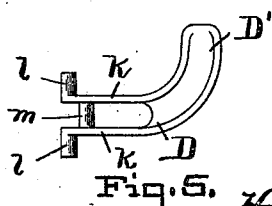
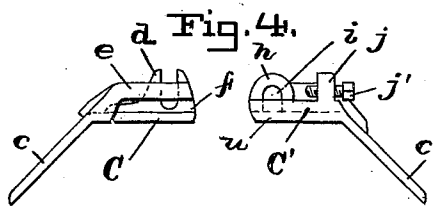
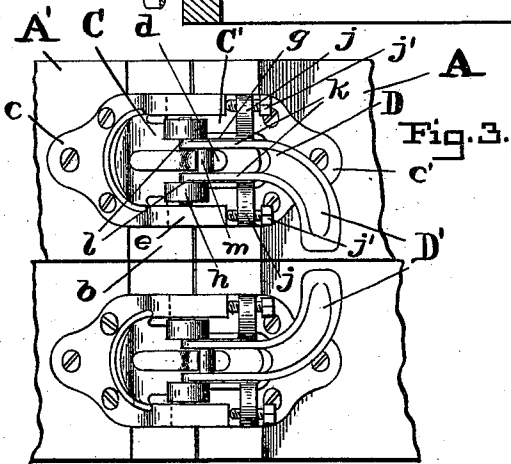
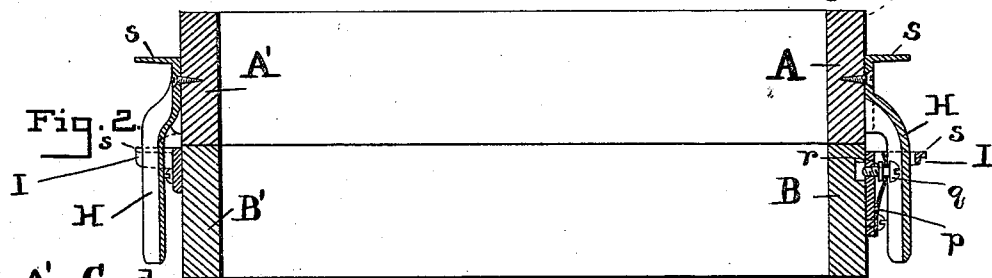
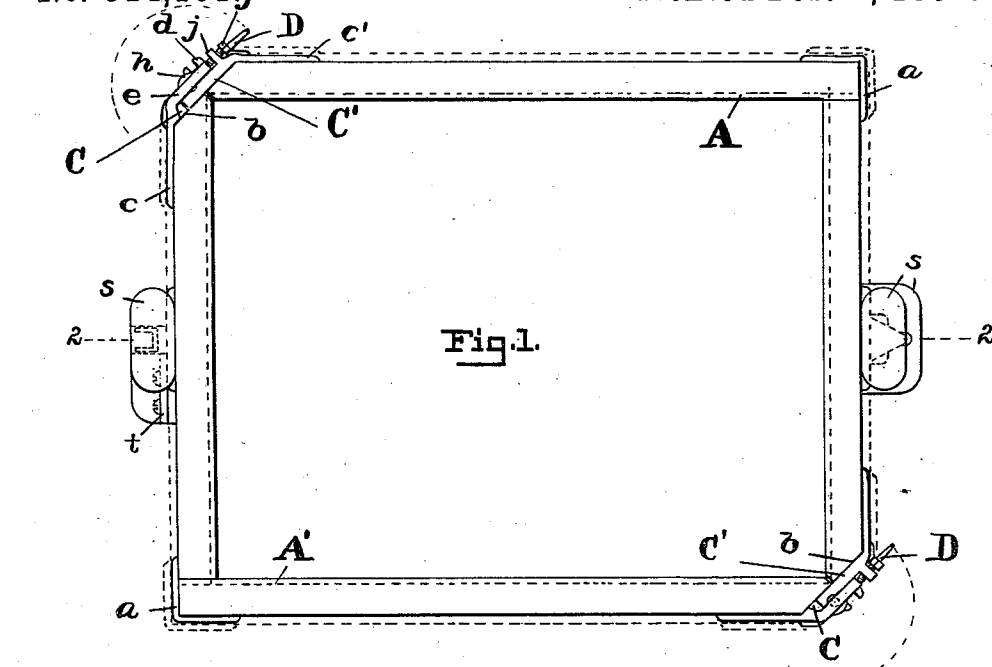


