L. A. BOSS & W. J. REARDON.

SNAP FLASK DEVICE.

APPLICATION FILED MAY 26, 1911.

1,008,943. Patented Nov. 14, 1911.

Fig. 1.

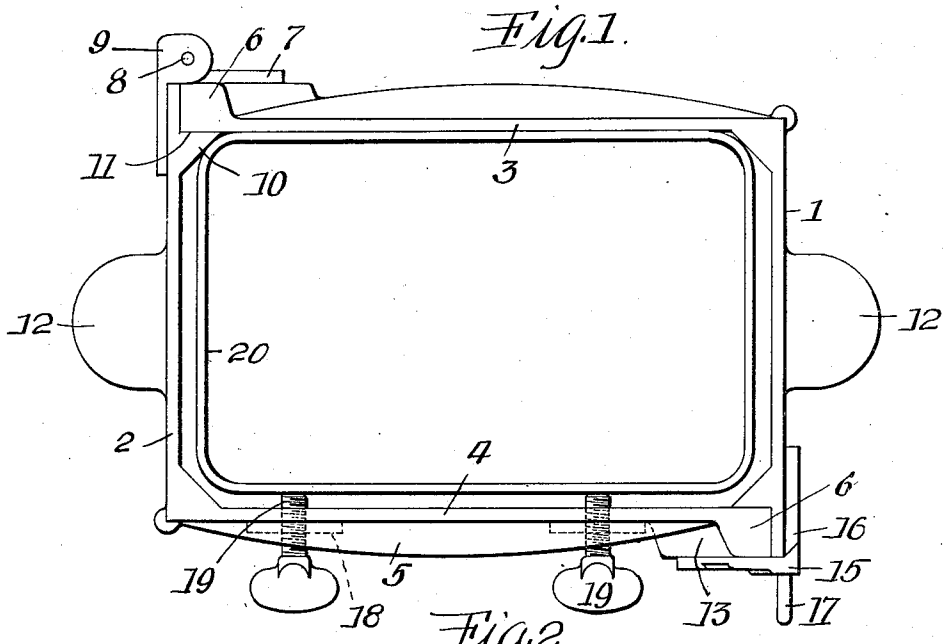


Fig. 2.

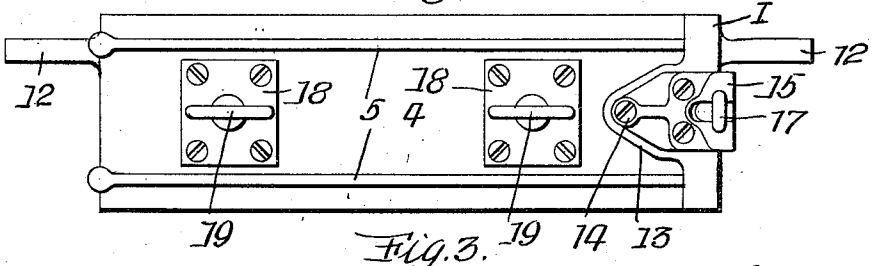


Fig. 3.

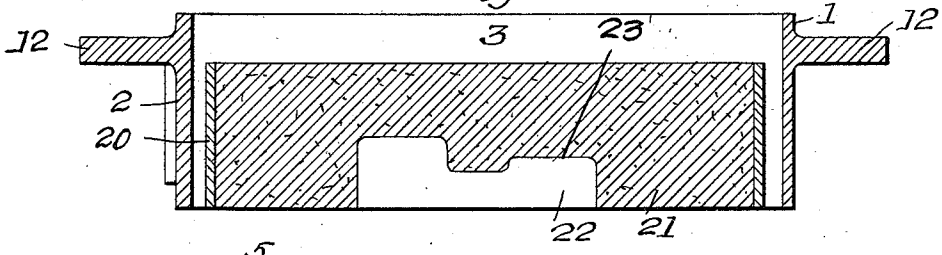
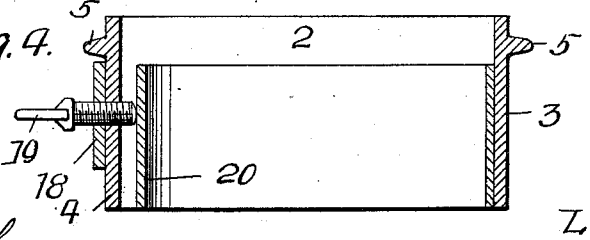


Fig. 4.



WITNESSES:

J. M. Mahaney.

R. A. Butler

INVENTORS.

L. A. Boss

W. J. Reardon.

BY

A. C. Evert Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

LEON A. BOSS, OF NORTH BRADDOCK, AND WILLIAM J. REARDON, OF WILMERDING, PENNSYLVANIA.

SNAP-FLASK DEVICE.

1,008,943. Specification of Letters Patent. Patented Nov. 14, 1911.

Application filed May 26, 1911. Serial No. 629,736.

To all whom it may concern:

Be it known that we, (1) LEON A. BOSS and (2) WILLIAM J. REARDON, citizens of the United States of America, residing at (1) North Braddock and (2) Wilmerding, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Snap-Flask Devices, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a snap flask device, and the primary object of the invention is the provision of positive and reliable means, in a manner as will be hereinafter set forth, for detachably retaining a frame or band in a snap flask made of any durable material.

