

No. 837,760.

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A. D. WHISLER.

MOLD.

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Fig. 1.

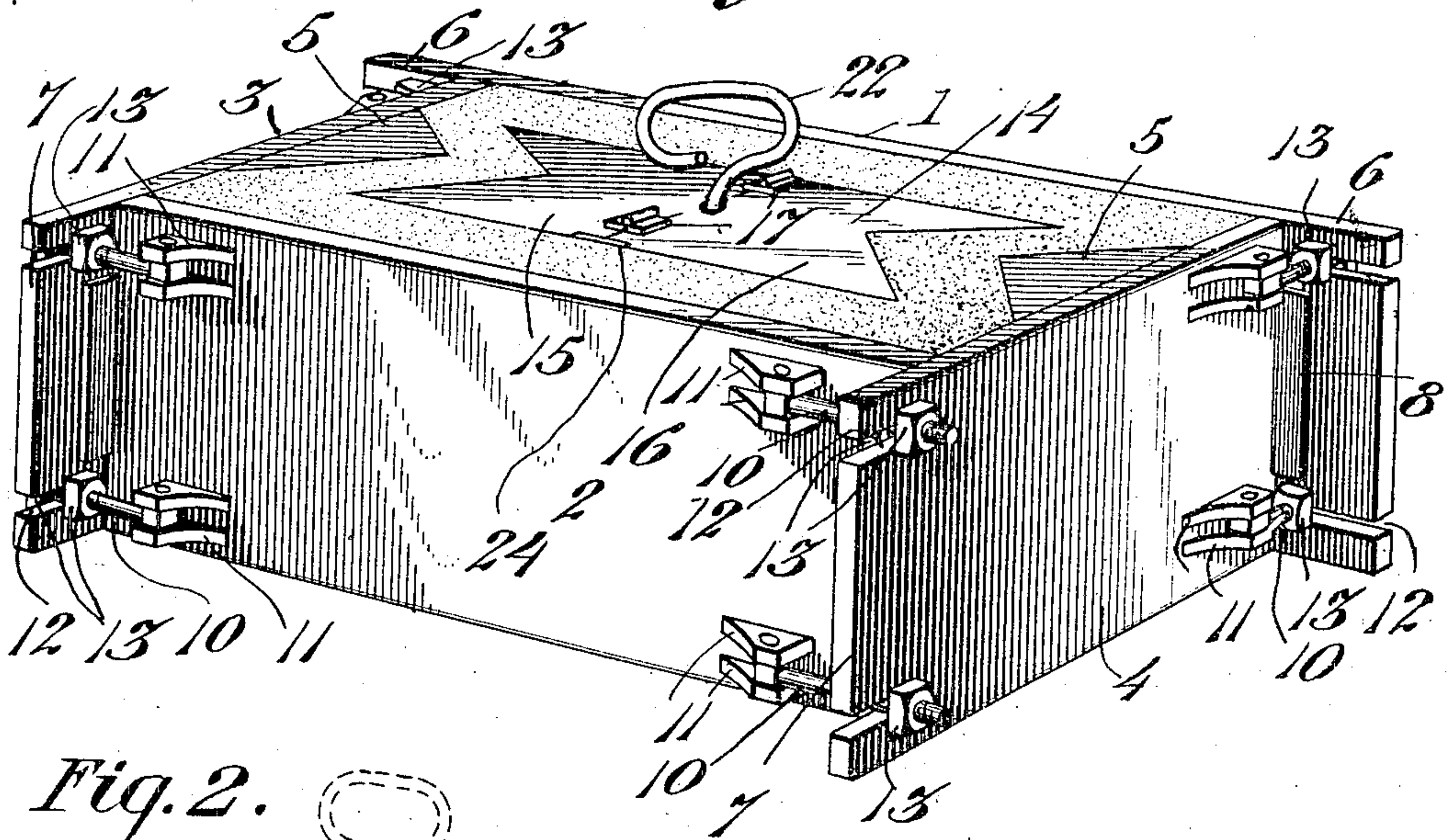


Fig. 2.

