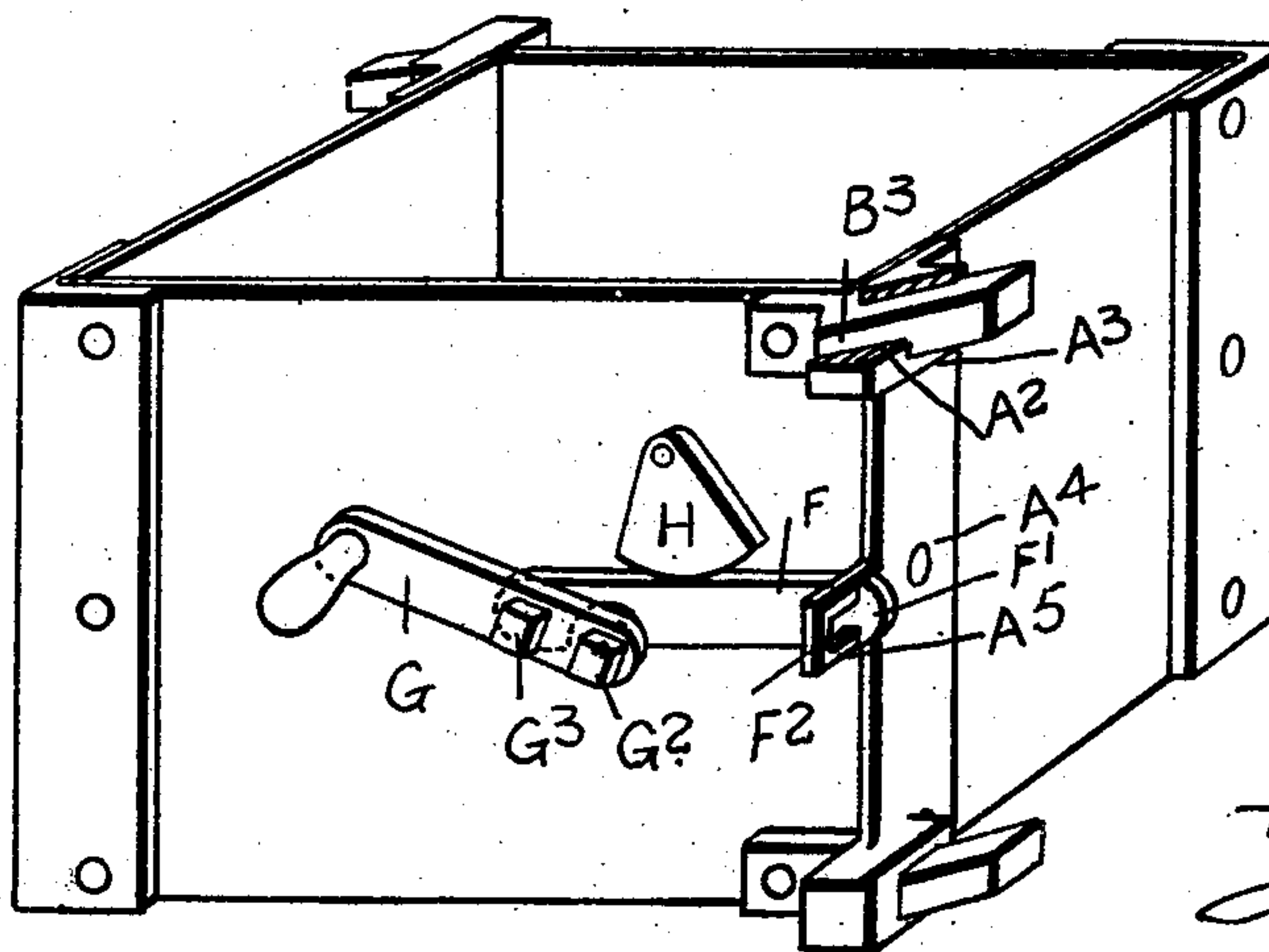