Another object of our invention is to obviate the necessity of using wedges or similar devices for retaining a frame or band in a snap flask.

We obtain the above objects by resorting to the use of hold-fast devices that will positively retain a frame or band in a flask.

It has been the practice heretofore to use wedges for holding a frame or band relatively to the walls of the flask, to protect the mold when pouring molten metal. The wedges have never been satisfactory as the frame or bands could shift when the mold was inverted, besides it was always necessary to arrange the wedges at the inner sides of the walls of the flask. In eliminating the use of wedges, we arrange our hold-fast devices in a flask whereby they can be easily manipulated from the outer side thereof, and the hold-fast devices are so designed as to insure a perfect alinement of castings and prevent any shifting movement that would tend to produce an imperfect molded article. With this understanding of the principle of our invention, reference will now be had to the drawing, wherein there is illustrated a preferred embodiment of our invention, but it is to be understood that the structural elements are susceptible to such changes as fall within the scope of the appended claims.

In the drawing—Figure 1 is a plan of a snap flask in accordance with this invention, Fig. 2 is a front elevation of the same, Fig. 3 is a longitudinal sectional view of the flask, and Fig. 4 is a cross sectional view of the same.

A snap flask in accordance with this invention comprises two angle bars having end walls 1 and 2 and longitudinal walls 3 and 4, said longitudinal walls having the outer sides thereof provided with longitudinal reinforcing ribs 5 arranged in parallelism and adapted to add rigidity to said walls. The wall 3 has the outer vertical edge thereof enlarged, as at 6, and provided with a hinge member 7. Pivotally connected to the hinge member 7 by a vertical pin 8 is a hinge member 9, carried by the outer vertical edge of the wall 2. The wall 2 contiguous to the hinge member 9 has a vertical rib 10 presenting a shoulder 11 in opposition to the inner side of the wall 3, the said shoulder 11 assisting the wall 3 in limiting the closing movement of the walls 2 and 3.

The end walls 1 and 2, adjacent to the upper edges thereof and at a point intermediate the ends of said walls, are provided with hand grips or handles 12, whereby the snap flask can be easily handled or inverted.

The outer end of the wall 4 is provided with an enlargement 13 and suitably secured to said enlargement, preferably by screws 14, is a bifurcated latch 15 adapted to engage a keeper 16, carried by the outer end of the wall 1. The keeper 16 is provided with a rotatable flat head 17, which in one position receives the bifurcated latch 15 and in another position locks the latch in engagement with the keeper. The wall 4 has the outer side thereof, between the ribs 5, provided with bosses or detachable plates 18 and adjustably mounted in said bosses and the wall 4 are set screws 19. The inner ends of these screws are adapted to engage the outer side of a rectangular frame or band 20 and bind the opposite wall of said frame against the wall 3 of the flask, thereby fixing the frame within the flask, when said flask is in a closed position. It is in the frame 20 that sand or other material, 21, is packed upon a pattern 22 to produce a cavity 23 adapted to receive molten metal during the molding operation.

It is essential that the frame 20 be positively positioned and held during the manipulation of the flask, whereby the frame cannot shift when the flask is inverted or when molten metal is being poured into the cavity 23. The least perceptible movement of the frame 20 produces a rupture, crack or irregularity in the wall of the

cavity 22 after the pattern has been removed and when a casting is made the article is imperfect. The set screws which constitute the hold-fast device of the flask prevent the frame 20 from shifting within the flask, consequently with all other conditions even, a perfect piece of work will be produced.

What we claim is:—

1. A snap flask device comprising a relatively wide pair of L-shaped bars arranged to provide a rectangular inclosure and each having the longitudinal member thereof formed on its outer face with longitudinally extending reinforcing means near the top and near the bottom thereof, means for hinging one end of said bars together, means for detachably connecting the other end of said bars together, a frame mounted in and of less height than the height of said inclosure, flat handles carried by opposing members of said bars near the top thereof, each of said bars provided with an inwardly extending rib, said ribs forming shoulders adapted to be engaged by the bars for limiting the inward movement of opposing members of the bars when connecting the bars together to provide the inclosure, and adjustable means extending through one of the bars and abutting directly against one of the walls one side of said frame for clamping it against the other of the bars.

2. A snap flask device comprising a pair of L-shaped bars arranged to provide a rectangular inclosure, means for hinging one end of one of said bars to one end of the other of the bars, a bifurcated latch and a keeper carried by the other ends of said bars and adapted to engage with each other to detachably couple the free ends of the bars together, a frame mounted in said inclosure, outwardly projecting handles carried by the bars, and adjustable means carried by and extending through one of the members of a bar intermediate the ends of the member and engaging with one side of said frame for clamping the latter against the opposing member of the other bar.

In testimony whereof we affix our signatures in the presence of two witnesses.

LEON A. BOSS.
WILLIAM J. REARDON.

Witnesses:
KARL H. BUTLER,
CHRISTINA T. HOOD.