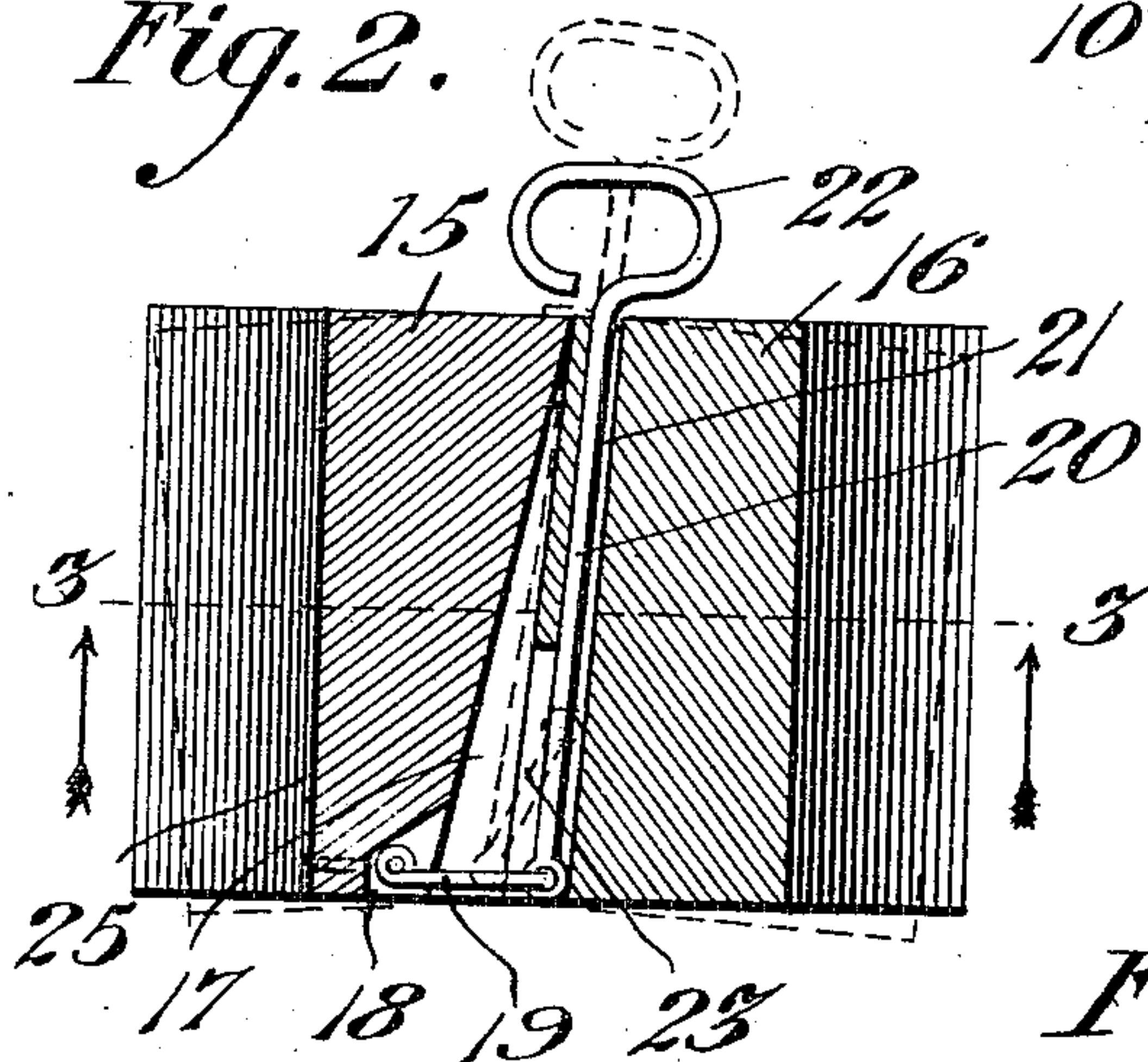


Fig. 3.