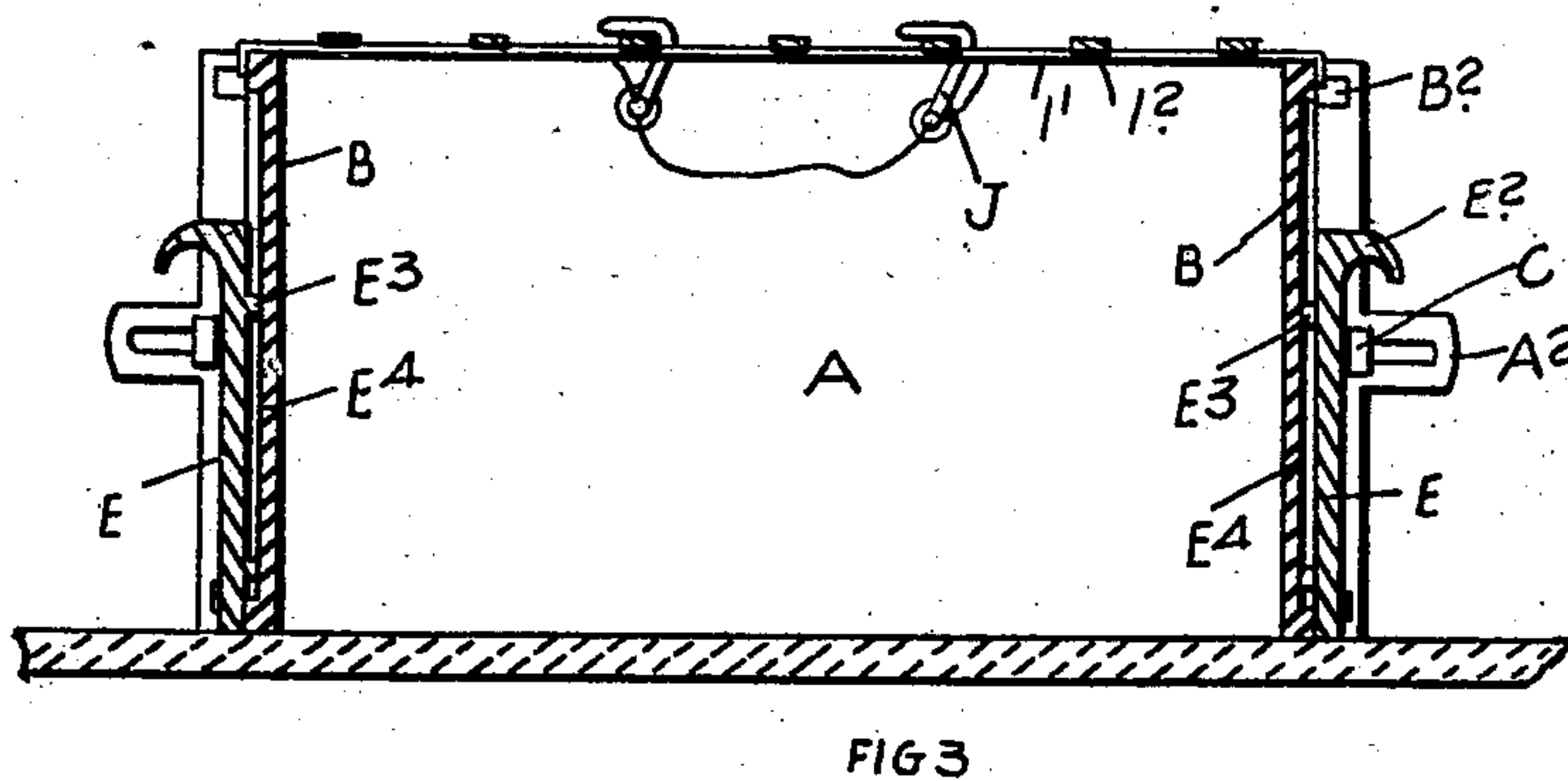
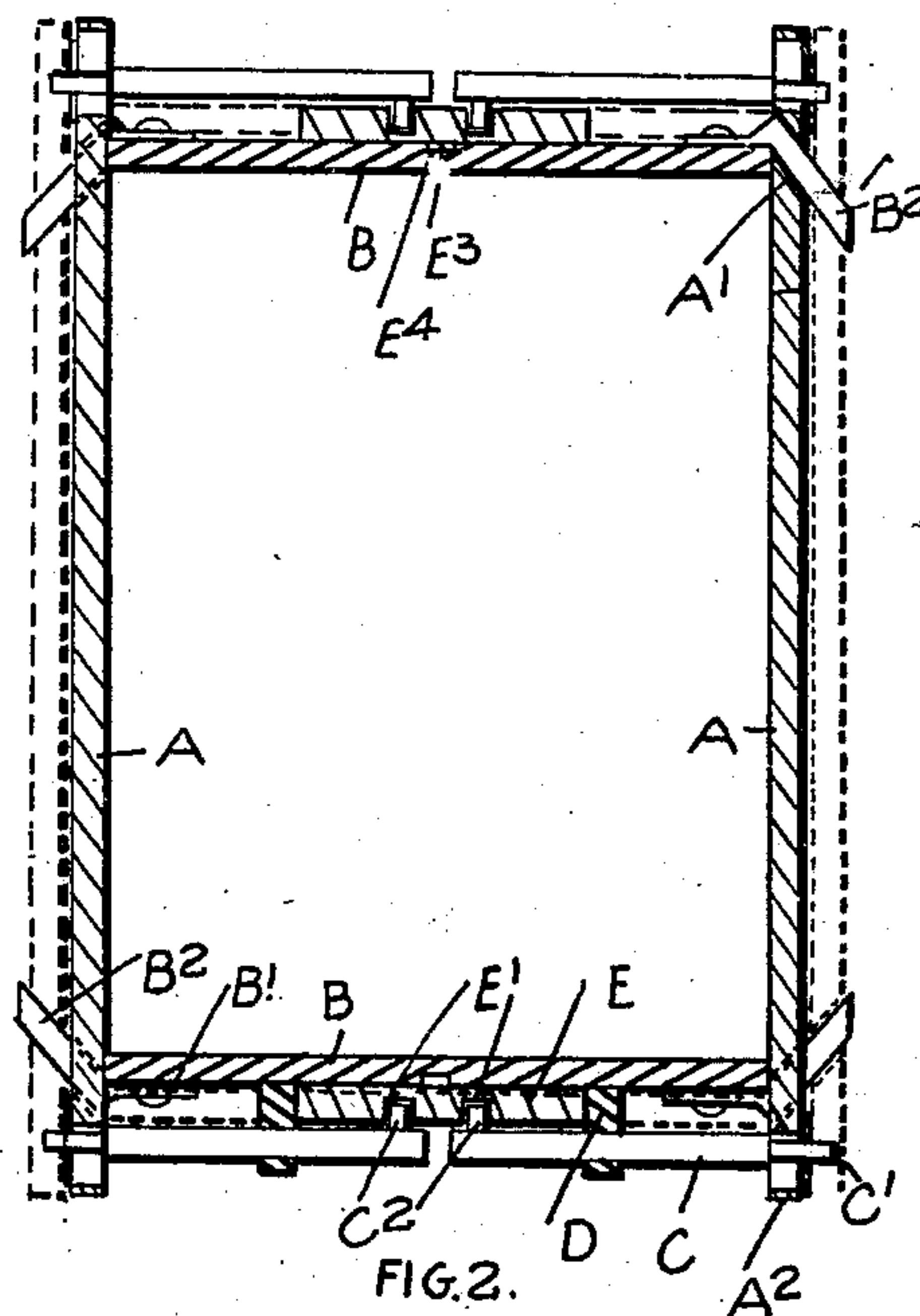
