(No Model.)

H. H. GARRETT.

GUIDE FOR MOLDERS' FLASKS.

No. 477,300. Patented June 21, 1892.

FIG. 1.

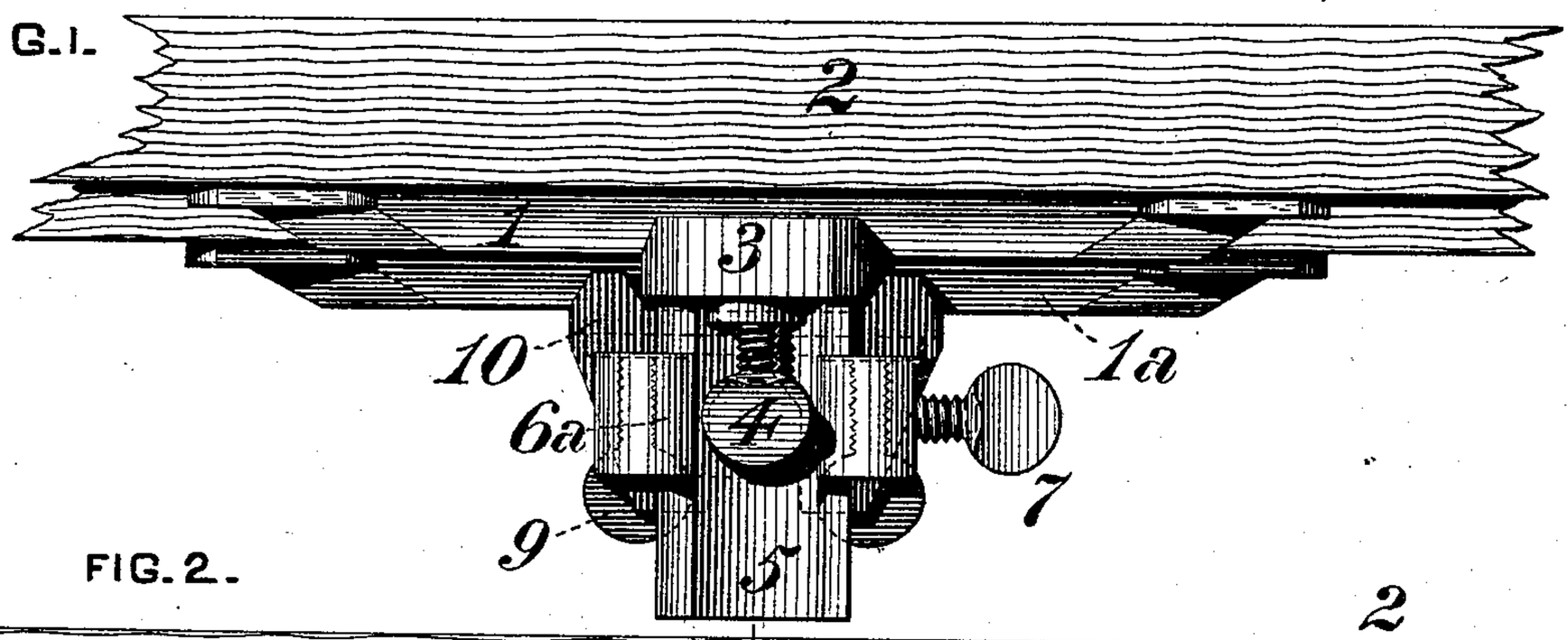


FIG. 2.

