

## Molder's Flask.

No. 98,728.

Patented Jan'y 11, 1870.

Fig. 2.

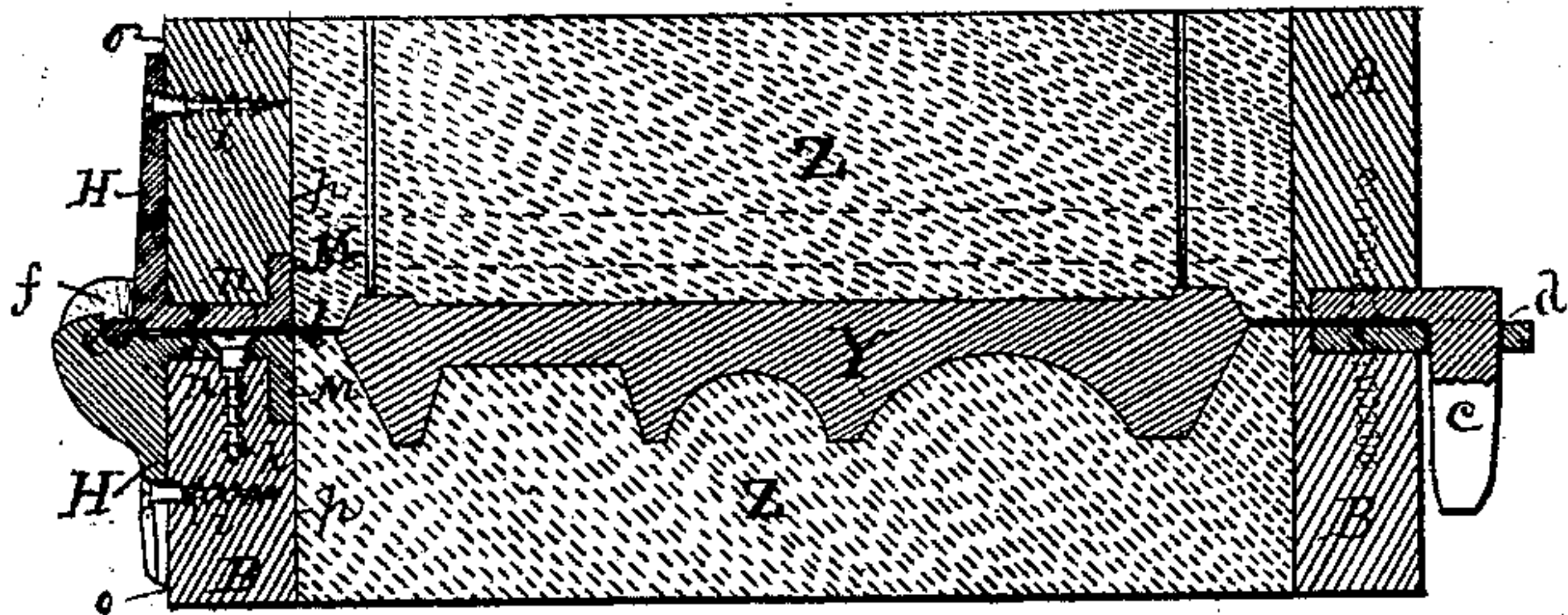


Fig. 4.