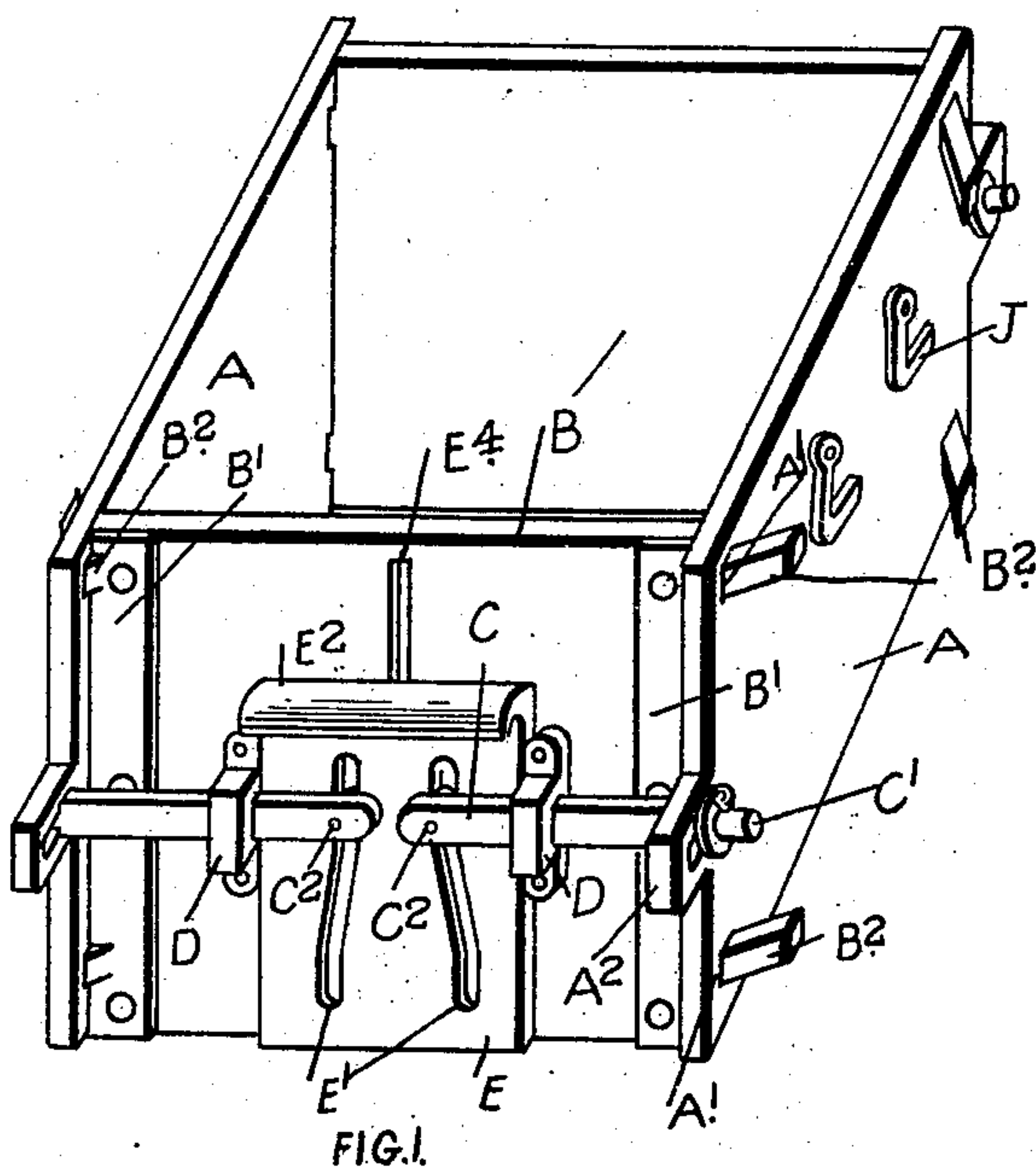


