

No. 848,480.

PATENTED MAR. 26, 1907.

W. S. MYERS.
MOLD FOR SASH WEIGHTS, &c.
APPLICATION FILED JUNE 22, 1906.

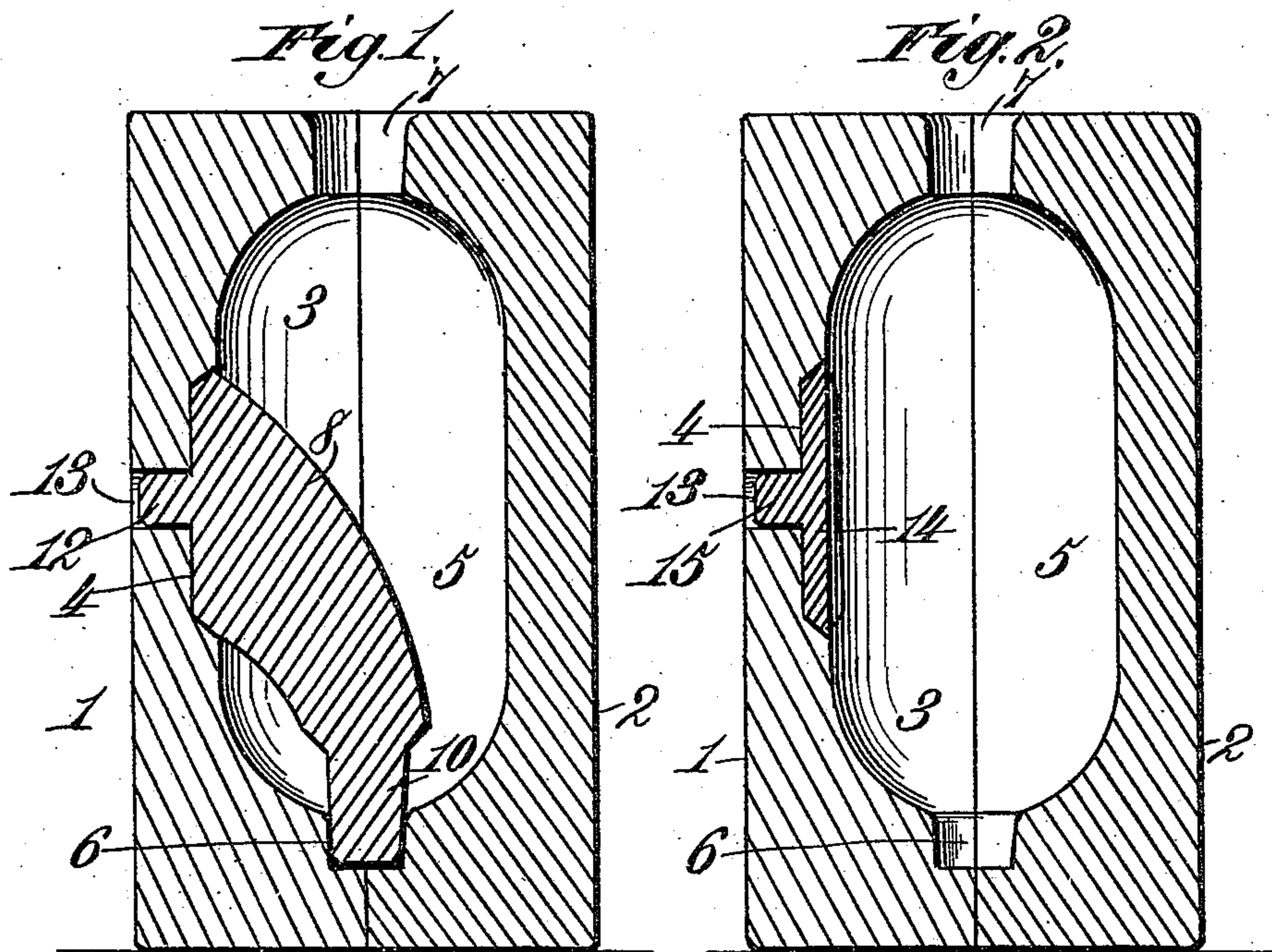


Fig. 3.