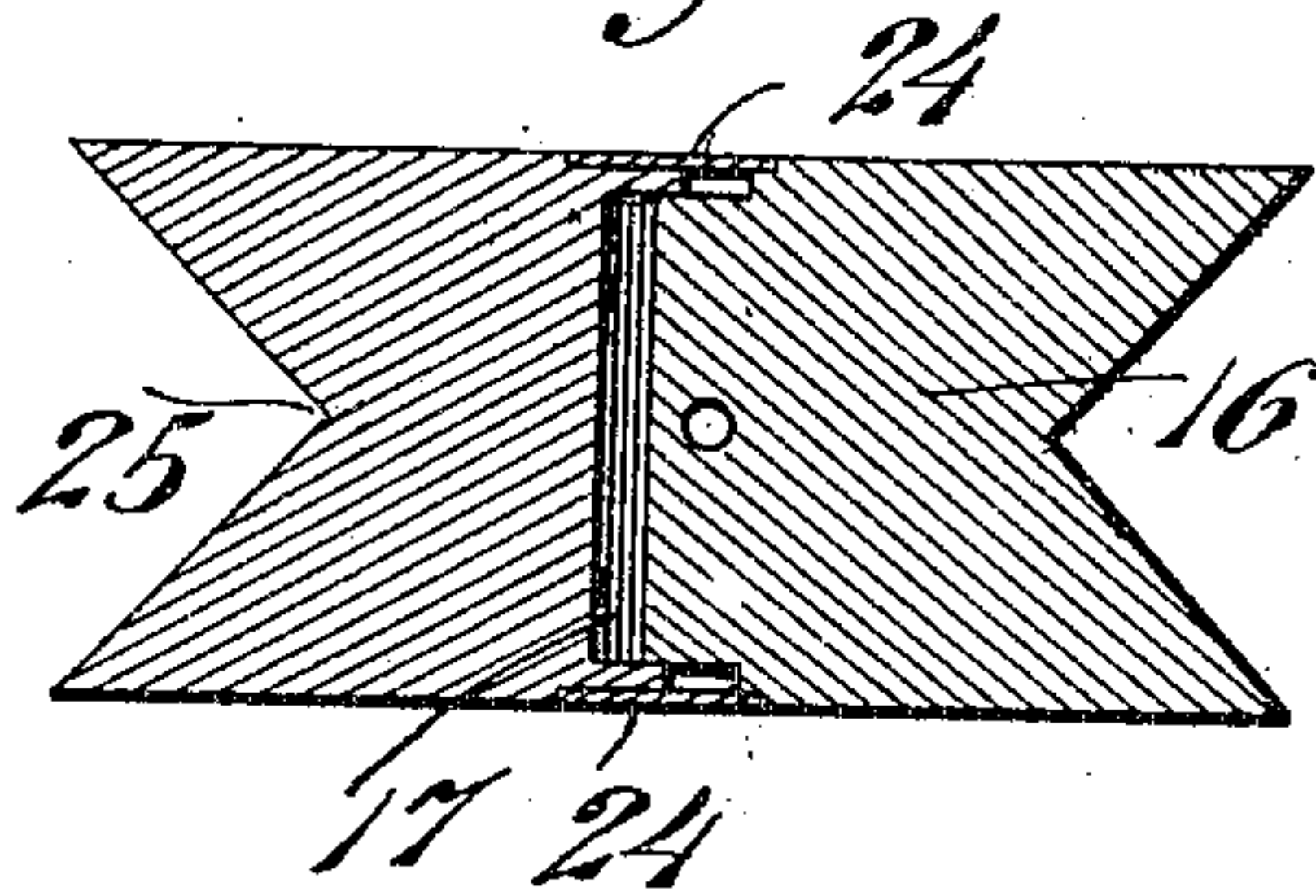
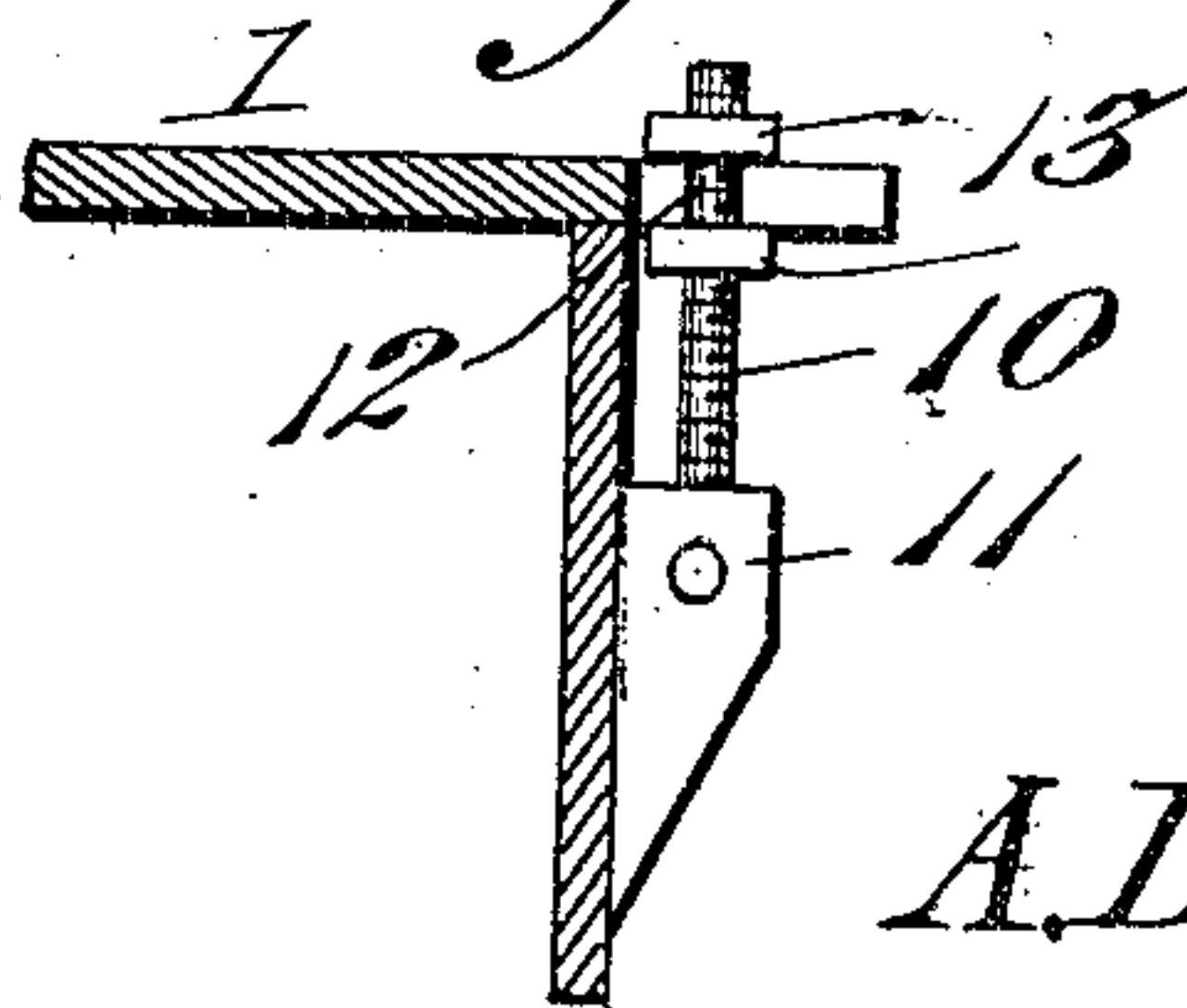