(No Model.)

H. R. TRAVERS & C. PETERSEN.
MOLDER'S FLASK.

No. 514,101, j'

Patented Feb. 6, 1894.



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UNITED STATES PATENT OFFICE.

HERMAN R. TRAVERS AND CHRISTIAN PETERSEN, OF BALTIMORE, ASSIGN-
ORS TO JOHN E. NORWOOD, OF SYKESVILLE, MARYLAND.

MOLDER'S FLASK.

SPECIFICATION forming part of Letters Patent No. 514,101, dated February 6, 1894.

Application filed December 20, 1892. Serial No. 455,849. (No model.)

To all whom it may concern:

Be it known that we, HERMAN R. TRAVERS and CHRISTIAN PETERSEN, citizens of the United States, residing at Baltimore city, in the State of Maryland, have invented certain new and useful Improvements in Molders' Flasks, of which the following is a specification.

This invention relates to an improvement in molders' flasks and the object is to provide a flask with corner-fastenings or clamps whereby it may be spread while the opposite sides remain parallel with each other.

In the accompanying drawings which illustrate a construction for carrying out our invention, Figure 1 shows a top-view of the flask closed, broken lines indicating its open state. Fig. 2 shows a central cross-section taken on line 2—2 of Fig. 1. Fig. 3 shows a face-view of the corner-fastenings or clamps at one corner. Figs. 4 and 5, show side or edge views of the two sliding parts of a clamp, and a detail of the clamp-cam.

The upper and lower halves of the flask each comprise two parts, A, A', and B, B', and each of such parts consists of two sides of the flask fastened together at right angles to each other, the corner thus formed being bound by a metal corner-piece, *a*. The two parts of a flask-half fit together and form a rectangle, and the two diametrically opposite corners where they abut are cut off to form surfaces, *b*, for the fastenings or clamps to fit against, one of such clamps being at each of these separable corners of the flask.

Each clamp consists of the following parts: A plate, C, fits against the corner surface, *b*, and has an angle flange, *c*, fitting against the side of the part, A', of the flask, and secured thereto. A lug, *d*, formed on the plate, C, projects at right angles therefrom and is bifurcated or slotted, as shown. The side-arms, *e*, are formed integral with plate, C, one on either side of the bifurcated lug, *d*, being joined to said plate at the point of the angle formed between the plate, and the angle-flange, *c*. Said arms extend up from plate, C, a short distance and then parallel with it, to a length preferably about equal to that of the plate, C. A plate, C', co-operating with plate, C, has a side flange, *c'*, by means of