A. SCHRAG.
MOLDING BOX AND THE LIKE.
APPLICATION FILED MAY 6, 1908.

915,489.

Patented Mar. 16, 1909.



WITNESSES.

Albany
J. E. Boyer

INVENTOR.

A. SCHRAG.

By J. H. Schuchman atty.

UNITED STATES PATENT OFFICE.

ANDREW SCHRAG, OF TORONTO, ONTARIO, CANADA, ASSIGNOR OF ONE-HALF TO HENRY
DAVID MURRAY, OF TORONTO, CANADA.

MOLDING-BOX AND THE LIKE.

No. 915,489.

Specification of Letters Patent.

Patented March 16, 1909.

Application filed May 6, 1908. Serial No. 431,211.

To all whom it may concern:

Be it known that I, ANDREW SCHRAG, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have in-
5_vented certain new and useful Improve-
ments in Molding-Boxes and the Like, of which the following is the specification.

My invention relates to improvements in molding boxes and the like, and the object of
10 the invention is to devise a simple expansible box capable of being instantaneously with-
drawn away from the sides of the concrete block when set.

A further object is to make the mold of
15 such a character that it can be readily and expeditiously removed and lifted.

A still further object is to make the mold of such a character as is adaptable for molding
flasks.

20 A still further object is, when it is used as a molding flask, to dispense with weights, which are now commonly used to prevent the sand rising with the expansion of the metal when molding in metal.

25 To effect these objects I have constructed the mold of four sides having from the edges on two of the sides projecting tongues set at substantially an angle of forty-five degrees to the plane of the side and extending through
30 correspondingly set orifices in the adjacent side, bars connected to the two opposite sides at the outer ends and held in suitable guide-ways on the sides intervening and an ex-
pansible device for extending the bars so as
35 to throw the sides apart, the parts being arranged and constructed in detail as herein-
after more particularly explained.