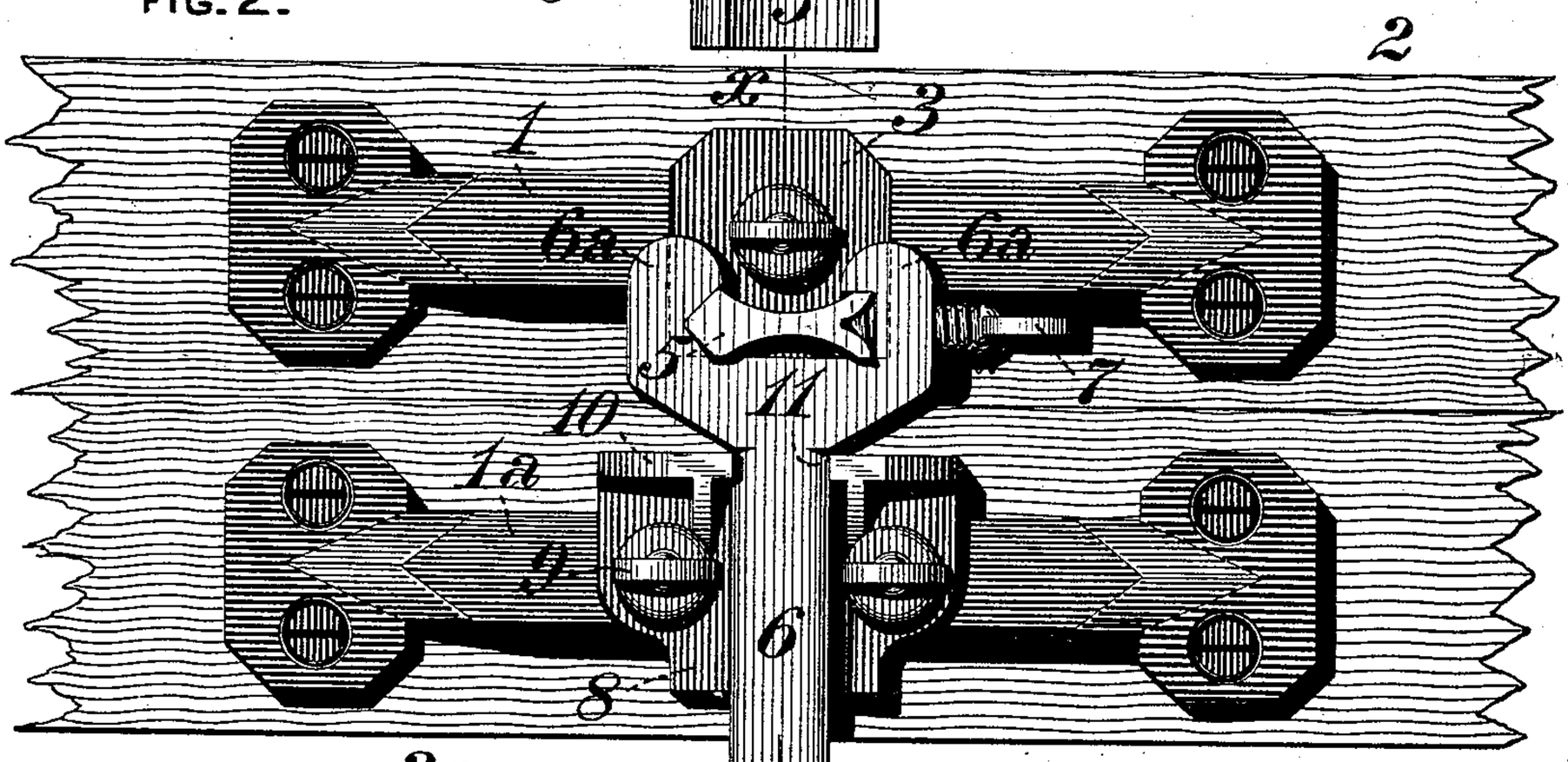