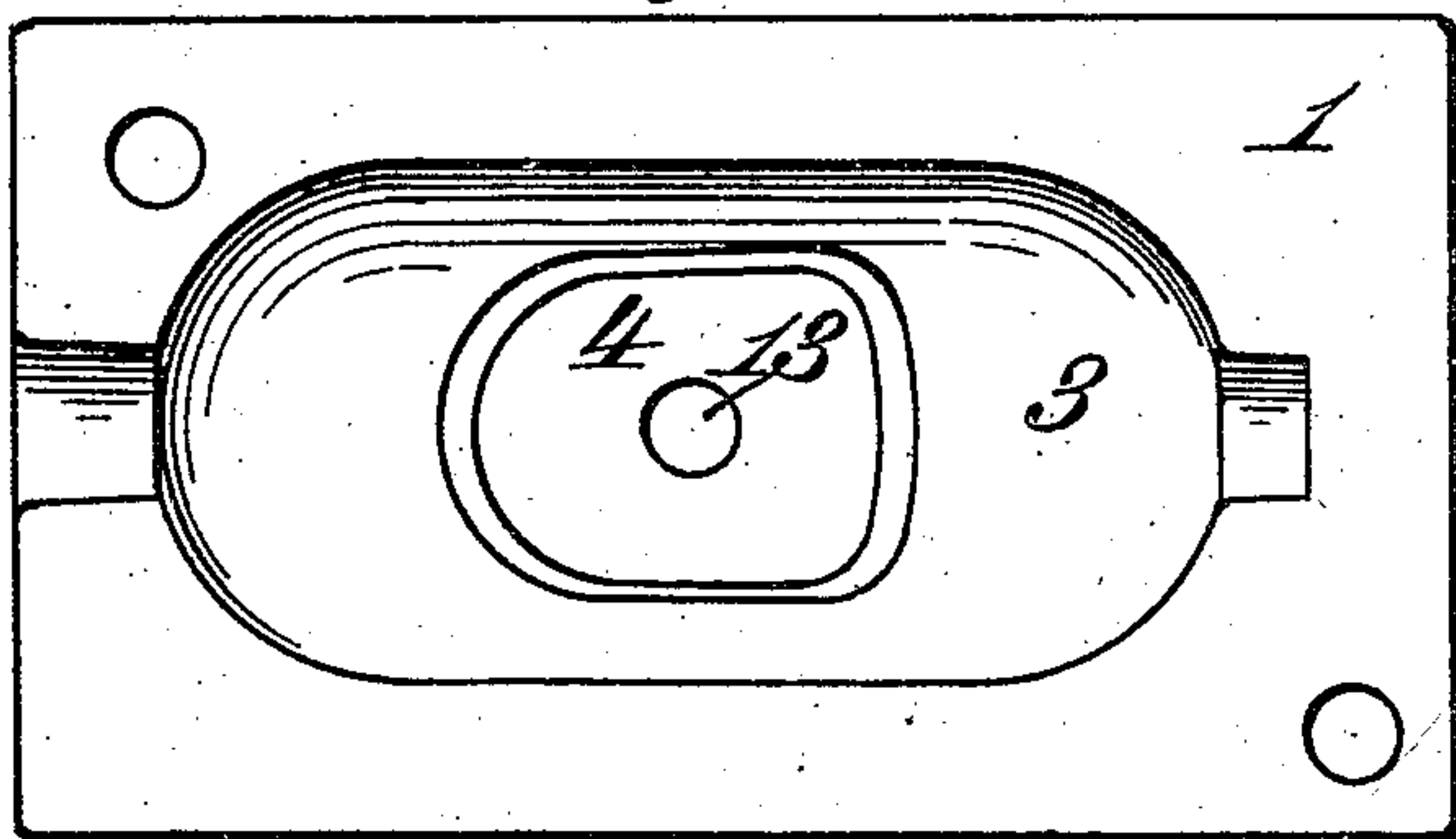


Fig. 4.