Fig. 4.



Witnesses

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MOLD.

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To all whom it may concern:

Be it known that I, ALBERT D. WHISLER, a citizen of the United States of America, residing at Benton Ridge, in the county of Hancock and State of Ohio, have invented new and useful Improvements in Molds, of which the following is a specification.

This invention relates to improvements in molds for manufacturing building-blocks of concrete or other plastic materials, the object of the invention being to provide a simple and effective construction of mold by means of which building-blocks of different shapes and sizes may be conveniently formed, the construction of the mold also being such as to permit of its collapse for storage or shipment and the disassemblage of its parts for the convenient removal of the formed blocks, as well as to prevent spreading of the mold-walls during the operation of tamping the material therein.

Another object of the invention is to provide a core of novel construction for the manufacture of hollow building-blocks, such core being adapted to be contracted in size to permit of its convenient removal without disturbing the material.

In the accompanying drawings, Figure 1 is a perspective view of a mold embodying my invention. Fig. 2 is a vertical longitudinal section through the core. Fig. 3 is a horizontal section thereof on line 3 3 of Fig. 2. Fig. 4 is a similar section through one of the corners of the mold, showing in detail one of the sets of fastening devices.

The mold is of rectangular or oblong-rectangular form and comprises independent side walls 1 and 2 and end walls 3 and 4, the interior surfaces of which may be roughened or provided with any desired forming members for the production of "rock-faced" or any other type of block. As shown, the end walls 3 and 4 are provided with inwardly-extending blocks or forming projections 5, which may be properly shaped to form V or other shaped spaces or recesses in the ends of the block, whereby in the construction of a wall the joined ends of blocks will cooperate to produce hollow spaces or air-chambers. In the present instance the projections 5 are shown as of V shape; but they may be of any other desired form.

The mold may be provided with a suitable bottom or, in lieu thereof, is rested upon a pallet-board or table, and, as shown, the walls 1, 2, 3, and 4 are detachably connected

to permit of their ready assemblage and disassemblage for the production of a block, for the removal of a formed block, and for package of the mold in close compass for storage or transportation. To this end the wall 1 is made of greater length than its companion wall 2 and is provided with end extensions 6, while the end walls 4 project beyond the wall 2 to provide similar extensions 7, the opposite ends of the walls 3 and 4 being arranged to bear against the wall 1 inside said extension 6, while the ends of the wall 2 bear upon the walls 3 and 4 inside the extensions 7. The extensions 6 and 7 are provided, respectively, with cleats or abutments 8 and 9, forming supports against which the abutting ends of the walls 2, 3, and 4 bear to hold them from relative outward movement, and thereby obviate to a material extent liability of spreading of the walls when the plastic material is tamped into the mold.

