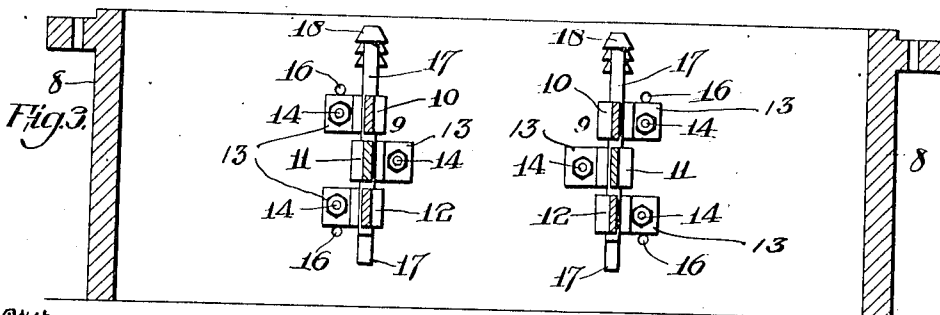
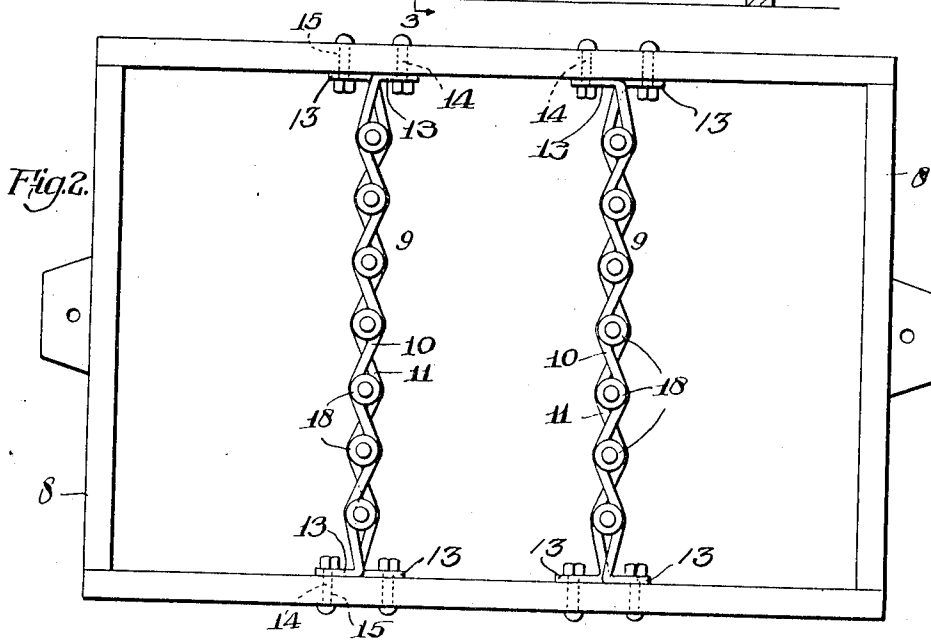
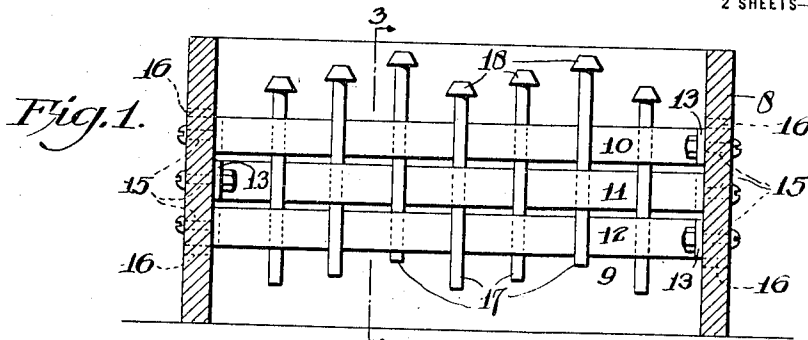


R. S. BUCH.
MOLDER'S FLASK.
APPLICATION FILED APR. 15, 1918.

1,290,071.

Patented Jan. 7, 1919.
2 SHEETS—SHEET 1.