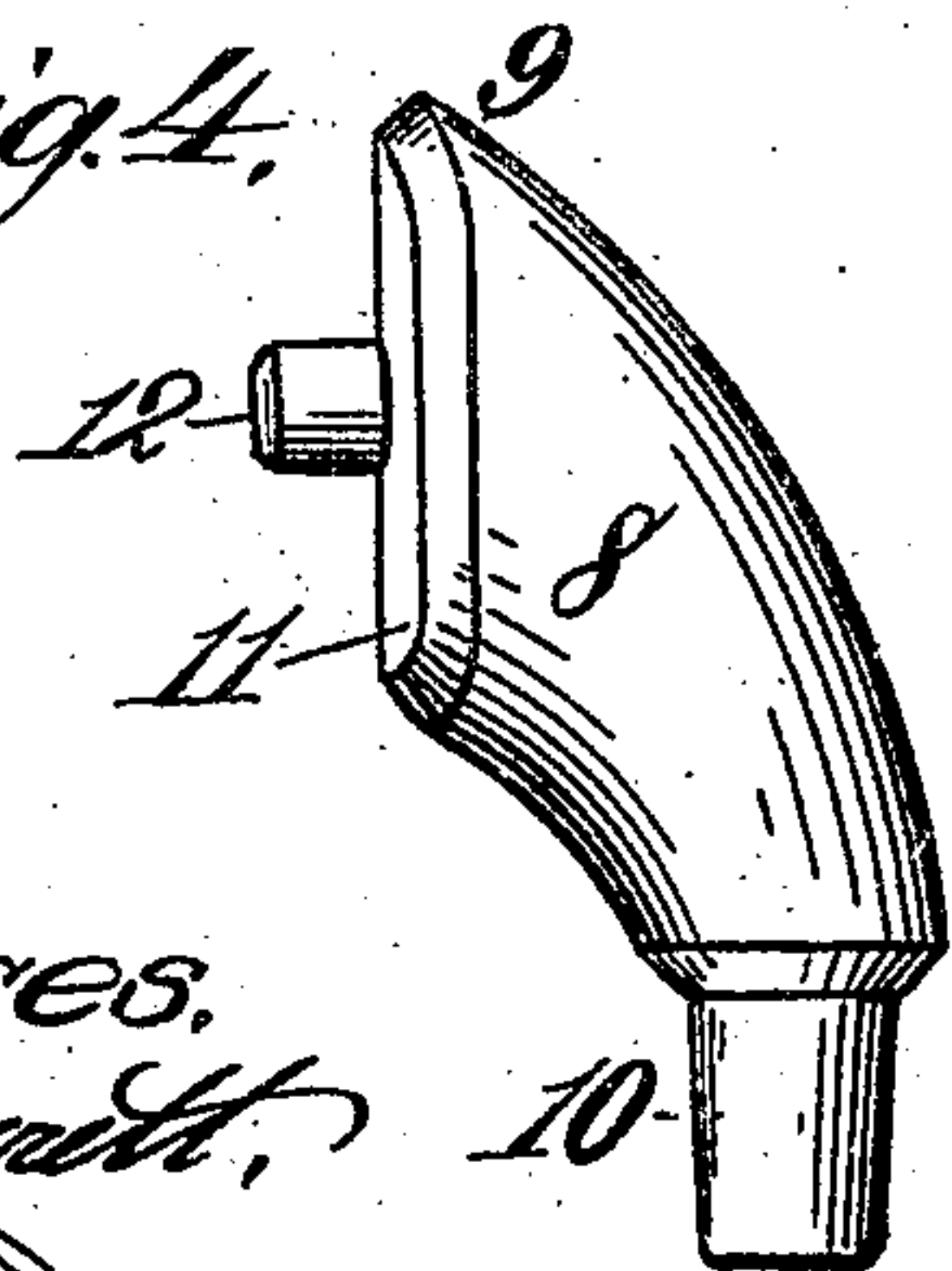
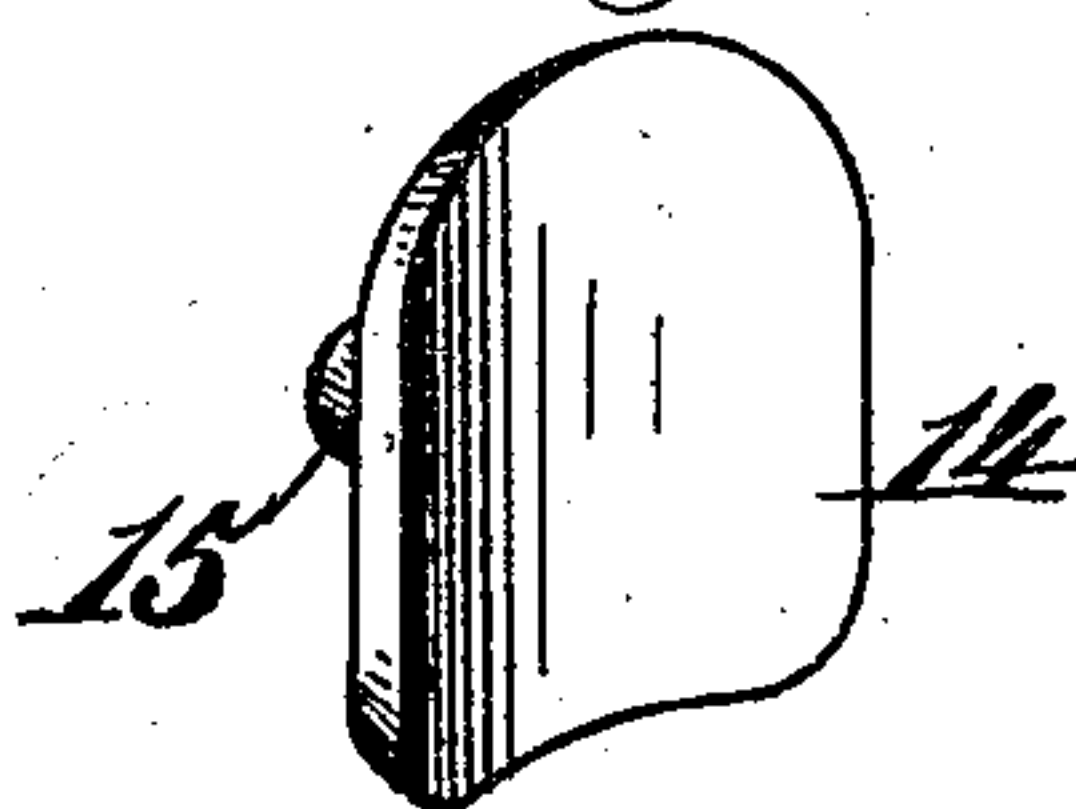