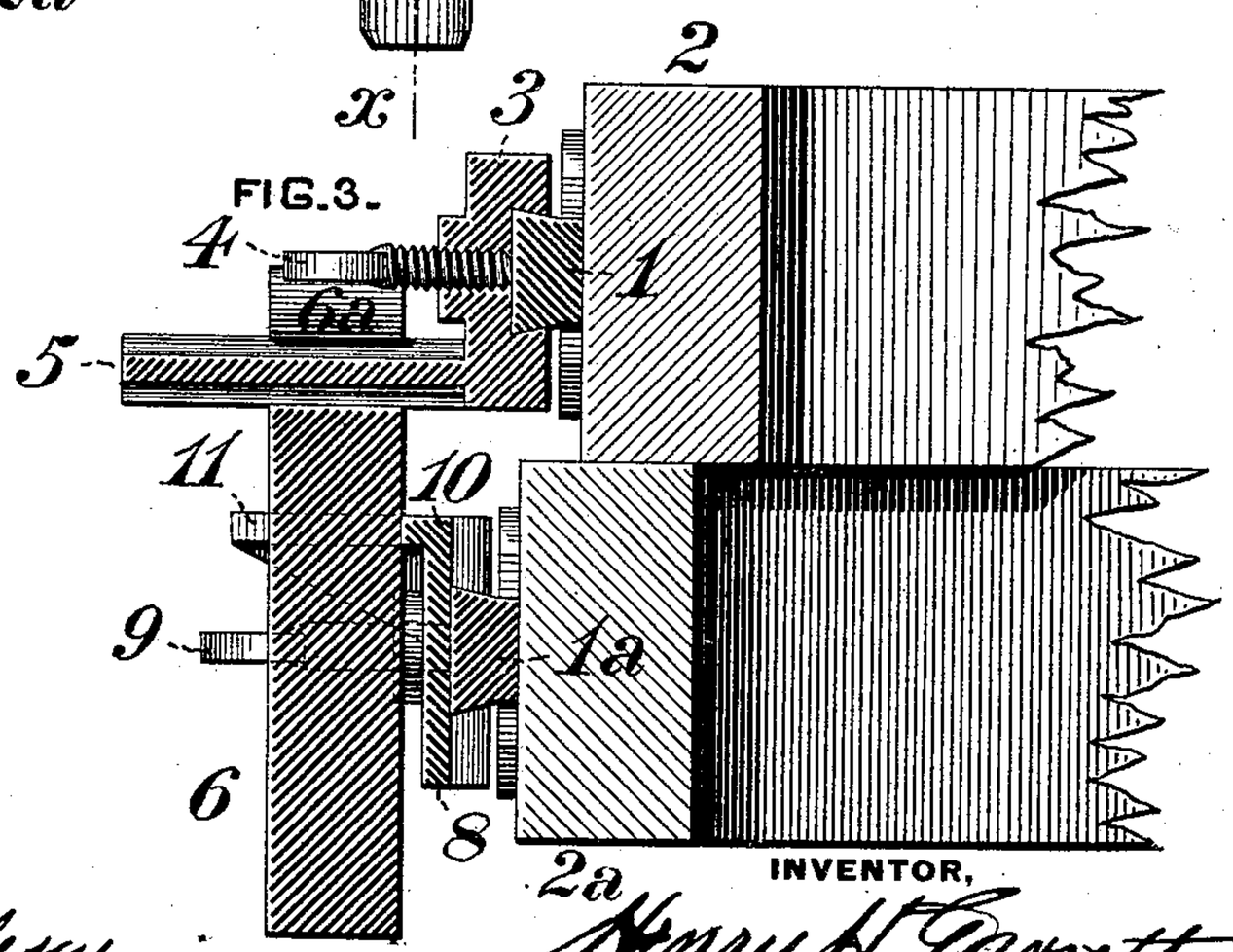