which it is secured to the part, A, of the flask. A central longitudinal slot, *g*, divides the plate, C', into two parts or members. In use these fit and slide one on either side of the 55 lug, *d*, and each one partly under one of the side arms, *e*. Two ears, *h*, are secured to the respective members of the plate, C', one on either side of the slotted lug, *d*, and project out between said lug and one of the side- 60 arms, *e*. A bearing in direction transverse to the side arms, *e*, is formed in each of the said ears, *h*, on the side thereof adjacent the lug, *d*. Two stop-lugs, *j*, are located on the plate, C', so that one confronts the end of 65 each of the side-arms, *e*. Set-screws, *j'*, pass respectively, one through each of the said stop-lugs, and the side-arms, *e*, abut at their ends against said set-screws whereby the inclination of the flask part, A, with respect to 70 the part, A', may be adjusted, and in case the flask is of the two-part variety the said two-parts may be made to fit each other closely, as it will be evident, by reference to the drawings, that the corners secured by the fasten- 75 ings, *a*, may be raised or lowered with respect to the other corners by adjusting the set-screws, *j'*. A handle has two trunnions, *l*, on opposite sides and near one end, which fit respectively into the bearings in the ears, *h*. 80 This handle has a central slot extending longitudinally from the end on which the trunnions, *l*, are located; this slot is of a width sufficient to accommodate the slotted lug, *d*. The said slot forms two parallel arms, *k*, of 85 the handle, D, and a round cross-pin, *m*, extends between the arms, *k*, and is of such a size as to slide easily in the slot of the slotted lug, *d*. The trunnions, *l*, and the cross-pin, *m*, extend in a parallel direction a short distance 90 apart for a purpose to be presently indicated.

The operation of the device is as follows:—The parts, A, and A', of the flask are shifted away from or toward each other by means of 95 the handle, D, which may be swung on its trunnions in the bearings in the ears, *h*, while the cross-pin, *m*, will move, from its normal position on one side of the trunnions to a position an equal distance on the opposite side thereof, but the flask-part, A', will move with 100 the cross-pin, *m*, because the lug, *d*, in which said cross-pin slides is fixed to said part, A'.

Hence the part, A', will move with and to the same extent as the said cross-pin, or, in other words, the parts, A, and, A', will have a total movement toward and away from each other equal to twice the distance between the centers of the trunnions and the cross-pin. At one position of the handle, D, the ends of the side arms abut against the ends of the set-screws, j'. At the other position, they are apart a distance equal to the total movement of the parts, A, and, A'. The handles, D, with the cross-pins and trunnions, operate as cams. Thus they may be termed cam-handles, and the fastenings generally may be termed cam-fastenings. The separable diametrically-opposite corners of the flask are each provided with one of these clamps and it will be seen that by operating them simultaneously the flask will be spread and contracted while the sides remain parallel. Each half of the flask has the corner-fastenings, and the handles of the same have ends, D', curved toward each other so that both may be taken in one hand and operated together. The movement is very simple and the parts are not likely to get out of order, and the flasks may be very expeditiously handled with this improved construction.

It is evident that our invention might be embodied in different form from what is here shown.

Having thus described our invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a molder's flask, the combination of two parts forming the sides of said flask and having abutting ends; and cam-fastenings connecting said abutting ends and operative to spread the flask in the manner described.
2. In a molder's flask, the combination of

two parts forming the sides of the said flask and having abutting ends; sliding plates fastened to the two parts of the flask at said abutting ends; and cams connecting said plates and movable to spread the flask in the manner described.

3. In a molder's flask, the combination of two parts forming the sides of the flask and having abutting ends; and fastenings connecting said abutting ends and each comprising a plate having a central slot, and bearings on opposite sides of said slot, a plate having a slotted bearing occupying the slot in the first-named plate, and a cam-handle piece having trunnions engaging the bearings of the said first-named plate and a crank-pin engaging the slotted-bearing of the other plate, substantially as described.

4. In a molder's flask, the combination of two parts forming the sides of the flask and having abutting ends; and fastenings connecting said abutting ends and each comprising a plate having a central slot, bearings on opposite sides of said slot and transverse stop-ears; a plate having a slotted bearing occupying the slot of the first-named plate and having side-arms with ends which confront the stop-ears on the said first-named plate; adjustment screws extending through the said stop-ears; and a cam-handle-piece connecting the two plates by engagement with the bearings thereof.

In testimony whereof we affix our signatures in the presence of two witnesses.

HERMAN R. TRAVERS.
CHRISTIAN PETERSEN.

Witnesses:

JNO. T. MADDOX,
F. PARKER DAVIS.