The abutting ends of the walls 2, 3, and 4 are provided with pairs of fastening members arranged one above the other, each member comprising a bolt 10, swiveled at its inner end to lugs 11 upon the abutting end and adapted to engage a slot 12, formed in the coacting extension 6 or 7, the slot being open at its outer end to permit the bolt to be swung into and out of engagement with said extension. Each bolt carries securing and check nuts 13 to bear against the outer and inner faces of the extension and to fasten it against movement within the slot. It will be apparent that this construction of fastening means will hold the mold-sections securely in assembled relation and permit of their ready disconnection for the release of the formed block, and also enables the advantages above set forth to be effectively attained.

A core-block 14 is employed for forming building-blocks having central vertical cavities for the purpose of producing air-chambers in a wall built thereof, as is desirable in this variety of construction. This block is divided to form sections 15 and 16, which are hingedly connected at their upper ends, as indicated at 17, the inner face of the section 15 being outwardly and downwardly inclined to form a tapering space or recess 17, which is in communication at its lower end with a recess 18. A link 19 is pivotally mounted at one end within the recess 18 and similarly attached at its opposite end to the lower end of an operating-rod 20, extending upwardly

through a guide-passage 21 in the section 16 and having at its upper end an operating-handle 22. The inner face of the section 16 is inclined reversely to the inner face of the block 13, so as to fit within the space or recess 17 when the link 19 is pulled upwardly to draw the lower ends of the block together, whereby the block-sections may be tilted upon one another when the handle 22 is drawn upward to withdraw the core from the formed building-block, thereby contracting the core in the manner indicated in dotted lines in Fig. 2, to permit of its ready removal without disturbing the still moist plastic material. Upon forcing the handle 22 downward the link will be restored to its normal position and will force the lower ends of the block-sections apart. The section 16 is cut away to form a slot 23 for the free movement of the link 19, and both sections are provided in their side edges with recesses for the reception of countersunk plates 24, said plates being suitably secured to one of the sections and adapted to close the joints between the same to prevent access of the plastic material thereto. The outer ends of the core may be formed with V-recesses 25 for the production on the block of correspondingly-shaped extensions in the central cavity thereof to enable the end recesses formed by the projections 5 to be made without impairing the strength of the block.

It will thus be seen that my invention provides a simple construction of mold which may be manufactured at a low cost and effectively secures the desired advantages.

Having thus described the invention, what is claimed as new is—

1. A mold comprising side walls, one of said walls being longer than the other and provided at its ends with abutments and slots opening through the edges thereof, end walls bearing at one end against the abutments and longer side wall and formed at the opposite ends with extensions projecting beyond the shorter side wall, said extensions being provided with corresponding abutments and slots, pivoted bolts upon the shorter side wall and end walls adapted to swing into and out of engagement with said slots, and nuts

coöperating with the bolts to secure them in applied position.

2. In a mold, a core composed of sections hinged at their upper ends, a link connected with the lower end of one of the sections, an operating-rod upon the other section connected with the link, and a handle connected with the rod, whereby the latter may be drawn upwardly to contract the mold-sections.

3. In a mold, a core composed of sections hinged at their upper ends, the meeting faces of said sections being tapered to permit a relative tilting pivotal movement thereof, a sliding operating device on one of the sections, and a connection between said operating device and the other section, whereby when said operating device is moved in one direction or the other the sections will be tilted on the hinged connection to expand or contract the core.

4. In a mold, a core composed of hinged sections, said sections being adapted to swing on their hinged connection to contract or expand the core, an operating element slidably engaging one section, and a pivotal connection between said operating element and the other section to adjust said section.

5. In a mold, an expansible and contractible core composed of hinged sections, an operating element slidably engaging one section, and a pivotal connection between said element and the other section operative to expand and contract said sections when said element is adjusted.

6. In a mold, a core composed of hinged sections capable of adjustment to expand and contract said core, an operating element movably mounted upon one section, and a connection between said element and the other section operative when said element is adjusted to adjust the sections toward and from each other.

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT D. WHISLER.

Witnesses:

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