Jan. 22, 1929. 1,699,839

C. L. GOHMANN

ADJUSTABLE HINGE FOR FOUNDRY FLASKS

Filed Dec. 21, 1927

Fig. 1.

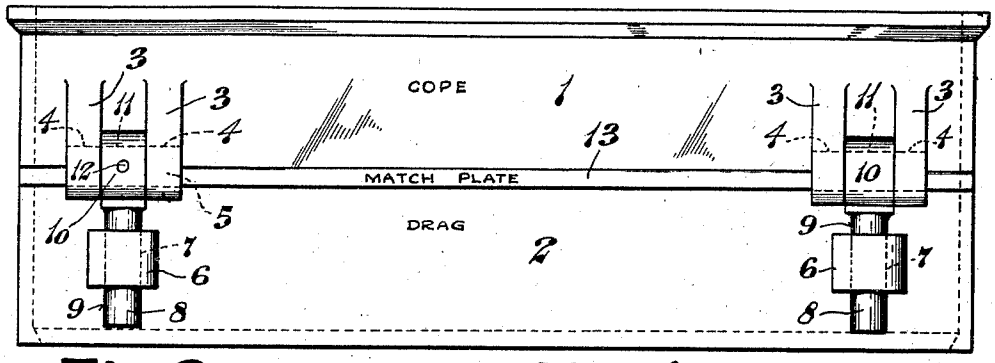


Fig. 2.

Fig. 4.

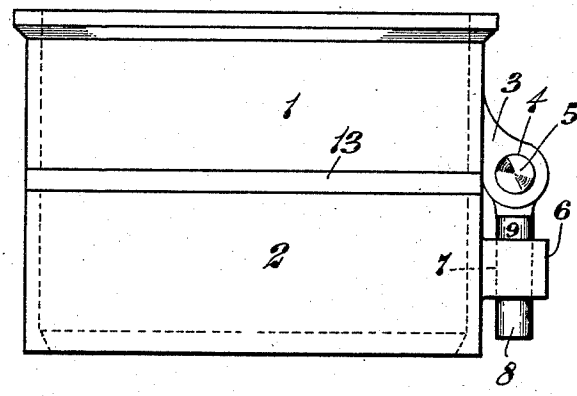


Fig. 3.

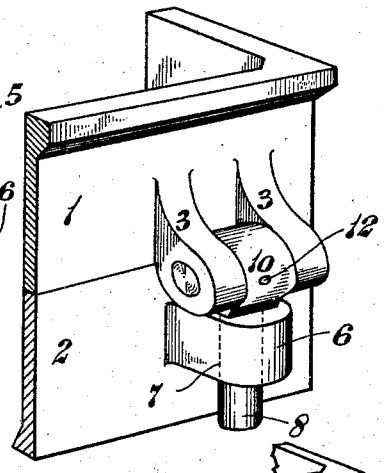
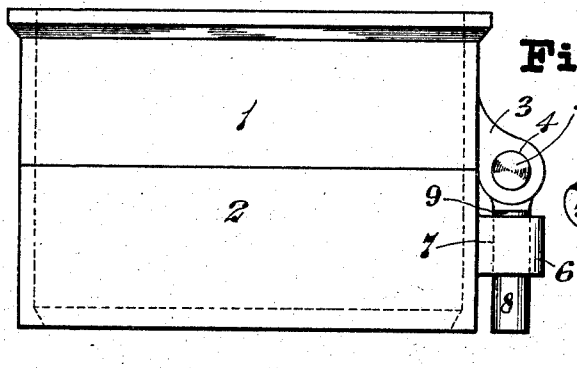


Fig. 5.



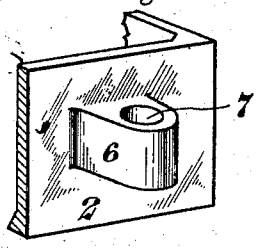


Fig. 6.

INVENTOR.

Charles L. Gohmann

BY James N. Ramsey

ATTORNEY.

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UNITED STATES PATENT OFFICE.

CHARLES L. GOHMANN, OF NEW ALBANY, INDIANA, ASSIGNOR TO GOHMANN BROS. AND KAHLER COMPANY, OF NEW ALBANY, INDIANA, A CORPORATION OF INDIANA.

ADJUSTABLE HINGE FOR FOUNDRY FLASKS.

Application filed December 21, 1927. Serial No. 241,600.