Fig. 5.



Witnesses,
Robert Everett,
J. D. Reader

Inventor,
William S. Myers.
By James L. Norris,
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM S. MYERS, OF ASHLAND, KENTUCKY, ASSIGNOR OF ONE-HALF TO
BANNING GRAY, OF ASHLAND, KENTUCKY.

MOLD FOR SASH-WEIGHTS, &c.

No. 848,480.

Specification of Letters Patent.

Patented March 26, 1907.

Application filed June 22, 1906. Serial No. 322,903.

To all whom it may concern:

Be it known that I, WILLIAM S. MYERS, a citizen of the United States, residing at Ashland, in the county of Boyd and State of Kentucky, have invented new and useful Improvements in Molds for Sash-Weights and the Like, of which the following is a specification.

This invention relates to a mold particularly adapted for casting sash-weights and convertible to cast either a partially hollow or tubular weight or a solid weight.

The improved mold is also provided with means by which the eye can be conveniently and readily formed in the weight by the repeated use of a core, and thus economize in the production of sash-weights, particularly in view of molds requiring the preparation of a new core every time it is desired to form an eye in the weight.

The improved mold is also capable of indefinite use, or, in other words, is structurally durable as well as convenient in its operation.

Instead of using the mold for forming sash-weights it is obvious that weights for other applications may be produced therein.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter set forth.

In the drawings, Figure 1 is a longitudinal vertical section of a mold embodying the features of the invention and showing the core in position therein. Fig. 2 is a similar view of the mold, showing the core removed and a filling member applied in the seat for one end of the core to adapt the mold for the production of weights of solid form. Fig. 3 is a top plan view of the lower section of the mold with the core removed. Fig. 4 is a detail side elevation of the core. Fig. 5 is a detail perspective view of the filling member.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numerals 1 and 2 respectively designate the cooperating sections of the mold, which may have any suitable dimensions and proportions. The mold as an entirety is constructed of metal, and the section 1 has a molding-cavity 3 with a seat-recess 4 in the central portion thereof, which is counter-sunk with respect to said cavity. The section 2 has a molding-cavity 5 therein, which

is uniform in contour throughout its entire length and is adapted to coincide with the cavity 3 in the section 1. The molding-cavities 3 and 5 have at one end of each a semicircular recess 6 at the center, the two recesses unitedly forming means for receiving and holding the outer extremity of a core which will be presently set forth. The mold-sections 1 and 2 at the end opposite the location of the semicircular recesses 6 have semicircular pouring-openings 7 therein, which unitedly form means for conveniently running molten metal into the mold when the two sections are assembled in operative relation.

