(No Model.)

S. P. ROBINSON.

MOLDER'S FLASK.

No. 294,406. Patented Mar. 4, 1884.

Fig. 1.

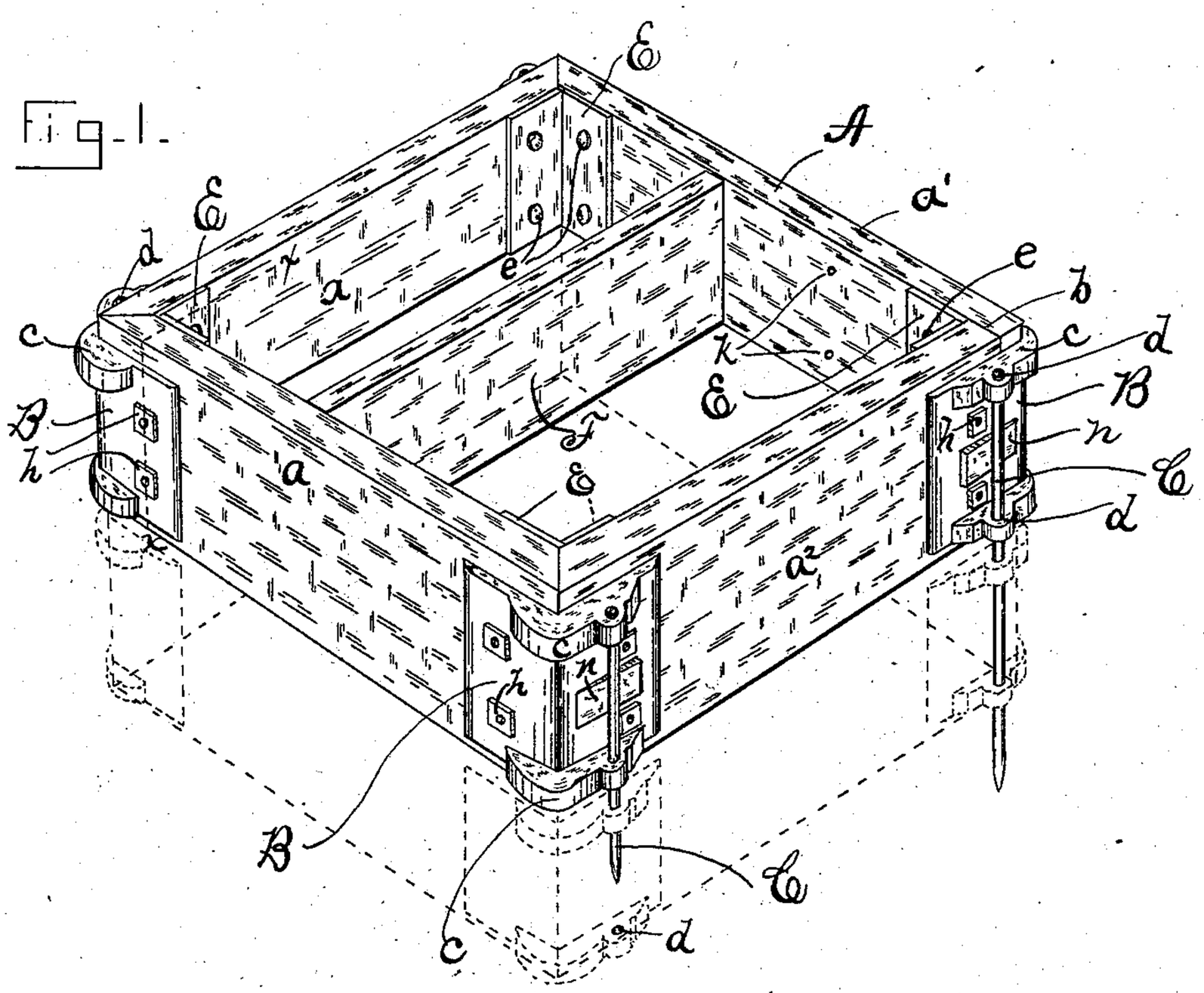


Fig. 2.

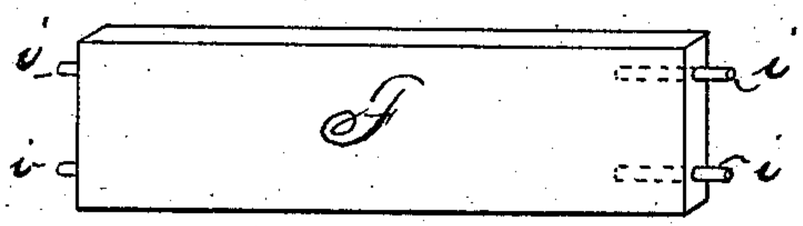
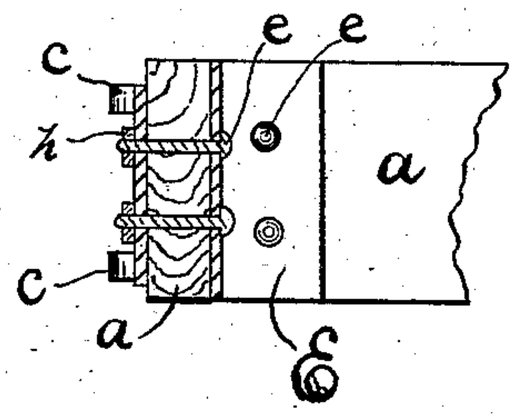


Fig. 3.



