(No Model.)

H. H. GARRETT.

GUIDE PIN FOR MOLDER'S FLASKS.

No. 371,837. Patented Oct. 18, 1887.

FIG. 1.

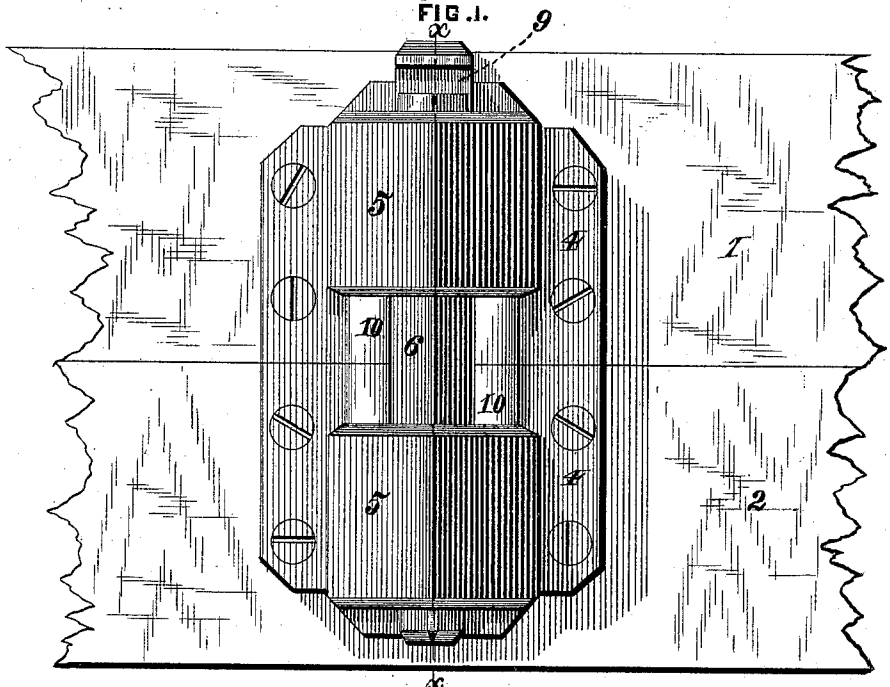
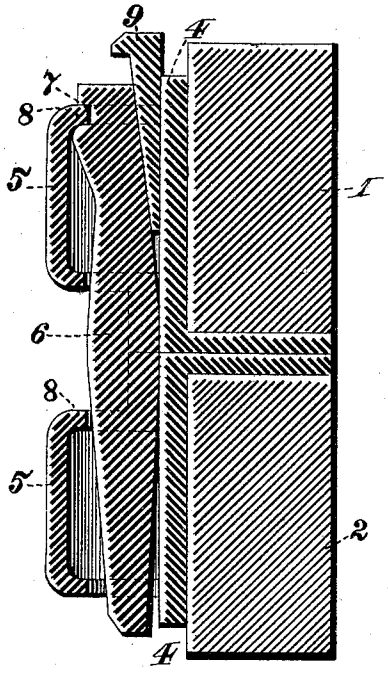


FIG. 2.



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HENRY H. GARRETT, OF PITTSBURG, PENNSYLVANIA.

GUIDE-PIN FOR MOLDERS' FLASKS.

SPECIFICATION forming part of Letters Patent No. 371,837, dated October 18, 1887.

Application filed March 31, 1887. Serial No. 233,107. (No model.)

To all whom it may concern:

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

In the accompanying drawings, which make part of this specification, Figure 1 is a view in elevation of my improved construction of guide-pin. Fig. 2 is a section of the same on the line *x x*, Fig. 1.

In the usual form of molders' flasks the pin is permanently secured by screws or otherwise to one half of the flask and the loop to the other half. This construction is, however, very objectionable, for the reason that the pins are either broken or loosened from the flask by an unequal lifting of one end of the half-flask in what is termed the "breaking" of the molds—*i. e.*, freeing the flasks from the sand after the casting has been made. In this breaking out the workman lifts one end of the flask and knocks or jars the sand out, and frequently only the handle of the upper half is caught hold of, thereby straining or breaking the guide device at the opposite end. As the guide-pin is unnecessary after the cope and drag are clamped together, I have invented a guiding device in which the pin can be easily and quickly removed after the cope and drag have been clamped together.

In general terms, the invention consists in the construction and combination of parts, substantially as hereinafter described and claimed.

In close proximity to the meeting edges of the cope 1 and the drag 2 are secured the plates 4, having the V-shaped loops 5 formed thereon. Into the loop of one part of the flask, preferably intended for the cope, is inserted the head of the pin 6, triangularly shaped in cross-section, as shown, and provided near its head with a notch, 7, for engagement with the rib or projection 8 on the loop 5. The back of the pin is slightly inclined, as shown in Fig. 2, from the middle toward each end, in order to permit of the rocking motion necessary to cause the notch to engage the rib on the loop. The pin is held firmly in place, with the notch and rib in engagement with each other, by the wedge 9. In order to obtain a good lateral support for the pin without unduly increasing the width of the loops, ribs 10 are formed on the plates 4, affording a considerable length of lateral bearing for the pin.

It will be observed that with my improved construction, after the parts of the flask have been secured together, the pin can be easily removed, thereby avoiding all liability of breaking the pin or straining the flask during the breaking-out operation.

In forming large molds in which there is a high projection on one-half it is necessary to nail long cleats or strips on the sides of the flask in order to obtain the necessary length of guide, the ordinary guide being too short. In my improved device any desired length of pin can be employed.

I claim herein as my invention—

1. A molder's flask provided with guide-loops, in combination with a guide-pin having its rear face inclined from the middle toward its end and removable from said loop, and a wedge for securing the pin within the loops, substantially as set forth.

2. A molder's flask provided with guide-loops having inwardly-projecting ribs, in combination with removable guide-pins provided with a notched head, and means for causing the notch to engage the rib, substantially as set forth.

3. A molder's flask provided with guide-loops having inwardly-projecting ribs, in combination with removable guide-pins provided with notched heads, and wedges for securing the pins in place, substantially as set forth.

In testimony whereof I have hereunto set my hand.

HENRY H. GARRETT.

Witnesses:
DARWIN S. WOLCOTT,
R. H. WHITTLESEY.