Witnesses

E. E. Reichart
Augustus B. Oppes

Inventor

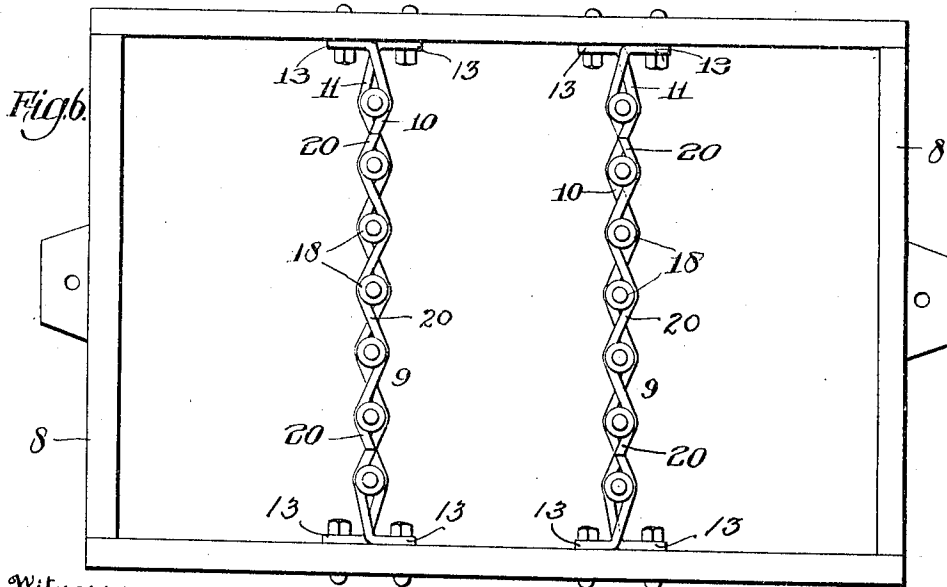
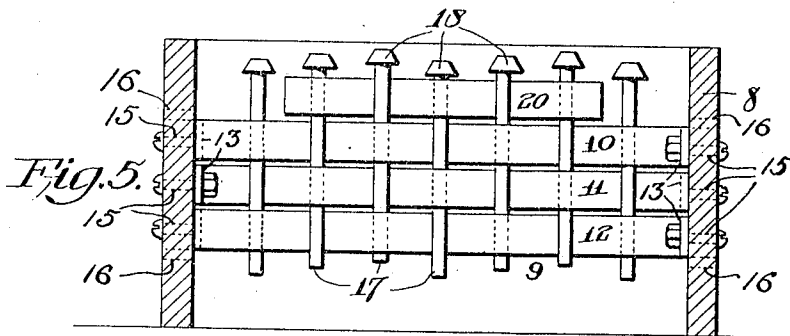
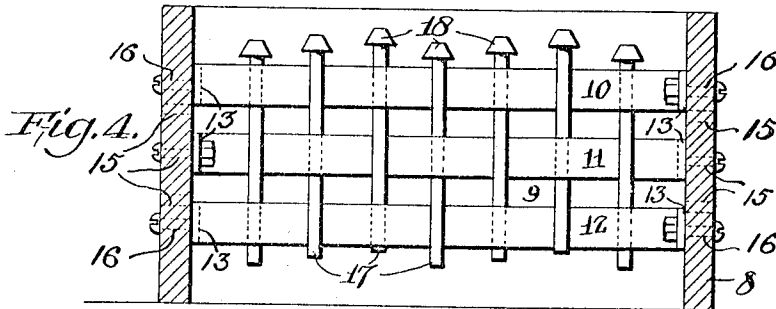
Royce S. Buch
By Joshua P. Hottel
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UNITED STATES PATENT OFFICE.

ROYER S. BUCH, OF YORK, PENNSYLVANIA.

MOLDER'S FLASK.

1,290,071.

Specification of Letters Patent.

Patented Jan. 7, 1919.

Application filed April 15, 1918. Serial No. 228,557.

To all whom it may concern:

Be it known that I, ROYER S. BUCH, a citizen of the United States, residing at York, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Molders' Flasks, of which the following is a specification.

Numerous sand-supporting devices for molders' flasks have been made, prior to my invention, including headed pins adjustably mounted in bars. However, while these pins have been made adjustable the bars themselves have been made in such manner as not to be adjustable within their depths.

One object of my invention is to provide a molder's flask with a sand-supporting bar which includes parts so constructed that they can be separated to various extents within the direction of the depth of the bar so as to offer various amounts of frictional resistance to the sand within the flask. The device of my invention is, therefore, adjustable to suit a great variety of requirements necessary in molding castings of different shapes and sizes.

Another object is to make my invention of simple construction and so that it can be quickly assembled or adjusted to suit various requirements.