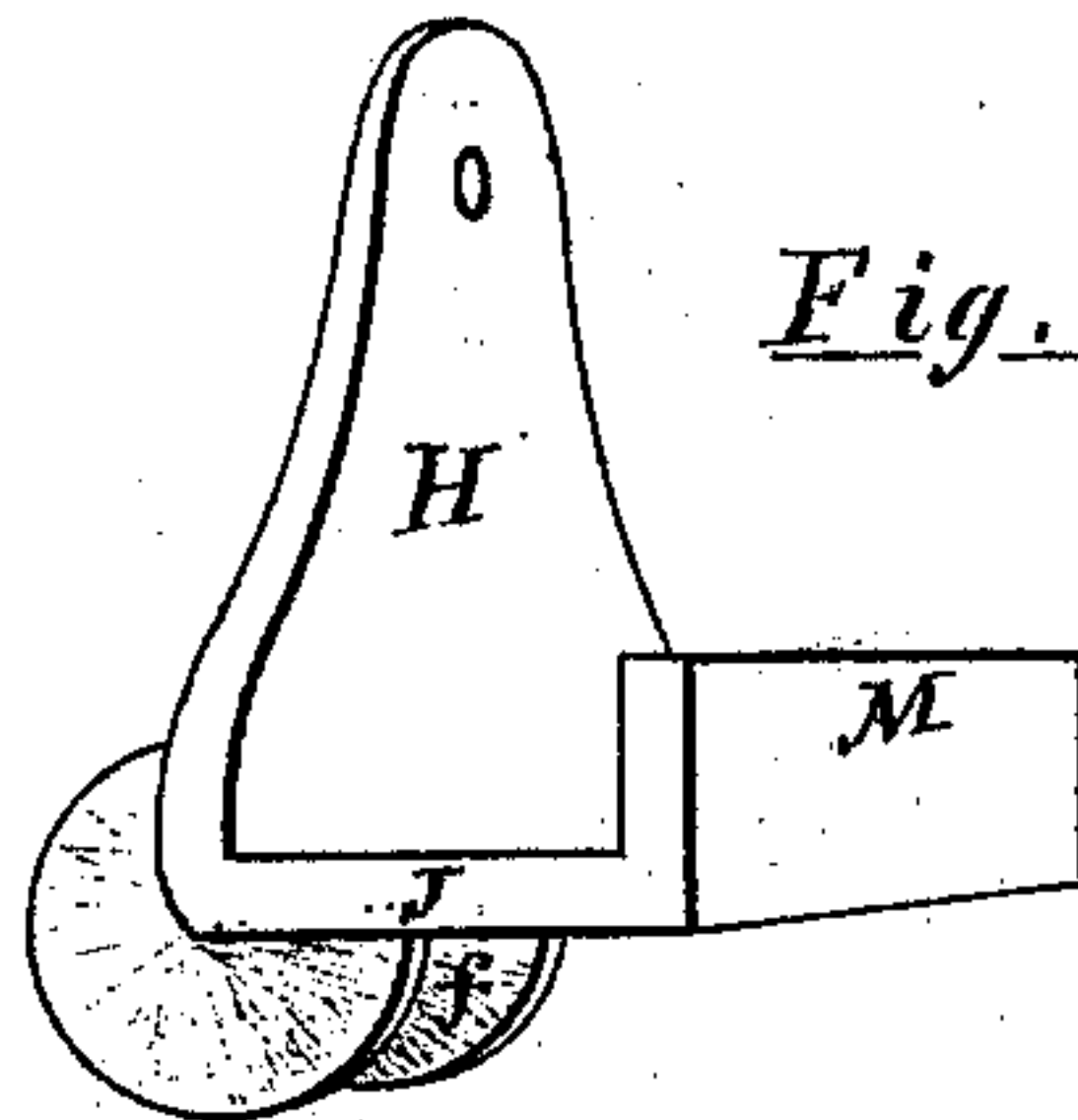


Fig. 1.

