

P. D. BECKWITH.

FLASK HINGE.

No. 368,317.

Patented Aug. 16, 1887.

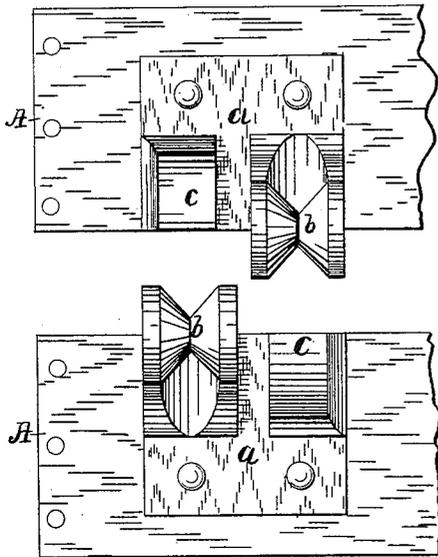


FIG. 1.

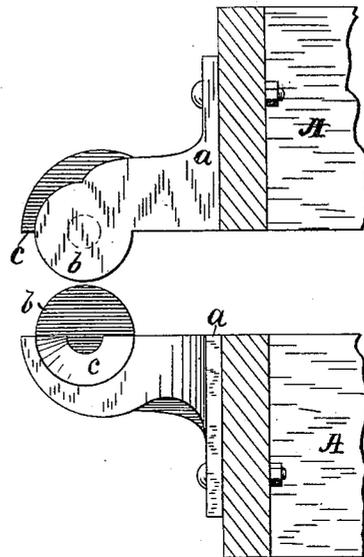


FIG. 2.

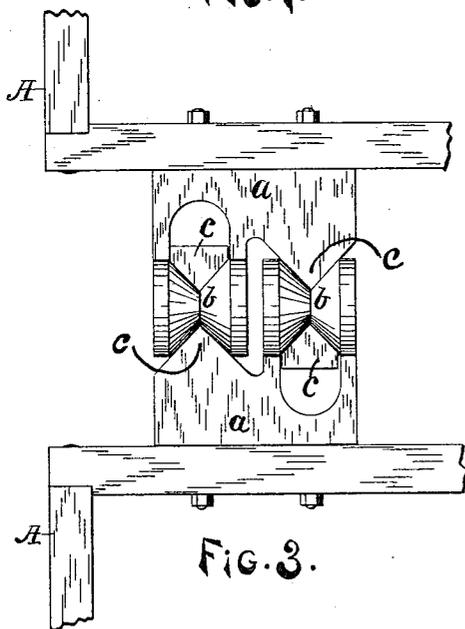


FIG. 3.

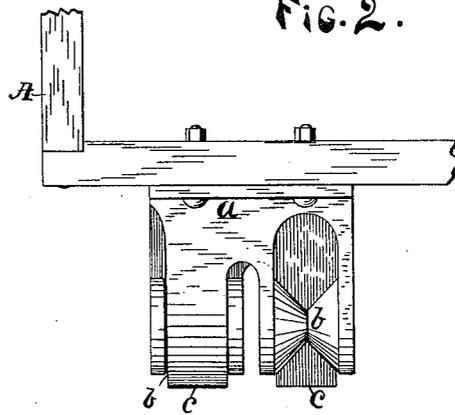


FIG. 4.

Witnesses

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J. W. Park

Inventor

Philo. D. Beckwith.

By his Attorney

L. V. Moulton,

(Model.)

2 Sheets—Sheet 2.

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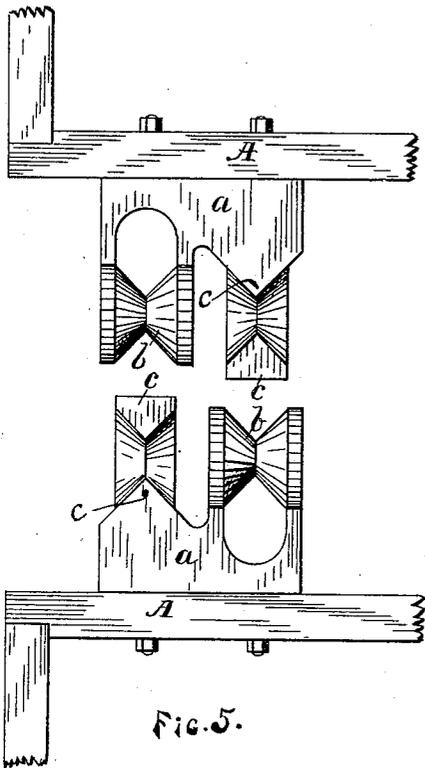


Fig. 5.