These objects, and other advantageous ends, which will be described hereinafter, I attain in the following manner, reference being had to the accompanying drawings in which—

Figure 1 is a transverse sectional elevation through a portion of a molder's flask, which may be either the cope or drag of the flask, made in accordance with my invention,

Fig. 2 is a top plan view of Fig. 1,

Fig. 3 is a section taken on the line 3—3 of Fig. 1,

Fig. 4 is a view of similar nature to Fig. 1 showing certain of the strips of the sand-supporting bar separated to a greater extent than shown in Fig. 1 and thereby providing a deeper bar,

Fig. 5 is a view of similar nature to Fig. 1, showing an additional sectional strip included in the bar but having no direct connection with the flask, and

Fig. 6 is a top plan view of the construction shown in Fig. 5.

Referring to Figs. 1, 2, 3, and 4 of the drawing, 8 represents a portion of a molder's flask, such for example as the drag of a flask, and includes a sand-supporting bar 9 made

up in the present instance of three zigzag strips 10, 11, and 12. These strips are preferably made of strap metal arranged one above another, as clearly shown in Fig. 1. The ends of each of the strips 10, 11, and 12 are bent, as shown at 13, and bolts 14 extend through these bent ends 13 and through holes 15 in the sides of the flask so as to detachably connect the strips to the flask.

The holes 15 are arranged one above another and as illustrated additional holes 16 are provided above and below the three holes 15 in which the bolts 14 are inserted. In this manner any number of holes 15 and 16 can be provided within the flask and the bolts may be removed from certain of the holes and inserted through others, such for example as shown in Fig. 4. By this arrangement the strips 10, 11, and 12 can be separated to various extents and in so doing the sand-supporting bar 9 can be made of various depths. Fig. 1 shows the strips 10, 11, and 12 relatively close together while Fig. 4 shows said strips farther apart.

A plurality of pins 17 are provided with heads 18 and these pins are interlaced with the strips 10, 11, and 12 so that alternate strips engage the same sides of the pins while the intermediate strips engage the opposite sides of the pins. Thus in a supporting bar having three strips, said strips may be said to engage the pins in what is known as a three point contact. By making the strips 10, 11, and 12 zigzag, the pins 17 extend through the recessed portions, as clearly shown in Figs. 1, 2, and 3. By making the strips 10, 11, and 12 separate and of metal they will bind against the pins 17 so that there will be sufficient friction between the pins 17 and the strips to prevent the pins from accidentally moving after they are once inserted. However, a slight tapping or pressure exerted upon either end of the pins will be sufficient to move them into the desired position to suit the requirements of the pattern.

In Figs. 5 and 6 I have shown a construction including the same elements as shown in Figs. 1 to 4, inclusive, and in addition I have shown a sectional zigzag strip 20 which is held between the heads 18 of the pins 17, the mere interlacing of this strip being sufficient to hold it in place. I thus obtain a wider sand-supporting bar without other direct attachment of the bar to the flask. This sectional strip may be any length de-

sired so that if it is necessary to additionally reinforce and support sand in certain portions of the flask, sectional strips, such as 20, can be inserted wherever desired.

5 With my invention the pins 17 can be moved into stepped formation to accommodate patterns of various shapes, said stepped formation being clearly illustrated in Figs. 1, 4, and 5.

10 While I have described my invention as taking a particular form, it will be understood that the various parts of my invention may be changed without departing from the spirit thereof, and hence I do not limit myself to the precise construction set forth, but consider that I am at liberty to make such changes and alterations as fairly come within the scope of the appended claims.

15 Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

20 1. A molder's flask including a bar having strips independently movable with respect to the depth of the bar and adjustably secured to the flask, substantially as described.

25 2. A molder's flask including a bar having strips independently movable with respect to the depth of the bar; and means inter-

laced with said strips, substantially as described.

30 3. A molder's flask including a sand-supporting bar made up of independent zigzag strips; and means for detachably connecting said strips to the flask, substantially as described.

35 4. A molder's flask including a sand-supporting bar made up of independent zigzag strips; means for detachably connecting said strips to the flask; and members interlaced with said zigzag strips, substantially as described.

40 5. A molder's flask including a sand-supporting bar made up of independent zigzag strips; means for detachably connecting said strips to the flask; members interlaced with said zigzag strips; and a sectional strip interlaced with said members, substantially as described.

45 In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROYER S. BUCH.

Witnesses:

M. E. WEAVER,
D. C. COBLE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents Washington, D. C."