

No. 814,657.

PATENTED MAR. 6, 1906.

H. A. LOW.
TRANSFORMABLE MOLD FOR BUILDING BLOCKS.

APPLICATION FILED MAY 26, 1905.

2 SHEETS—SHEET 1.

Fig. 1

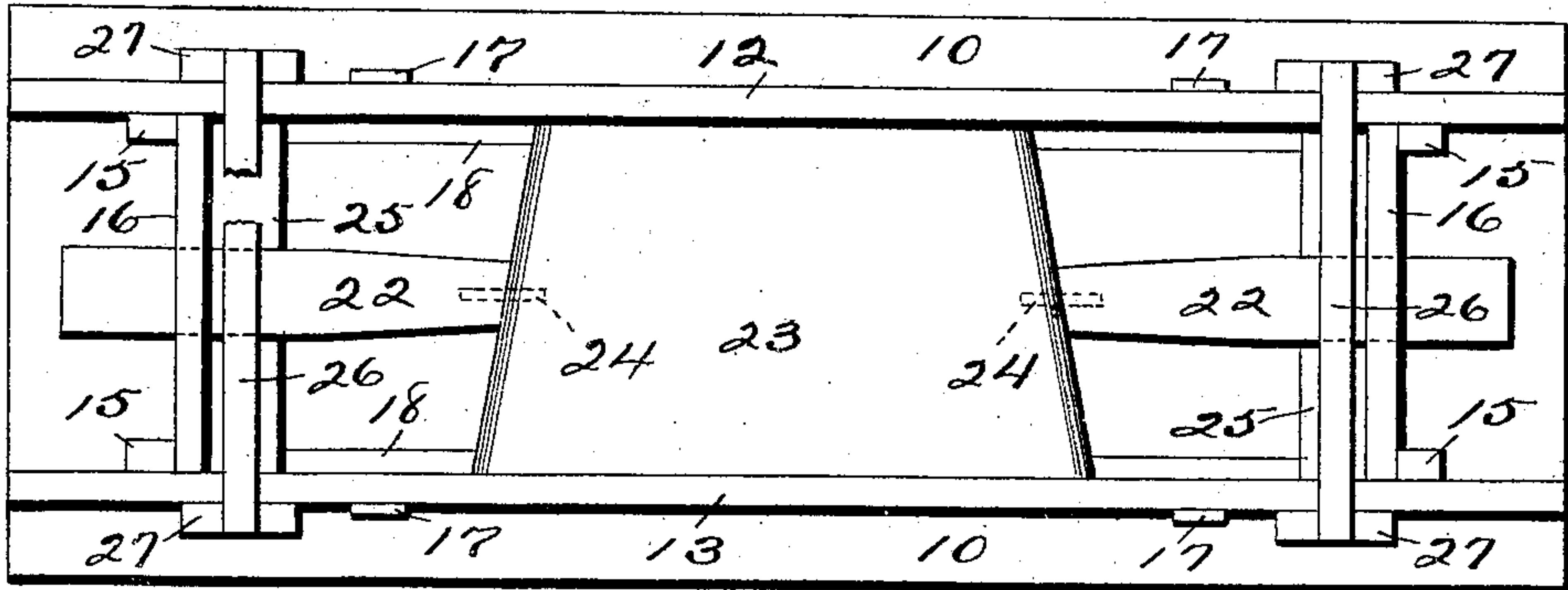


Fig. 2.

