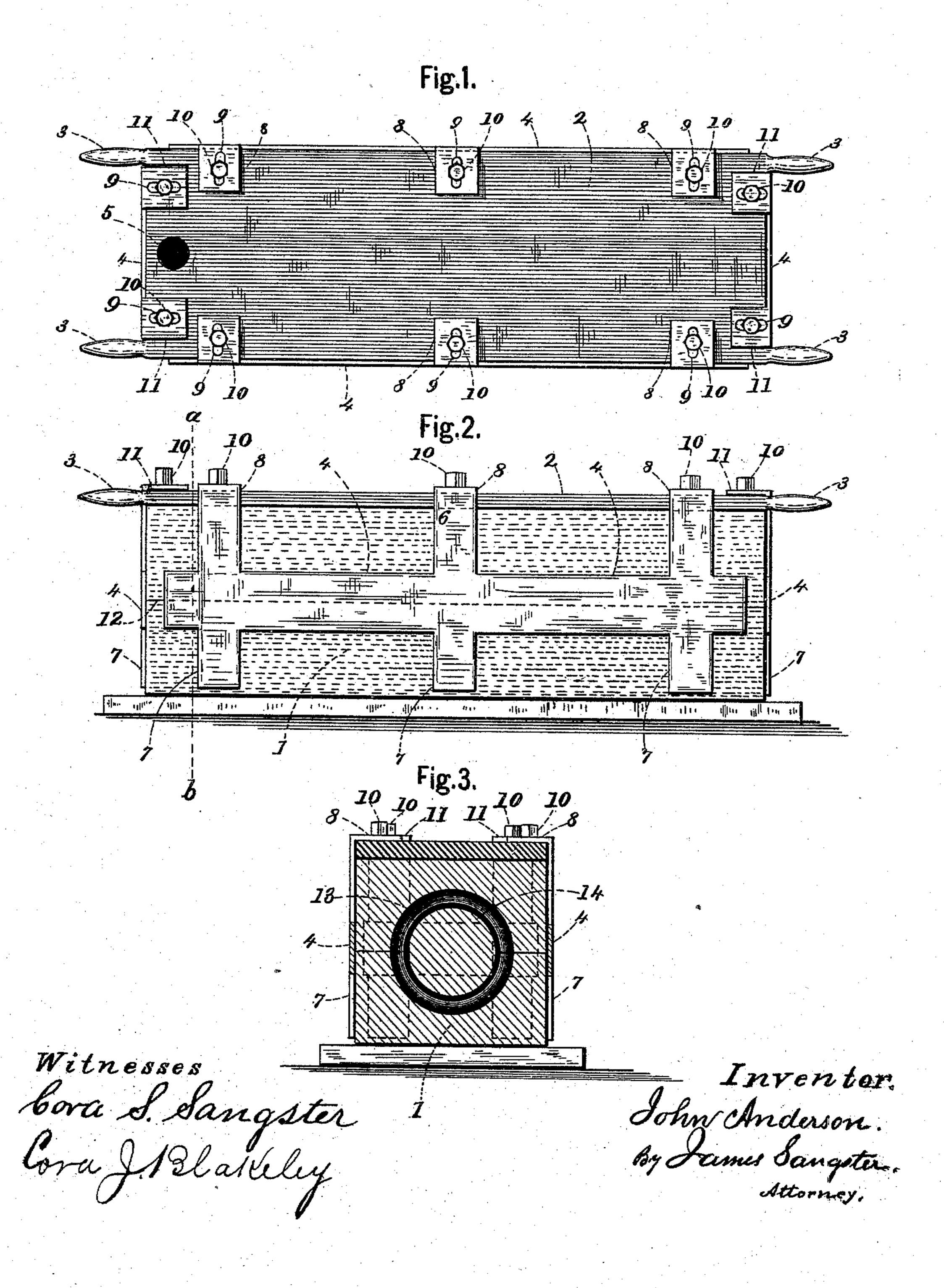
(No Model.)

## J. ANDERSON. FLASK WEIGHT FOR MOLDS.

No. 488,513.

