J. ROST. PIN AND GUIDE FOR MOLDING FLASKS.

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PIN AND GUIDE FOR MOLDING-FLASKS.

No. 898,929.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Julius Rost, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Pins and Guides for Molding-Flasks, of which the following is a specification.

This invention relates to molders' flasks, and more particularly to improvements in a pin and guide for insuring the proper registering of the cope and drag of the mold and

for effectively preventing wabbling.

The invention has for one of its objects to improve and simplify the construction of devices of this character so as to be comparatively easy and inexpensive to manufacture, readily applied to flasks of ordinary construction and designed to facilitate the manipulation of the mold sections and insure better

castings.

A further object of the invention is the provision of a pin and guide for flasks in which the guide is provided with an adjustable pin engaging slide or bearing piece and in which the pin is capable of vertical adjustment for lengthening or shortening the pin to suit the work in the flask, the parts being so designed as to insure the proper registering of the cope with the drag and permit of ready adjustment.

With these objects in view and others, as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the

claims appended hereto.

In the accompanying drawing, which illus40 trates one of the embodiments of the invention, Figure 1 is a side view of a flask with the guide and pin applied thereto. Fig. 2 is a plan view of the device. Fig. 3 is a section of the guide. Fig. 4 is a vertical section on 145 line 4—4, Fig. 2. Fig. 5 is a plan view of the pin and holder therefor. Fig. 6 is a side view of the adjustable bearing piece mounted in the guide.

Similar reference characters are employed [50 to designate corresponding parts throughout

the several views.

Referring to the drawing, A designates the drag and B, the cope of the flask, which may be of any approved construction and design.

155 The pin and guide device designated gener-

ally by C, consists of a socketed holder 1 that is secured to the drag A in any suitable manner and in the socketed portion 2 thereof is an extension pin 3. This pin is preferably of round cross section and is vertically 60 adjustable in the socket 2 and clamped in position by a set screw 3'. By this means, the pin can be raised or lowered to any desired position to suit the work to be done. On the cope B is a guide 4 that comprises a suitably 65 shaped casting that is provided with a chamber 5 and a recess 6 communicating with the chambers, the said recess serving to receive the pin 3. As shown in 1, the upper end of the extension pin 3 is tapered so as to facili- 70 tate the removal and place of the cope, and the pin may be steel, brass, cold rolled iron or the like. In the housing is a slide or follower 7 that has at its inner end a semi-circular bearing piece for engagement with the ex- 75 tension pin 3. The slide or follower 7 is provided with teeth 9 that mesh with a worm 10 whereby the slide can be moved inwardly or outwardly. The worm 10 is arranged in the chamber 5 and mounted to rotate in bear- 80 ings 11, there being a slotted head 12 on the outer end of the work for permitting the latter to be turned with the screw driver. In order to hold the follower in fixed position after being adjusted, a set screw 13 is pro- 85 vided which extends through one of the walls of the chamber 5 and binds at its inner end on the follower. By means of the construction described, the parts can be readily and conveniently adjusted to proper regis- 90 tering of the sections of the flask so as to insure perfect castings, and furthermore there can be no wabbling of the parts since the slides 7 of the flask can be moved by the worm to firmly grip the extension pins 3.

While I have shown and described the invention in connection with a bench or box flask, it is obvious that it may be used with equal benefits on floor flasks.

From the foregoing description, taken in 100 connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have 105 described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the apparatus shown is merely illustrative 110

sired, as are within the scope of the claims.

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

5 1. In a flask, the combination of a pin, a holder having a socket in which the pin is holder for securing the pin in place, a guide provided with a recess for receiving the pin, 10 a member slidably mounted on the guide and having a portion disposed in the recess for engaging the pin, teeth on the member, a worm on the guide and engaging the teeth for moving the member, and bearings on the 15 guide in which the worm is held against longitudinal movement.

2. In a flask, the combination of a pin, a holder therefor, means for clamping the pin in the holder, a guide, a follower mounted in 20 the guide, a semi-circular member on the follower for engaging the pin, teeth on the fol-

and such changes may be made when de- lower, and a worm meshing with the teeth for

adjusting the follower.

3. In a flask, the combination of a pin of round cross section, a holder having a cylin- 25 drical socket for receiving the pin and permitting the latter to move longitudinally longitudinally movable, a set screw on the thereon, a set screw on the holder for clamping the pin therein, a guide provided with a chamber and a recess communicating there- 30 with, a member arranged in the chamber and having a portion disposed in the recess for engaging the pin, means in the chamber for moving the said member, and a device for clamping the member in fixed position.

In testimony whereof, I affix my signature

in presence of two witnesses.

JULIUS ROST.

Witnesses:

A. W. Splitt, WELLS K. GREGG.