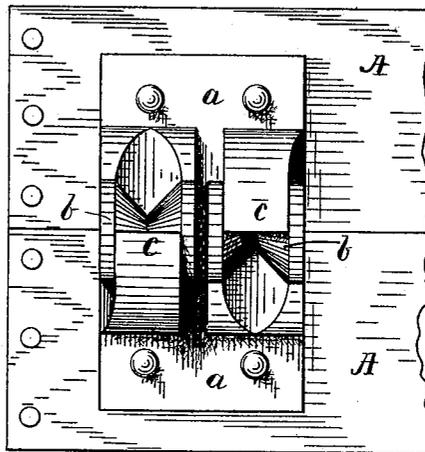


Fig. 6.

Witnesses

Inventor

W. A. Reed
Sarah Moulton.

Philo. D. Beckwith.
By *his* Attorney
L. V. Moulton.

UNITED STATES PATENT OFFICE.

PHILO D. BECKWITH, OF DOWAGIAC, MICHIGAN.

FLASK-HINGE.

SPECIFICATION forming part of Letters Patent No. 368,317, dated August 16, 1887.

Application filed February 21, 1887. Serial No. 228,776. (Model.)

To all whom it may concern:

Be it known that I, PHILO D. BECKWITH, of Dowagiac, in the county of Cass and State of Michigan, have invented a new and useful Hinge, of which the following is a specification.

My invention relates to that class of hinges that are detachable at pleasure, and more particularly to hinges used upon foundry-flasks.

The object of my invention is to provide a hinge that will permit lifting off the upper part of a flask in a horizontal position, and that will, when the flask is opened by turning upon said hinge, be interlocked in such a manner that the parts cannot be detached until the flask is again closed. I accomplish this by the device illustrated in the accompanying drawings, in which—

Figure 1 shows an elevation of one corner of a flask having my device attached and the parts of the flask slightly separated; Fig. 2, the same shown at right angles to the view in Fig. 1; Fig. 3, a plan view of the same, showing the position of the parts when the flask is opened by turning upon the hinge; Fig. 4, the same when the flask is closed. Fig. 5 is a plan view of the hinge detached, and Fig. 6 an elevation of the hinge closed.

Like letters refer to like parts in all the figures.

A represents the flask, to which are attached the plates *a a*, to each of which is attached a pintle, *b*, and a half knuckle or hook, *c*, so situated that their axes are in the same horizontal line, and also so situated that the hook on each plate will engage with the pintle on the other plate when the flask is closed, thus forming a double hinge, each half of which is the duplicate of the other in reverse position.

The pintles *b* are made smaller in diameter at the middle, preferably in the form of frusta of cones, with the small ends adjacent, and the half knuckles or hooks have corresponding conical surfaces which half inclose said pintles.

The operation of my device is as follows: When the flask is closed, the upper part of said flask can readily be lifted off in a horizontal

position and again accurately replaced, the inclined conical surfaces of the pintles and hooks serving to guide the upper part of the flask to proper place, the device in this case performing the functions of the usual guide-pins. When the opposite side of the upper part of the flask is lifted and the device allowed to operate as a hinge upon which said upper part of the flask is turned, said device interlocks so that the parts cannot be separated until again closed, the pintle on the upper part resting in the hook on the lower part, and the hook on the upper part passing under the pintle on the lower part, thus preventing accidental displacement of the upper part of said flask. The device also presents the same appearance and operates in the same way when the flask is either side up, thus being well adapted for work that has to be "rolled over," which requires the opening of the flask while reversed or upside down, in which position the ordinary detachable hinge will not operate.

I am aware that a hinge having a pintle on one part and an open knuckle or hook on the other engaging with said pintle, and the two parts detachable when in a certain relative position, is not new. I do not claim such broadly.

What I claim, and desire to secure, is as follows:

1. A hinge having a pintle and an open knuckle or hook on each part, the knuckle or hook on each engaging with the pintle on the other, substantially as described.

2. A hinge having a pintle and an open knuckle or hook on each part, the knuckle or hook on each engaging with the pintle on the other, and each having inclined conical surfaces, substantially as described.

3. A hinge having a pintle and an open knuckle or hook on each part, the knuckle or hook on each engaging with the pintle on the other and interlocking when open and detachable when closed, substantially as described.

PHILO D. BECKWITH.

Witnesses:

COY W. HENDRYX,
EMANUEL PHILLIPSON.