Patented Dec. 20, 1892.



## United States Patent Office.

JOHN ANDERSON, OF BUFFALO, NEW YORK, ASSIGNOR TO THE PIERCE STEAM HEATING COMPANY, OF SAME PLACE.

## FLASK-WEIGHT FOR MOLDS.

SPECIFICATION forming part of Letters Patent No. 488,513, dated December 20, 1892.

Application filed March 12, 1890. Serial No. 343, 792. (No model.)

To all whom it may concern:

Be it known that I, John Anderson, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Snap-Flask Weights for Molders, of which the following is a specification.

The ordinary snap flask for molders is usually employed for the smaller kinds of work.

The object of my invention is to adapt the snap flask for molding larger varieties of work as well as greatly improving it for the smaller or lighter work, all of which will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which:—

Figure 1 is a top plan view. Fig. 2 is a side elevation and Fig. 3 a vertical section in

line a b Fig. 2.

The snap flask mold, 1, (see Figs. 2 and 3) is made in the usual way by means of the snap flask well known to molders, but such a flask mold when used for the larger or heavier kinds of work is liable to be forced apart by the expansion and weight of the fluid metal within the mold. Consequently such molds have not heretofore been used for larger or

heavy castings on account of this defect. To obviate the objection above mentioned 30 I employ a flat weight, 2, of cast iron adapted to cover the top of the mold as represented. It is provided with an opening, 5, through which the metal is poured and with handles, 3, by which it is lifted on or off from the mold. 35 It is also provided with side clamp pieces, consisting of the horizontal portions, 4, and vertical portions 6 and 7 each provided with an angle piece 8, at the top having a slot, 9, through which a bolt 10, screws into the top 40 plate to secure the clamping pieces rigidly thereto when adjusted to fit the mold. Similar clamping pieces, 11, are also used at the ends of the plate, 2, for the largest molds, the smallest sizes do not always require them. 45 These end clamping pieces, 11, are also provided with slots, 9, and bolts, 10, to secure them to the plate, 2. It will be noticed that these end and side clamping pieces are made

easily adjustable on the top plate to or from I

the ends and sides of the mold and also are 50 easily removable by means of the slots 9 and bolts 10, this is an important construction especially when large molds are used. The horizontal portions, 4, of the side and end clamps protect the opening, 12, between the 55 two portions of the mold so as to keep it tight and prevent leakage. The clamping pieces are also made to pass close to each side of the mold as they are forced down over it, so that they hold closely in place, which construction 60 permits a comparatively light weight, 2, to be used and thereby avoids the use of a heavy weight and its consequent serious hinderance to work.

A single weight, 2, and its clamping pieces, 65 is sufficient for a large number of molds because it is used only long enough to permit the metal to be poured in the mold, and as it chills almost immediately it can be lifted off therefrom and put onto another mold until 70 the metal has been poured into it, which operation can be repeated until any required number of molds have been filled. This construction saves the employment of a large number of flasks and also the large space re- 75 quired for storing them. By this means a much smaller quantity of sand is required because the side and end clamps give the holding strength that would otherwise be required to be given by an additional quantity 80 of sand.

I claim as my invention.

1. A snap flask weight adapted to cover the top of the mold, having handles by which said weight is lifted on or off from the mold 85 and a hole through which the metal is poured, in combination with side and end clamping pieces consisting of the horizontal portions, 4, for covering the seam where the two parts of the mold come together, and vertical portions 90 7 having angular slotted portions at the top and screw bolts adapted to pass through said slots for securing the side and end clamping pieces to the top weight whereby they are made easily removable and adjustable for 95 flasks varying in size substantially as described.

2. A removable snap flask weight consist-

ing of a flat covering weight 2, having handles, 3, by which it is carried, and an opening through which the metal is poured, all formed in one piece in combination with removable end and side clamping pieces having angle pieces, 8, provided with slots, 9, and bolts by which they are adjustably and removably se-

cured to the flat covering weight, substantially as described.

JOHN ANDERSON.

Witnesses:

JAMES SANGSTER,

CORA J. BLAKELEY.