My invention relates to adjustable hinges and more specifically to hinges for flasks commonly used in foundry practice.

The objects of my invention are to provide an adjustable hinge for foundry flasks and the like which is simple, efficient, durable, inexpensive to manufacture and readily adapted to conveniently assemble or disassemble the cope with the drag, or vice versa.

Another object of my invention is to provide an adjustable hinge, part of which is mounted upon the cope and the remaining part upon the drag whereby split patterns or match plates of different thicknsses can be successfully and efficiently drawn, thereby eliminating the labor of patching the mold after drawing, which is frequently necessary with hand or machine drawing.

My invention consists in the construction, combination, location and arrangement of parts, as herein set forth and claimed.

In the drawing:

Fig. 1 is a side elevational view of a flask having two of my improved adjustable hinges mounted on the cope and drag and showing a match plate or split pattern inserted between the cope and drag;

Fig. 2 is an end elevation thereof;

Fig. 3 is a similar end elevation with the match plate or split pattern removed;

Fig. 4 is a fragmentary perspective view of one corner of Fig. 1:

Fig. 5 is a fragmentary perspective view of one corner of the drag; and

Fig. 6 illustrates a portion of the hinge, part of which appears in section.

In the embodiment of my invention as illustrated and which shows a preferred construction I provide an adjustable hinge for foundry flasks the latter comprising cope 1 and drag 2. The cope 1, as shown in Fig. 1, is provided with bearing-lugs 3, which may be integrally formed therewith or attached in any suitable manner as desired. Each of the bearing-lugs 3 has its hole 4 disposed horizontally for the purpose of receiving pivot-pin 5, as clearly shown. The drag 2 is provided with a pair of eye lugs 6, which lugs may also be formed integral therewith or attached in any suitable manner as desired.

Each of the eye lugs 6 is provided with vertically disposed hole 7 for the purpose of slidably receiving the shank 8 of sliding pin 9. The upper end of said pin 9 is enlarged to form head 10, which head is provided with a horizontally disposed hole 11 through which one of the pivot pins 5 is adapted to be inserted.

To assemble the pins 9 between the pairs of bearing lugs 3 upon cope 1 simply insert head 10 of said pin 9 between the bearing-lugs 3 until the hole 11 therein is brought into registry with holes 4 in said bearing-lugs 3. Then insert one of the pins 5 within said holes 4—11 and securely attach pin 9 to pin 5 in any suitable manner, as for example, by dowel pin 12, as shown in Fig. 5.

Both of the pins 9 are thus pivotally attached to cope 1 and the shanks 8 thereof are spaced apart from each other and adapted to register with holes 7 in eye lugs 6, the latter being part of the drag 2, as before stated.

The operation of a flask having my improved hinges thereon is as follows:

Assume that the split pattern or match board 13 has been placed between the cope 1 and drag 2, as shown in Figs. 1 and 2, respectively. Then after the sand has been rammed in the cope and drag, the cope may be drawn either by hand or by machine, but in either case the shanks 8 of pins 9, slidably fitted within hole 7 of eye lugs 6, eliminate the usual danger of spoiling the mold when drawing, thereby eliminating the labor of patching the mold.

An advantage of this invention is that match plates or split patterns of varying thicknesses can be readily handled by flasks equipped with my improved adjustable hinge.

By carefully considering the description in connection with the showing made on the drawing, it will be understood that the device is of comparatively simple construction, practical in operation and very advantageous. As the use and construction is clear a more lengthy description need not be entered.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In combination with a foundry flask comprising a cope and drag, a pair of spaced apart bearings mounted upon said cope, an eye lug mounted on said drag, and a pin pivotally mounted in said bearings and adapted for slidable engagement with said eye lug.

2. An adjustable hinge for a foundry flask comprising a pair of spaced apart bear-

ings integrally formed with the cope of said flask, an eye lug integrally formed with the drag of said flask and having its hole disposed vertically therethrough and a pin having a reduced shank and pivotally mounted in said bearings, said shank being adapted to slidably engage said vertically disposed hole.

3. An adjustable hinge for foundry flasks comprising a cope having a plurality of pairs of extended bearings, a drag having a plurality of extended eye lugs, pivot pins swingably mounted in said bearings, the shanks of which are adapted to slidably fit within said eye lugs for adjustably and pivotally connecting said cope with said drag for the insertion of split patterns or match plates of varying thicknesses between said cope and drag.

CHARLES L. GOHMANN.