

No. 868,882.

PATENTED OCT. 22, 1907.

G. E. NEUBERTH.
MOLDER'S LADLE.

APPLICATION FILED APR. 12, 1907.

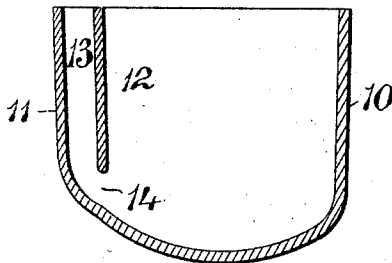


Fig. 1

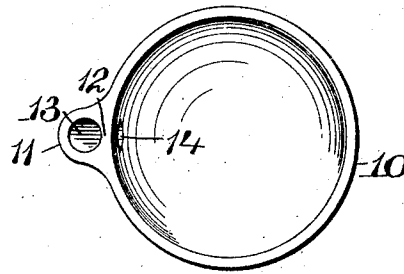


Fig. 2

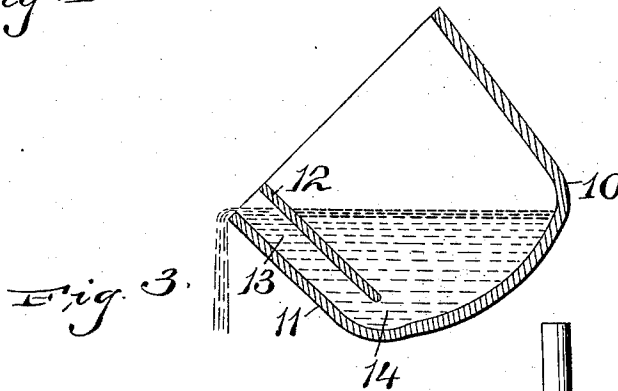


Fig. 3

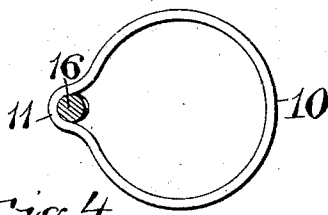


Fig. 4

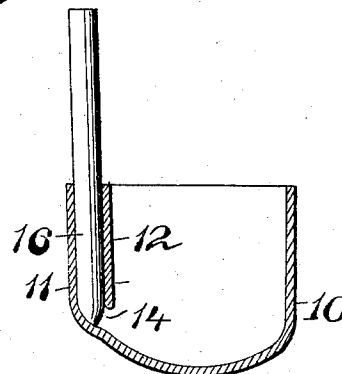


Fig. 5

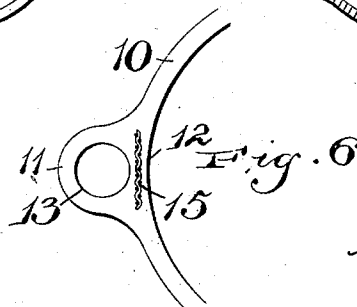


Fig. 6

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MOLDER'S LADLE.

No. 868,882.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE E. NEUBERTH, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Method of Preparing Molders' Ladles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

This invention relates to a ladle used in foundry practice when making castings of a comparatively small size, and is designed to provide a ladle that takes the molten metal from the bottom of the mass, but conducts it and pours from the top of the ladle. This is done to prevent the slag flowing into the mold, and all the metal but the slag can be used as the pouring can continue until the slag appears at the outlet, and then pouring can cease.

The method of preparing the ladle is the new feature of it, and the same ladle can be used with different sized outlets, the ladle being provided with the passage for metal whenever the ladle is lined.

The invention is illustrated in the accompanying drawings, in which

Figure 1 is a vertical section of the ladle. Fig. 2 is a top view of the same. Fig. 3 is a section showing the pouring operation. Figs. 4 and 5 show steps in the preparation of the ladle, and Fig. 6 is a detail of a part of the ladle showing a modified construction.

In the drawings 10 is the body portion of the ladle, and a spout portion 11 extends down on one side for a major portion of the depth of the ladle. A partition 12 is formed across the ladle to form, with the spout 11, a passage 13 which opens at 14 into the body portion of the ladle. When metal is run into this ladle, the slag, which is on the top, is held there, as the pouring is done as in Fig. 3, taking the molten metal from the bottom of the body portion and conducting it to the top of the ladle to be poured. The partition 12 keeps the slag in the body portion, and practically all the

metal in the ladle can be poured, and all that is poured will be free from impurities and slag, and a casting without pitted portions will be the result.

When desired, the partition 12 can be strengthened by a screen or stiffening element 15, as shown in Fig. 6. The method of preparing the ladle is novel, and the process consists in setting a rod 16, which can be of the required diameter, in fire-clay in the spout 11, as in Figs. 4 and 5. The whole ladle is then lined with fire-clay, as in Fig. 5, and the partition 12 is formed and the ladle is simply lined as a round ladle is, thus saving the time necessary now to form the short spout lining in the usual ladle. The rod 16 is then twirled to loosen it and then withdrawn, the opening 14 is made with the finger and the ladle is baked, and is then ready for use.

If very small work is to be done, and a small flow of metal is desirable, the ladle is prepared with the rod 16 of very small diameter, and when the opening or passage 13 is wanted of a large capacity, a larger rod is placed in the spout when the ladle is lined.

This ladle is easily and cheaply made, and is sure to supply clear metal when pouring until the clear metal is all gone.

Having thus described my invention, what I claim is:—

1. The hereindescribed method consisting in forming a ladle with a spout portion extending from the top for a major portion of its length toward the bottom, inserting a rod in the spout, lining the ladle and the spout to inclose the rod, then removing the rod, and then forming an opening from the bottom of the passage left by the rod into the body portion of the ladle.

2. The hereindescribed method consisting in forming a ladle with a spout portion extending from the top toward the bottom, lining the spout portion with heat resisting material, inserting a rod in the spout portion, lining the ladle to inclose the rod, then uncovering the end of the rod at the bottom of the spout portion on the side toward the body portion of the ladle, and then removing the rod.

In testimony, that I claim the foregoing, I have hereunto set my hand this 10th day of April 1907.

GEORGE E. NEUBERTH.

Witnesses:

WM. H. CAMFIELD,
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