case, will, when cooled, form a complete and durable armor for the same, substantially as herein set forth.

JAMES MYERS, JR.

Witnesses:

O. D. MUNN,
WM. TUSCH.