FIG. 3.



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UNITED STATES PATENT OFFICE.

HENRY H. GARRETT, OF PITTSBURG, PENNSYLVANIA.

GUIDE FOR MOLDERS' FLASKS.

SPECIFICATION forming part of Letters Patent No. 477,300, dated June 21, 1892.

Application filed March 21, 1892. Serial No. 425,723. (No model.)

To all whom it may concern:

Be it known that I, HENRY H. GARRETT, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered a certain new and useful Improvement in Guides for Molders' Flasks, of which improvement the following is a specification.

My invention relates to appliances for setting the copes and drags of flasks in which sand molds are formed in proper relative position for the pouring of the molten metal into the mold; and its object is to enable such adjustment as may be rendered necessary by imperfect fitting of the sides of the flask-sections one to another, due to warping, twisting, or inaccurate construction or setting of the parts of the flask, to be readily and properly effected.

To this end my invention, generally stated, consists in the combination, with a pair of fixed guides adapted to be secured to the cope and the drag of a flask, of two sliding blocks which are longitudinally adjustable upon the fixed guides and a guide-pin adjustable upon one of said blocks toward and from the fixed guides and fitting in a slot or guideway on the other block.

The improvement claimed is hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a plan or top view of a portion of the cope of a molder's flask having my improvement applied; Fig. 2, a front view, in elevation, of the device connected to the cope and drag, and Fig. 3 a vertical transverse section at the line $x\ x$ of Fig. 2.

In the practice of my invention I provide two fixed bars or guides 1 1^a, which are screwed or bolted at their ends, one above the other, to the cope 2 and the drag 2^a of an ordinary molder's flask. The upper and lower sides of the guides 1 1^a are preferably inclined inwardly from their faces, so as to form dovetails, as shown in Fig. 3. A block 3, having lips or flanges fitting on one of the fixed guides 1, is adapted to slide longitudinally thereon and is adjustable, so as to be fixed at any desired point by a clamping-screw 4. The block 3 is provided with an arm 5, projecting outwardly from and substantially perpendicular to its face, said arm being adapted to receive and support a movable and downwardly-projecting flask-pin 6, which has at its upper end lips or flanges 6^a, fitting over the sides of the arm 5. The pin 6 is movable toward and from the fixed guides 1 1^a on the arm 5 and may be fixed in any desired position thereon by a clamping-screw 7. To facilitate the firm connection of the pin 6 to the arm 5 when adjusted, one side of the latter may be beveled or inclined, as shown, the pin 6 being provided at top with a corresponding lip, and the opposite side of the arm may be longitudinally recessed to receive the clamping-screw 7. A block 8 is fitted to slide longitudinally on the fixed guide 1^a in the same manner as the block 3 on the guide 1 and is provided with clamping-screws 9, by which it may be fixed in any desired position on the guide 1^a. The block 8 is provided with an arm 10, which projects outwardly in corresponding direction with the arm 5 of the block 3, and a longitudinal slot or guideway 11 is formed in the arm 10, the width of said slot or guideway being such that the pin 6 may fit easily but without undue slackness or looseness therein.

Under the above construction it will be seen that either the block 3, which carries the pin 6, or the block 8, which carries the slot or guideway 11, in which said pin fits, or both blocks, may be adjusted longitudinally on the respective flask-sections and that the pin 6 may likewise be adjusted toward and from the flask-sections, such range of adjustment in directions at right angles enabling the proper alignment and setting of the cope and drag to be readily and conveniently effected.

I claim as my invention and desire to secure by Letters Patent—

1. In a guide for molders' flasks, the combination of two fixed guides adapted to be secured to the cope and the drag, respectively, a sliding block longitudinally adjustable upon each of said guides, and a guide-pin adjustable upon one of said blocks toward and from the fixed guides and fitting a slot or guideway upon the other block, substantially as set forth.

2. In a guide for molders' flasks, the combination of two fixed guides adapted to be secured upon the cope and the drag, respect-

ively, a sliding block fitting on one of said guides and having an outwardly-projecting arm, a clamp for fixing said block in position on the guide, a guide-pin fitting freely on and depending from the arm of the sliding block, a clamp for fixing said guide-pin, a second sliding block fitting on the other fixed guide and having a projecting arm slotted to receive the guide-pin, and a clamp for fixing said sliding block on said fixed guide, substantially as set forth.

In testimony whereof I have hereunto set my hand.

HENRY H. GARRETT.

Witnesses:
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