(No Model.)

W. N. GARTSIDE.

MOLDER'S FLASK.

No. 421,693. Patented Feb. 18, 1890.

Fig. 1.

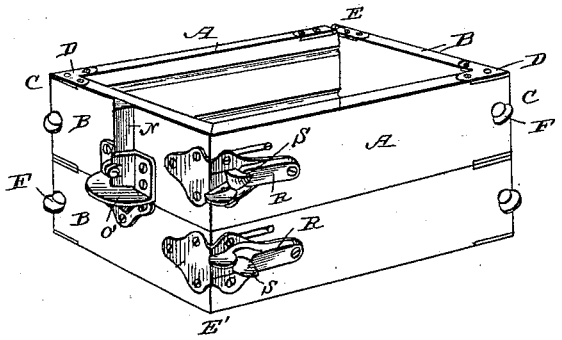


Fig. 2.

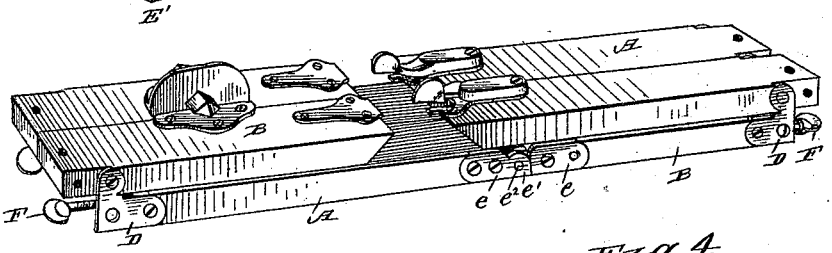


Fig. 3.

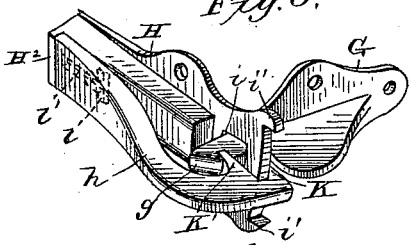


Fig. 4.

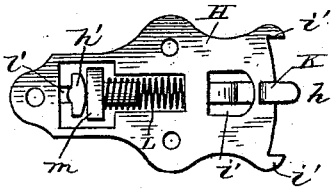
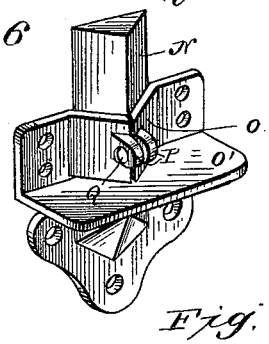


Fig. 6.



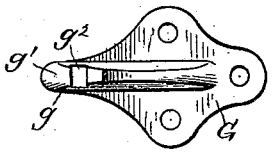


Fig. 5.

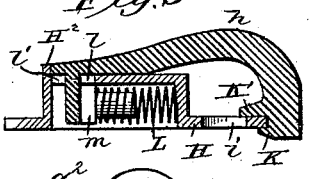
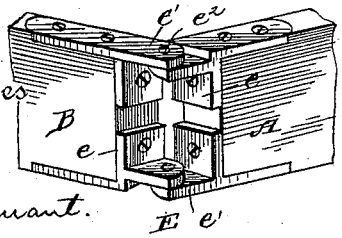
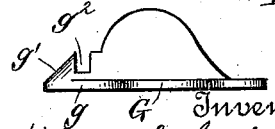


Fig. 7.





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UNITED STATES PATENT OFFICE.

WILLIAM N. GARTSIDE, OF RICHMOND, INDIANA.

MOLDER'S FLASK.

SPECIFICATION forming part of Letters Patent No. 421,693, dated February 18, 1890.

Application filed October 9, 1889. Serial No. 326,458. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. GARTSIDE, of Richmond, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Molders' Flasks; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

It is perhaps proper for me to here state that flasks have heretofore been made in which the cope or drag or both were made in two sections hinged together at one corner and united by a snap or catch at the diagonally-opposite corner, the object being to provide a flask which could be easily manipulated and be capable of a more universal application; but the development of the flask-making industry has demonstrated the desirability of providing a flask which may be shipped in small compass, and, when desired for use, set up with little or no labor and by an unskilled person.