A core 8 is provided and has an enlarged extremity 9 tapering toward the opposite extremity and terminating in a reduced stem 10. The enlarged extremity 9 has a convex face 11 to removably and snugly fit in the seat 4, and projecting centrally from this face is a dowel-pin 12 to enter an opening 13 in the center of said seat to hold the core in positive position when disposed within the mold. The stem 10 is received in the recesses 6, and by this means both extremities of the core will be firmly secured and held against displacement when the parts of the mold are assembled for forming a weight. The core, as set forth, is adapted to provide the eye and the knot-seat opening out through one side of the sash-weight, or, in other words, the core operates to give the sash-weight constructed by the mold a partially-tubular formation, the stem 10 particularly producing the eye.

When it is desired to employ the mold forming a solid weight, the filling member 14, (shown by Fig. 5,) is inserted in the seat 4, the upper side of this filling member being of a concave contour corresponding to and completing the concave shape of the cavity 3. This filling member has a dowel-pin 15 projecting from the center thereof to removably fit in the opening 13 to hold the said piece in place.

In preparing the mold for producing a semitubular weight having an eye the core 8 is placed within the mold, as shown by Fig. 1, and the two mold-sections assembled. The molten metal is then poured into the coinciding mold-cavities through the aligned openings 7 and flows around the core. After cooling the mold-sections are separated, the molded weight removed, and the core dissociated.

from the weight. The operation is similar when the core is removed and the filling member 14 is placed in the mold, as shown by Fig. 2.

5 The special advantages of the improved mold are the positive position of the core, the ready reuse of the core, and the introduction of the molten metal into the end of the mold-sections. This particular point of intro-
10 ducing the molten metal into the mold-sections is important, as a solid weight can be formed more expeditiously and superiorly.

It is customary to use as cheap iron as possible to make sash-weights, this iron generally consisting of stove-scrap or white iron and is very close grain and high in shrinkage. By disposing the pouring-opening in one end of the improved mold it is possible to rest the
20 mold on the opposite end, and as the molten metal passes through the opening or gate at the top the weight is permitted to solidify and shrink at the same time that the feeding is effected, thereby insuring the formation of a more perfect weight of a round and smooth
25 character. Furthermore, the reusable core employed in the improved mold can be quickly dissociated from the cast weight in view of the fact that the end of the stem 10 is inclosed by portions of the mold-sections
30 and is held firmly in this position to lock the core in place no matter how roughly the mold is handled, and when the cast weight is removed said stem is exposed at one end of the weight and is adapted to be struck to loosen
35 and facilitate the removal of the core.

Many advantages will appear from time to time to those using the improved mold, and instead of making the cavities in the mold-sections regular in curve it is obvious that
40 their contour may be varied to produce sash-weights having different exterior formations.

Having thus described the invention, what is claimed is—

45 1. A mold comprising two sections with coinciding molding-cavities having a gate at one end, one of the sections having a seat and an opening in the center thereof and also a

seat at the end opposite the location of the gate and partially formed in both sections, a core device to removably engage the seat at
50 one end of the interior portions of the sections and also the seat in one of the sections, and a removable filling-piece also applicable to the seat formed solely in one of the sections, whereby the mold may be used
55 for casting either a solid or a partially-tubular weight.

2. A mold comprising two sections with coinciding molding-cavities extending longitudinally thereof, the cavities having a gate
60 communicating therewith and extending through one end of the sections and a receiving-seat at the opposite ends of the cavities terminating at a distance inwardly from the outer ends of the sections, the said
65 seat being formed partially in the end portions of the two sections and located at the point of said sections, and a core device movably held within the mold and having one extremity reduced and adapted to be
70 engaged and inclosed within the said seat and the opposite extremity bearing upon the wall of one of the cavities at a point between the extremities of the said cavities.

3. In a mold of the class set forth, the
75 combination of mold-sections having cavities therein provided at one end with semicircular recesses, one of the cavities having a central seat and an opening, and both cavities having communication with a gate or
80 pouring-opening, and a core removably mounted within the mold and provided with an enlarged extremity having a dowel-pin to engage the seat and opening and a reduced stem engaging and partially inclosed within
85 the end portions of the mold-sections at the joint of the latter.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM S. MYERS.

Witnesses:

PROCTOR K. MALIN,
ELIZABETH H. MURPHY.