

(No Model.)

A. J. & A. WISNER.
MOLD FOR CANDY WHISTLES.

No. 347,406.

Patented Aug. 17, 1886.

Fig. 1.

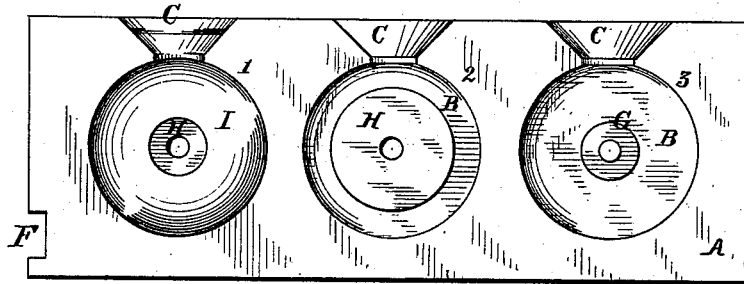


Fig. 2.

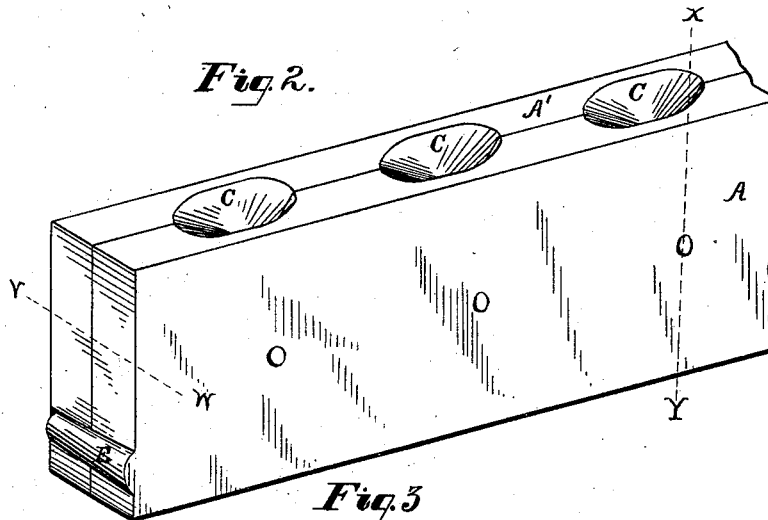


Fig. 3.

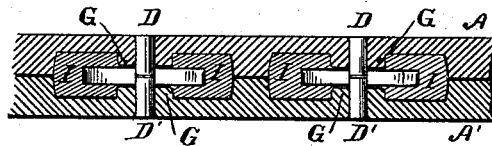
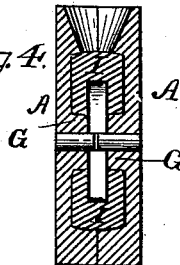


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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MOLD FOR CANDY WHISTLES.

SPECIFICATION forming part of Letters Patent No. 347,406, dated August 17, 1886.

Application filed January 5, 1885. Serial No. 152,022. (No model.)

To all whom it may concern:

Be it known that we, A. JACKSON WISNER and ALBERT WISNER, citizens of the United States, and residents of Philadelphia, Pennsylvania, have invented a useful Improvement in Molds for Candy Whistles, designed to surround a hollow disk with molten material; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, making part hereof.

The nature of our invention will fully appear from the following description and claims.

In the drawings, Figure 1 is an elevation of a section of one of the halves of our mold, showing, first, a matrix filled with the molten material surrounding the inclosed disk; secondly, a matrix with the disk in place; thirdly, an empty matrix, with an inwardly-projecting flange to hold the disk away from the side surface of the matrix; Fig. 2, a perspective view of one section of our mold; Fig. 3, a horizontal longitudinal sectional view of a part of our mold on the line V W of Fig. 2, showing the disks and molten material within the matrices; Fig. 4, a vertical sectional view of our mold upon the line X Y of Fig. 2.

A A' are the two halves, which, when joined together, form the body of the mold.

B is the matrix to give form to the molten matter to be cast.

C is the gate through which the molten matter is poured into the matrix.

D D' are two pins or posts, one set into or cast with each side of the mold, and projecting within the matrix, into the center thereof, and meeting or nearly meeting therein when the two halves of the mold are joined together.

E, Fig. 2, is a key or guide attached to one half of the mold, engaging in a socket or depression, F, Fig. 1, in the other half of the mold, and is designed to guide the two halves when they are joined together, so as to make the one half of the matrix in one half of the mold meet truly its corresponding half-matrix in the other half of the mold.