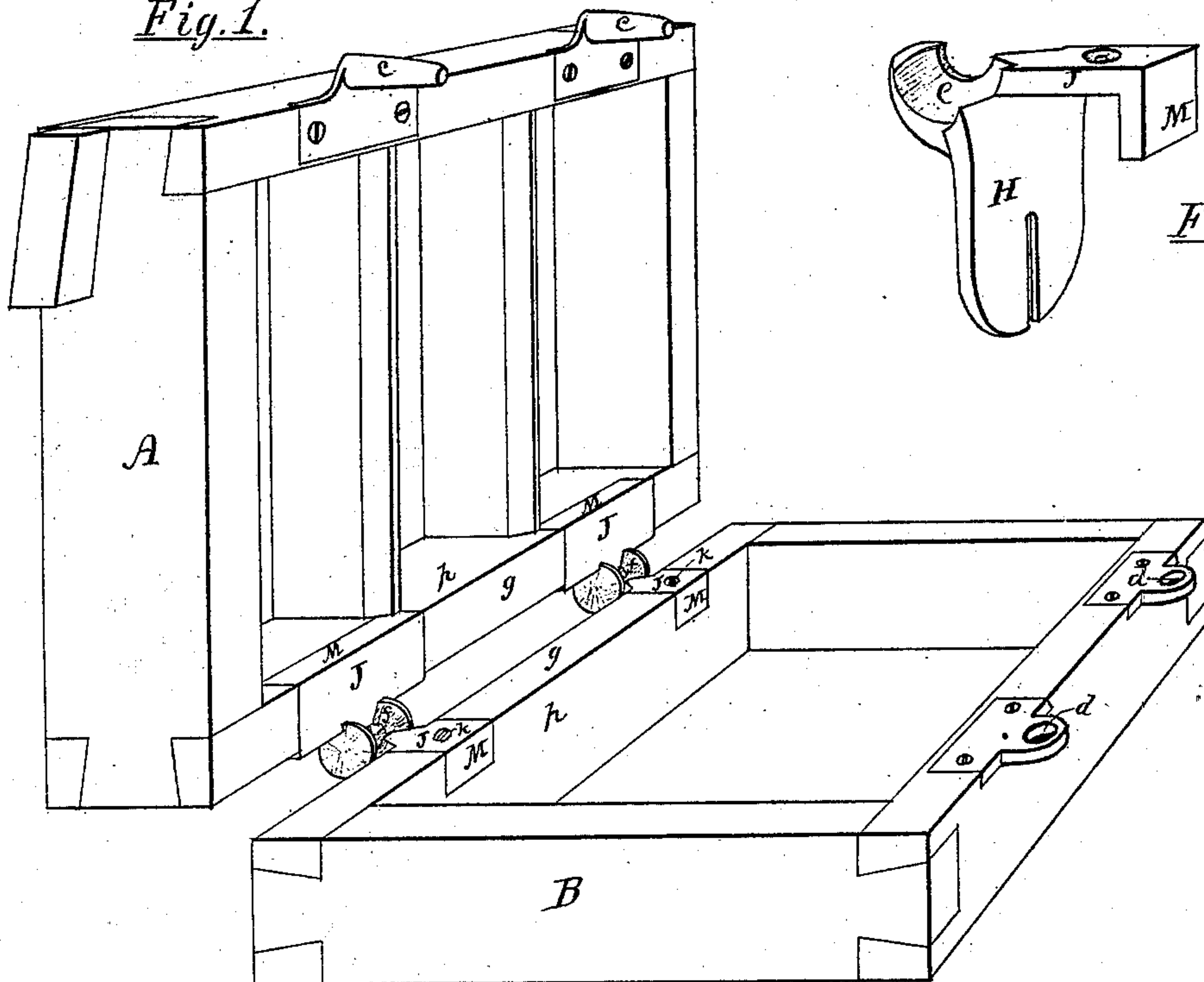
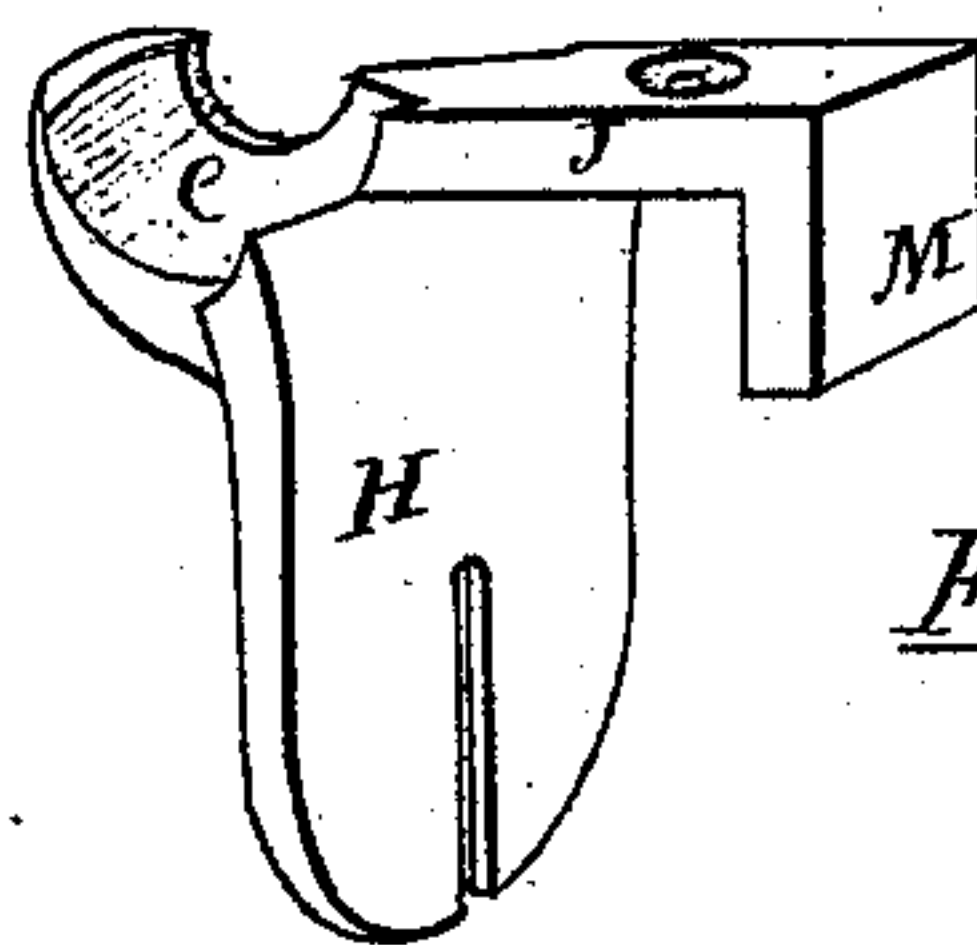


Fig. 3.