WITNESSES

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SAMUEL P. ROBINSON, OF PLAINFIELD, CONNECTICUT.

MOLDER'S FLASK.

SPECIFICATION forming part of Letters Patent No. 294,406, dated March 4, 1884.

Application filed January 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL P. ROBINSON, of Plainfield, Windham county, Connecticut, have invented certain new and useful Improvements in Molders' Flasks, which improvements are fully set forth and described in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a two-part flask embodying my improvements. Fig. 2 is a detached view of my improved form of parting-strip, and Fig. 3 a sectional view on line *x x* of Fig. 1.

My immediate object is to construct, without the use of nails, a flask which shall be lighter, yet stronger, than flasks as commonly constructed, and which may be quickly taken apart or assembled whenever necessary. This I accomplish by the use of a series of metallic corner-pieces of peculiar shape, as fully described hereinafter.

In Fig. 1, A represents the upper flask or cope, composed of the four sides *a a a' a²*. These pieces may be mitered at the corners, or may be allowed to abut, as at *b*.

B represents right-angular corner-pieces, made, preferably, of thin cast metal, having strengthening-ribs *c c*, which on one side of the angle are perforated, as at *d*, to receive the guide-pins C. It is my purpose to use four guide-pins, one for each corner, although two or three could be used with a satisfactory result. On the inner side of the flask, directly opposite to the corner-pieces B, are sheet-metal plates E.

As a convenient and cheap means for securing the several parts of the flask together, I drill through the corner-pieces B, the wooden sides of the flask, and the plates E, and, after having inserted bolts *e* from the inner side of the flask, I fasten the whole firmly together by nuts *h*, screwed onto the outer end of said bolts, the plates E forming, practically, washers under the heads of the bolts. Thus it will be seen that my flask is fastened rigidly together without the use of nails, and as my metallic corner-pieces are thoroughly stiffened by the ribs *c*, it is impossible for the flask to warp or leave its original square or oblong shape, and as the sides may be made of comparatively thin material, the flask is much reduced in weight, and is in consequence easier handled.

Instead of nailing in the cross-bar or parting-strip represented by F in Figs. 1 and 2, I construct said strip with two or more pins, *i i*, driven or screwed into the ends of said strips and projecting outward a distance somewhat less than the thickness of the wooden sides of the flask. On the inner sides of the flask I provide holes *k*, corresponding in number, size, and position with the pins *i*. When it becomes necessary to use cross-bar F, one of the sides *a* is removed by unscrewing the nuts which secure said side. The cross-bar is placed in position, as in Fig. 1, the pins *i* entering holes *k*, when the side may be again returned to its place and secured by the bolts and nuts, as before described.

When using a two-part flask, (cope and nowel,) the guide-pins should be long enough to pass downward into the perforated corner-pieces of the lower half, as shown at C, Fig. 1, and when a series of cases are used to build up a deep flask, the guide-pins should be long enough to extend through and support the entire series.

The guide-pins C are held in place by wedges of wood, *n*, or other suitable material, which are entered between the body of the pin and the plate which forms a part of the angular corner-piece.

I prefer to use wedges of wood, as they are inclined to swell when dampened by the molding-sand, and remain firmly fixed in place until driven out, and if lost or broken they are quickly and cheaply replaced.

Having thus described my invention, I claim as new and wish to secure by Letters Patent—

1. In combination with the sides or walls of a flask for molders' use, a series of right-angular metallic corner-pieces, and a corresponding series of washer-plates, E, on the inner side of the flask, the plates E, the sides of the flask, and the metallic corner-pieces being clamped firmly together by bolts and nuts, as described, said corner-pieces being provided with strengthening ribs *c*, for the purpose of retaining the flask in its rectangular form, as described.

2. In combination with the walls of a flask for molders' use, a series of right-angular me-

tallic corner-pieces having strengthening-ribs *c*, perforated, as at *d*, to receive guide-wires, whereby the upper and lower flasks, or a series of flasks, may be held in vertical alignment, as and for the purpose specified.

3. In combination with the walls of a flask, the angular corner-pieces B, with perforated strengthening-ribs, and the guide-wire C, held firmly in place by wedges entered between the body of the guide-wire and the plate of the corner-piece, said angular corner-pieces being clamped to the walls of the flask by bolts and nuts, as and for the purpose specified.

SAMUEL P. ROBINSON.

Witnesses:
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FRANK L. LATHROP.