G is an inwardly-projecting flange or shoulder set upon the center of the inner surface of each half-matrix. Each shoulder G projects only so far into the matrix as to allow suffi-

cient space for the occupancy of the disk to be inclosed between such opposite shoulders.

H is the hollow disk to be inclosed in the molten material, each side of which disk is pierced with a central hole. This disk is set upon one of the pins, say D', so that the pin projects part way into it through the hole in its center. When the other half of the mold is joined to that half upon which the disk has been set, the other pin, D, projects into the interior of the disk from the opposite side. The mold thus being joined together is ready for the reception of the molten material I, which is poured in through the gate C, and it surrounds the disk H in the manner shown in matrix 1, or Fig. 1.

As the disk H is supported away from the two sides of the matrix by the two opposite shoulders or flanges, G G, which impinge against the disk around its center on both sides, the molten material will be prevented from running into the openings in the disk leading into the interior thereof, at the same time it will completely surround the inclosed disk, with the exception of its center, upon each side. When the molten material cools or hardens, the mold is opened, the cast removed, and the mold is ready to receive another disk, to be surrounded by molten material in a similar way. The inwardly-projecting pin D or D' serves to center the disk within the matrix, and each shoulder G, as well as each pin D or D', fulfills the office of preventing the molten material from entering into the interior of the hollow disk H, because each pin D fills or nearly fills an opening in the interior thereof, and each shoulder G surrounds such an opening and impinges against the side of the disk through which such opening is made.

The shape of the matrix B can be varied at will. It may be polygonal in shape, cast in the form of an animal, bird, or other living creature, or a well-known object in nature or in art. We have shown the disk H as round, and it forms, as we have described it, the common hollow-disk whistle used by children. Its shape may however be varied at will, the same as that of the matrix.

The interior hollow disk, H, really forms a

hollow core around which the molten mass is poured. It has been customary heretofore to use hollow cores in casting metals—such as in casting pipes—but they have always been composed of a central cylindrical shell surrounded by a yielding cushion, generally of straw, to provide for the contraction of the metal in cooling. This makes a compound core. In our last clause we claim a hollow core composed of a single thickness of suitable material, as distinguished from using such supplemental cushion.

It is necessary in forming our hollow core, as in making the ordinary tin whistle of two concave disks, to overlap the metal to make the joint, thus forming a double thickness of metal. For our purpose we wish this to be considered as one thickness of material in distinction to surrounding the shell of the core with a supplemental cushion of different material from that of which the core proper is composed, and we wish this explanation to be considered in interpreting the scope of our claim.

Our invention is principally designed to produce a mold in which a hollow-disk whistle may be surrounded with candy, and which will at the same time prevent the latter from flowing into the interior of the hollow disk. It is partly humanitarian in its objects, as it will enable the child to gratify his musical proclivities coincidently with satisfying his taste for sweets.

What we claim as new is—

1. A mold formed in two parts, A A', the matrix B, shoulder G, and pin D', projecting interiorly from said shoulder, substantially as described.

2. A mold composed of the two halves A', the matrix B, formed of corresponding concavities in the opposite halves of said mold, with interior shoulders, G, raised upon each side of said matrix, each shoulder being of such length as to leave between them, when the two halves of the mold are joined together, sufficient space to clasp an interposed disk or

other object to be surrounded by the molten mass in the mold, substantially as described.

3. A mold composed of two parts, an inner matrix, B, and a pin, D, projecting from one side of said mold into the interior of said matrix, substantially as described.

4. A mold composed of two parts, an inner matrix, B, and a shoulder, G, projecting from one side of said mold into the interior of said matrix, and of such length as not to touch the other side of the mold, substantially as described.

5. A mold composed of two parts, provided with an inner matrix, B, formed of two corresponding concavities, one in each side of the mold, shoulders G, one of which projects from the side of each concavity, leaving a space between them, pins D D', projecting from the opposite shoulders, as shown, substantially as described.

6. A mold composed of two parts, with an inner matrix, B, and a hollow core, H, sustained in said matrix, between the two sides of the same, and away from one of the sides thereof, by means of a shoulder, G, smaller upon its surface than the area of that face of the core against which it impinges, whereby the molten mass in the matrix will surround said hollow core at its sides, as well as at one end, and cling to said core when the mold is opened, substantially as described.

7. A mold composed of two parts, with an inner matrix, B, and a hollow core, H, sustained in said matrix, between the two sides of the same, the shell of said matrix being composed of a single thickness of metal or other suitable material in distinction to being surrounded by a cushion to provide for the contraction caused by the cooling of the molten mass surrounding it, substantially as described.

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Witnesses:

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