Witnesses:-

Albert S. Pease  
Austin L. Park.

Inventor:-

Clanson Wilcox



# UNITED STATES PATENT OFFICE.

ALANSON WILCOX, OF GREEN ISLAND, NEW YORK.

## IMPROVEMENT IN MOLDERS' FLASKS.

Specification forming part of Letters Patent No. 98,728, dated January 11, 1870.

*To all whom it may concern:*

Be it known that I, ALANSON WILCOX, of Green Island, in the county of Albany and State of New York, have invented a new and useful Improvement in Molders' Flasks, of which the following is a specification, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective view of one of my improved flasks with the cope part turned up perpendicular. Fig. 2 is a section of the same flask closed and full of sand, with a casting therein. Figs. 3 and 4 are perspective views of the two separable parts of one of the hinges of the same flask, on a larger scale.

Like parts are marked by the same letters in the different figures.

Molders' flasks are commonly made of wood, in two separable parts, A B, connected together on one side by steady-pins *c* and corresponding sockets *d*, and on the other side by V-shaped or inclined open-joint cast-iron hinges, each made in two distinct parts or halves, fastened separately to the upper and lower parts of the flask.

In such flasks it is very important that the two separable parts of each hinge should be firmly and durably fastened to the wooden parts of the flask, for, in molding, the whole or nearly the whole weight of the cope or upper part, A, when filled with sand *z*, as in Fig. 2, and turned upright, as in Fig. 1, must then be sustained by the hinges; and when the sand-filled cope shall be shut down, as in Fig. 2, its hinge side must bear hard on the V-shaped or inclined joints *e f* of the hinges, and not on the face *g* of the flask, to make the cope surely fit down in its true place.

In such flasks each separable half of the hinges has commonly had a vertical leaf, H, fastened upon the outer upright side, *o*, of the flask by screws *i*, with or without merely a horizontal part, J, let into and secured by a screw or screws, *k*, in the face *g* of the flask.

With such hinges the great weight of the sand-filled cope A, resting on the joints *e f* of the hinges, had to be mainly sustained by the fastening-screws, which were therefore apt to strain, tear, and split the wood, so as to let

the hinges sag and get loose thereon, and thereby allow the hinge side of the cope to bear hard on the face *g* of the flask instead of on the joints of the hinges, and thus make the flask unfit for use until repaired with considerable difficulty and expense; and with such hinges the hot or burning gases, which, in filling the mold with melted cast-iron Y, escape laterally through the parting *l*, Fig. 2, came in such contact with and so scorched or partially charred the wood at the places where the hinges were attached as to thereby hasten the loosening of the latter on the flask.

To avoid or lessen those defects is the principal object of my invention, which consists primarily in forming one or each of the two separable parts or halves of V-shaped or inclined open-joint hinges for molders' flasks, with an inside upright retaining and protecting flange, M, in addition to and in connection with the previously-existing horizontal part J and outside vertical leaf, H, so that the flange M may hook over a considerable portion, *n*, Fig. 2, of the wood of the flask, and thereby, in connection with the parts J and H, firmly and durably secure the half of the hinge to the flask with but little needed assistance from fastening-screws, and so that the flange M may materially protect the wood where the half of the hinge is attached from being charred and destroyed by the hot or burning gases that escape laterally through the parting in the mold in casting.

In attaching these improved hinges to flasks, I have the outside leaf, H, fit against the outer upright surface, *o*, of the flask, and have the flange M fit tight against or let into the inner surface *p* of the flask, so that the intervening wood *n*, Fig. 2, shall be compressed or closely embraced by and between the said outer leaf and inner flange, and there fasten the half of the hinge by a screw, *i*, or screws *i k*.

This improved hinge is a new article of manufacture and sale without the wooden flask, and the wooden flask having such hinges is superior to those hereinbefore mentioned as being in common use.

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

1. A flask-hinge having a V-shaped, or inclined open joint, and one or each of its separable halves formed with an upright inside flange, M, in connection with a horizontal part, J, and an outside upright leaf, H, as herein described.

2. A molder's flask having its wooden upper and lower parts, A B, connected at one side by open-joint hinges, which have one or each of the separable halves thereof formed with an upright inside retaining and protect-

ing flange, M, in addition to a horizontal part, J, and an outside vertical wing, H, substantially as herein described.

In testimony whereof I hereunto set my hand this 14th day of December, 1869.

ALANSON WILCOX.

Witnesses:

ALBERT S. PEASE,  
AUSTIN F. PARK.