It has been the primary object of my present efforts to produce a flask having these desirable qualities, and, further, to provide in connection therewith novel snap or catch mechanisms and steady-pin sockets, all of which when combined will make one of the most perfect and reliable flasks capable of being produced.

The invention therefore consists, broadly stated, in a flask formed in sections so united as to fold into small compass, and, further, in certain novel details of construction and combinations and arrangements of parts, to be hereinafter described, and pointed out particularly in the claims at the end of this specification.

In the accompanying drawings, Figure 1 is a perspective view of a flask, constructed in accordance with my invention, having a single cope. Fig. 2 is a similar view of the same folded for transportation or storage. Fig. 3 is a detail perspective view of the preferred form of catch. Fig. 4 represents a bottom plan and a side elevation of the two parts of the catch. Fig. 5 is a longitudinal section and elevation of the same. Fig. 6 is an enlarged view of the steady-pin socket and flange. Fig. 7 is a detail of one of the joints.

Similar letters of reference indicate the same parts in all the figures.

A A denote the sides of the flask, and B B the ends, said parts being united at the corners by loose connections, which permit of their being folded down flat on each other, as illustrated, for instance, in Fig. 2.

It is obvious that many different styles of hinge or loose connections may be employed at the corners, the only essential being that they should form a rigid strong structure when the flask is set up; but the preferred and most convenient form for the corners C consists of angle corner-irons D, secured on the edges of the adjacent parts and preferably united rigidly to one of the parts and pivotally to the other part, the end of which latter abuts against the former, as shown in dotted lines, Fig. 1, thus, when the parts are extended at right angles, forming a rigid joint. A set-screw F is provided for holding the parts in the position mentioned, which set-screw or a joint-bolt may be inserted through the holes d in the angle-iron D, but is preferably inserted through the end of the overlapping piece, as shown, thus providing an opening into which the screw may be screwed when the parts are folded.

The hinge-joint at the corner E, Fig. 7, consists of pieces e, secured at each corner of the side and end, respectively, with projecting lugs e', united by rivets, and having the corners e^2, which arrest the movement of the parts when they are brought into line.

On the ends of the parts forming the corner E′ are secured the sections of the spring snap or catch, in the preferred form illustrated in Figs. 3, 4, and 5, consisting on one side of the plate G, having the extended end g, pointed and provided with the incline or beveled surface g' and catch g^2, and on the other side of the spring-latch h and its guide as follows: The base H, which is secured to the side of the flask, is provided with a recess H′ at the rear end, into which fits the T-shaped projection h' on the latch h, and the upwardly-extending projection H^2, against which the rear straight end of the latch abuts

when retracted, causing it to always assume a position in line with the base. At the forward end the base is extended and provided with an aperture *i*, through which the catch g^2 passes, and a guide for the latch terminating at each side in stops *i'*.

Lugs K K' on the ends of the latch embrace the guide, the latter K' being extended somewhat and constitutes the point of the latch with which the catch engages.

The T-shaped projection passes into the base through a transverse aperture *l*, (see dotted lines, Fig. 3,) and is permitted a limited movement in the longitudinal aperture *l'*, the forward movement being limited by the block *m*, inserted in the recess in the base after the latch is in place. A spring L bears against the block *m* and tends to keep the latch retracted, and by forcing the straight portion against the projection H^2 keeps it in proper position to engage the catch.

When the parts are brought together, the latch is forced straight out by the cam-surface until it drops into the catch, and to release it it is only necessary to move the latch sidewise in either direction, enabling the latches on the cope and drag to be released simultaneously without the necessity of providing different styles of catches for each.

At each end of the drag are secured the steady-pins N, triangular in cross-section, and at corresponding points on the cope are secured the sockets O, into which they are adapted to fit in the well-understood manner. Each of the sockets is provided at the bottom with an extended flange O', having an aperture therein corresponding in shape to the pin, and serves the double purpose of a guide and handle. Above the flange are two projections P, extending outward from the base and substantially parallel with the walls of the opening in the flange, which projections are connected at the outer end by the screw Q. When now, for any reason, it becomes desirable to take up wear in the socket, or to tighten the same on the pins, it may be readily accomplished by tightening the screw Q and drawing the projections together.