Figure 1, is a perspective view of the preferred form of my invention. Fig. 2, is a
40 sectional plan of Fig. 1. Fig. 3, is a longitudinal section through Fig. 1. Fig. 4, is a perspective view of a modification.

In the drawings like letters of reference indicate corresponding parts in each figure.

45 A A are two sides and B B are the intervening sides or ends of the mold. The sides A and B may be formed of wood or metal and the sides B are provided with strips B' attached thereto near the ends of the sides and
50 provided with tongues B² preferably at the top and bottom, although intermediate tongues may be provided if desired. The tongues B² are set at an angle of forty-five degrees to the planes of the sides A and B
55 respectively and extend through orifices A'

at a corresponding angle set. The sides A have projecting slotted lugs A² through slots in which extend the reduced ends C' of the bars C. The bars C are also supported in
60 guide-ways D secured to the ends B and have at their inner ends pins C², which extend into the slots E' in the operating block E. The operating block E extends between the brackets D and is provided with a top lifting
65 lip E².

The slots E' it will be noticed are vertical near the top and then inclined outwardly toward the bottom where they extend down-
ward vertically.

The blocks E are provided with inwardly
70 extending projections E³, which extend into the vertical slot E⁴ made in the ends B. It will now be seen that by lifting the blocks E the four sides of the mold or flask will be
75 forced apart simultaneously on account of the tongues B² having the angle set in the orifices A' as hereinbefore described.

In Fig. 4, I show tongues B³ and orifices A² at two corners only, the orifices in this case being formed in blocks A³ forming part of the
80 strip A⁴ and the tongues having the inner end suitably secured to the sides as indicated. The plate A⁴ is provided with a slotted lug A⁵ projecting parallelly with the face of the
85 plate and into this slotted lug extends the turned end F' of the link F, which is also provided with a notch F². A lever G provided with a suitable handle G' is pivoted on a bolt
90 G², which when the mold is closed extends through the notch F². The lever G is connected by a pin or bolt G³ to the end of the link F. A cam-shaped stop H is provided,
95 so as to hold the link down and consequently the mold closed. To throw open the mold all it is necessary to do is to raise the cam
100 shaped stop H and swing the lever G toward the tongues, whereupon the mold or flask will be immediately expanded similarly and with equal facility to that described of the form of mold shown in Figs. 1 and 2 and 3.

While I intend particularly to utilize my mold for molding concrete it will, of course, be understood that it may be adapted for molding in a foundry. In case it is used for
105 foundry purposes as a flask I preferably provide an open frame I consisting of the side longitudinal bars I' and the cross bars I². Two or more of the bars I² extend beyond the edges of the mold or flask and have the hooks
110 J attached to the sides hook over them, so as

to hold down the molding frame and prevent the rising of the molding sand by the expansion of the metal when the casting is being made.

5 What I claim as my invention is:

1. In a molding box, the combination with the sides, of tongues fastened to the ends of one of the sides and set at an angle of forty-five degrees to the plane of the sides, and
10 orifices in the sides forming the adjacent angle, set at a corresponding angle and through which the aforesaid tongues extend, slotted lugs attached to two of the sides, bars projecting through the slotted lugs and means
15 for imparting longitudinal movement to the bars as and for the purpose specified.

2. In a molding box, the combination with the sides, of tongues fastened to the ends of one of the sides and set at an angle of forty-
20 five degrees to the plane of the sides, and orifices in the sides forming the adjacent angle, set at a corresponding angle and through which the aforesaid tongues extend,

slotted lugs attached to two of the sides, bars projecting through the slotted lugs, guides 25 for the bars attached to the sides and means for imparting longitudinal movement to the bars as and for the purpose specified.

3. In a molding box, the combination with the sides, of tongues fastened to the ends of one of the sides and set at an angle of forty-five degrees to the plane of the sides, and
30 orifices in the sides forming the adjacent angle, set at a corresponding angle and through which the aforesaid tongues extend, slotted lugs attached to two of the sides, bars projecting through the slotted lugs, guides
35 for the bars attached to the sides, pins projecting from the ends of the bars, an adjusting and lifting block having inclined slots in
40 the same into which the pins extend as and for the purpose specified.

ANDREW SCHRAG.

Witnesses:

R. COBAIN,
D. E. CRAIGIE.