It is obvious that other styles of spring snaps or catches may be employed—such, for instance, as illustrated in Figs. 1 and 2, in which simple spring-pressed latches R, engaging catches S, are employed, the springs, for convenience, being located within the latches, and a socket provided for the catches to prevent twisting or side strain on the flask.

Several sections of cope may be employed, if desired, with suitable steady-pins and sockets arranged on adjacent sections, and the various details of construction of the parts may be changed or modified by those skilled in the art without departing from the spirit of my invention.

From the above it will be seen that I have produced a flask adaptable to any of the uses to which flasks are now put, and which combines the rigidity of the ordinary solid rectangular flask with the advantages of the separable flask without the disadvantages and unreliability of the latter, at the same time being adapted to fold into small compass for shipment or storage.

Having thus described my invention, what I claim as new is—

1. In a rectangular molder's flask, the combination, with the sides and ends and a catch at one corner, of hinge-connections at each of the other corners, and fastenings for holding the diametrically-opposite hinged corners rigidly in angular position, substantially as described.

2. In a rectangular molder's flask, the combination, with the sides and ends and a catch at one corner, of hinge-connections at each of the other corners, and set-screws in the diametrically-opposite hinged corners for holding the same rigidly in angular position, substantially as described.

3. In a molder's flask, the combination, with the sides having the angle-iron secured thereon, of the adjacent sides pivotally connected to said angle-irons, substantially as described.

4. In a molder's flask, the combination, with the sides having the angle-irons secured rigidly thereto, of the adjacent overlapping sides pivotally connected to the said angle-irons, and the set-screw for holding said parts rigidly in angular position, substantially as described.

5. In a molder's flask, the combination, with the sides hinged together at one corner and the catch uniting the diagonally-opposite corners, of the angle-irons uniting the remaining corners, pivotal connections between said sides and irons, and the screw for holding said corners rigidly in angular position, substantially as described.

6. In a molder's flask, the combination, with the sections hinged together, of a fastening for the sections having the base, the laterally and longitudinally movable latch secured therein, and the spring for holding said latch in operative position, mounted on one section and the catch with which the latch engages mounted on the opposite section, and having the beveled surface for moving the latch longitudinally, substantially as described.

7. In a molder's flask, the combination, with the sections hinged together, of a fastening therefor having the base with the cavity, therein secured on one section, the latch having the headed projection within the cavity and the spring engaging the head of the catch with which the said latch engages mounted on the other section, substantially as described.

8. In a molder's flask, the combination, with the sections hinged together, a fastening therefor having the base with the aperture, cavity, and projection at the rear end secured on one section, the latch having the T-shaped projection within the cavity and the straight rear end engaging the projection, of the spring engaging the T-shaped projection to hold the

latch in operative position, and the catch with which said latch engages mounted on the opposite section, substantially as described.

9. The combination, with the hinged sections of a molder's flask, a fastening having an extended base mounted on one section with the aperture therein for the catch, the guide and stops at the forward end and the cavity and projection at the rear end, the latch free to move laterally and longitudinally and having the lugs embracing the guide, the straight rear end engaging the projection, the headed projection entering the cavity in the base, and the spring engaging said projection to hold the latch in operative position, of the catch mounted on the opposite section and engaging the latch, substantially as described.

10. The combination, with the hinged section of a molder's flask, a fastening having an extended base mounted on one section with the aperture therein for the catch, the guide and stops at the forward end and the cavity and projection at the rear end, and the transverse and longitudinal apertures into said cavity, the latch having the T-shaped projection within the cavity and operating through the longitudinal aperture, the straight rear end engaging the projection on the base and the lugs embracing the guide, the block engaging said T-head to prevent its withdrawal, and the spring for holding the latch in operative position, of the catch mounted on the opposite section and engaging the catch, substantially as described.

11. A steady-pin socket for molders' flasks having the separated side pieces and the screw passing through the same for drawing said sides together, substantially as described.

12. A steady-pin socket for molders' flasks having the bottom flange with the aperture therein, the separated side pieces, and the screw for drawing said sides together, substantially as described.

13. In a molder's flask, the combination, with the cope and drag, of the steady-pin and the socket therefor having spring sides adjustable toward and from each other, substantially as described.

14. In a molder's flask, the combination, with the sections pivotally connected together at one corner, of the fastening for holding the opposite corner having the catch and the latch movable through the catch in both directions, whereby it may be released from either side, substantially as described.

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