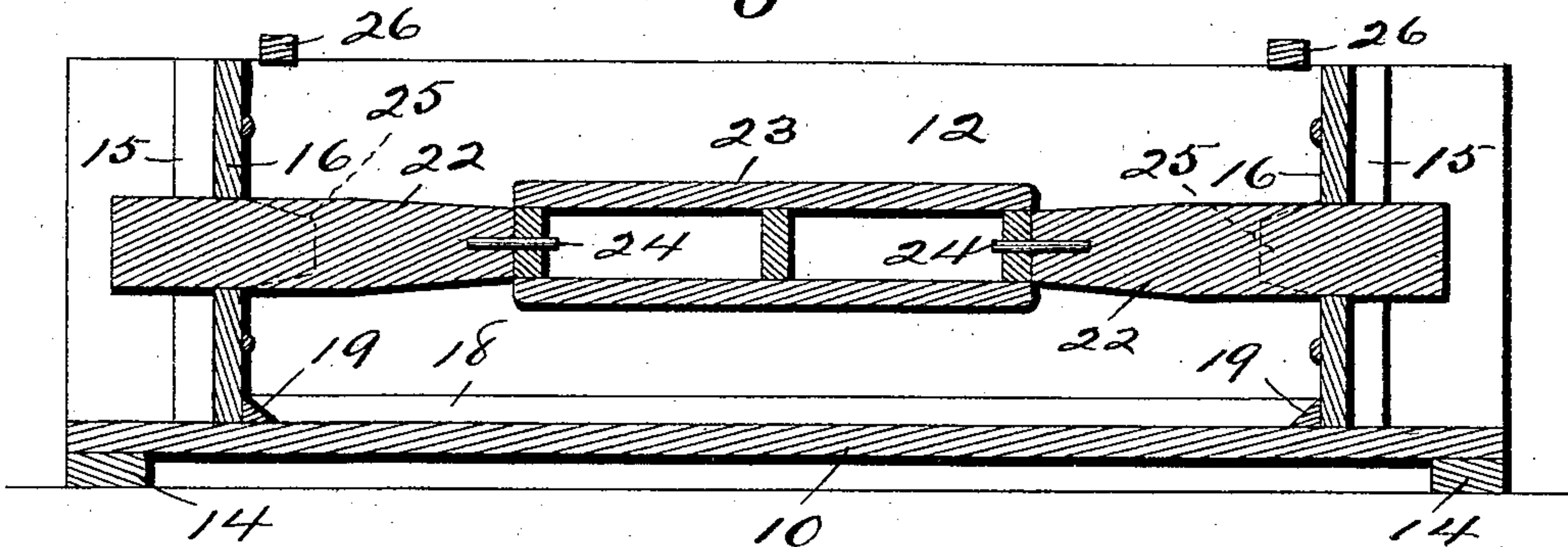
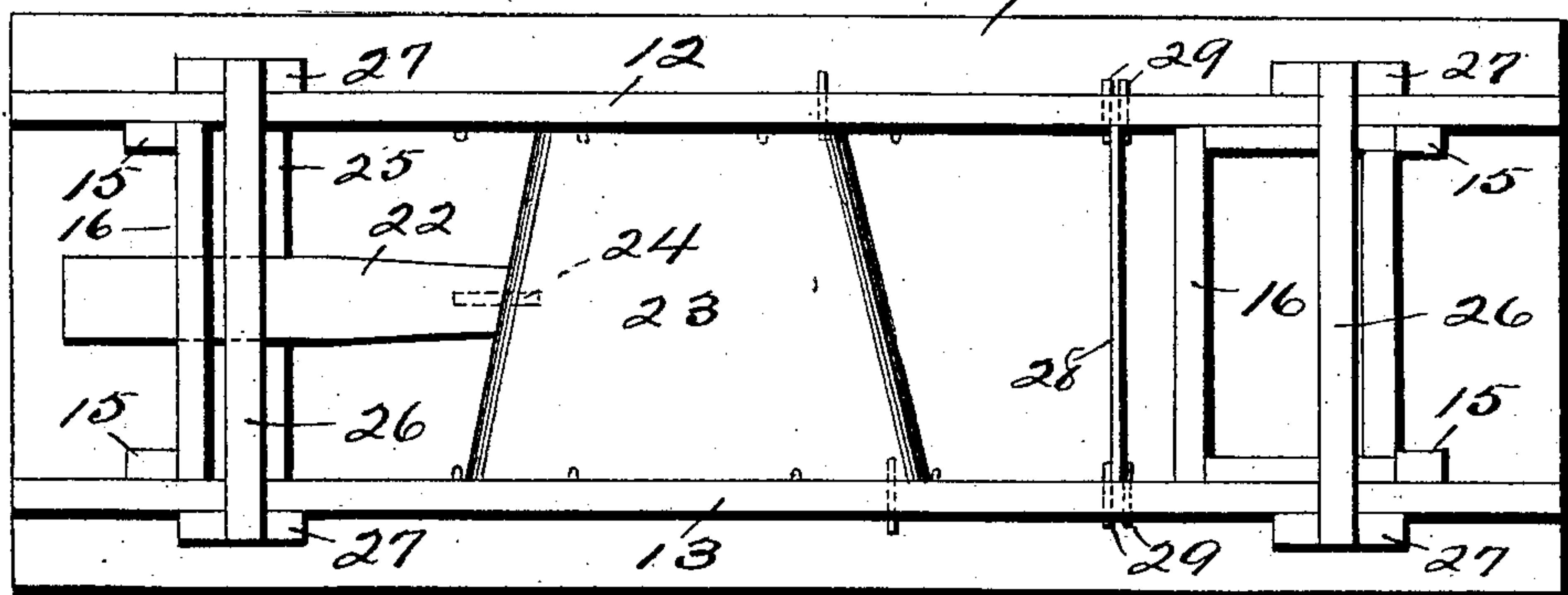


Fig. 3.



Witnesses:
R. B. Orwig.
R. H. Orwig

Inventor: Harold A. Low,
By Thomas G. Orwig, Attorney.

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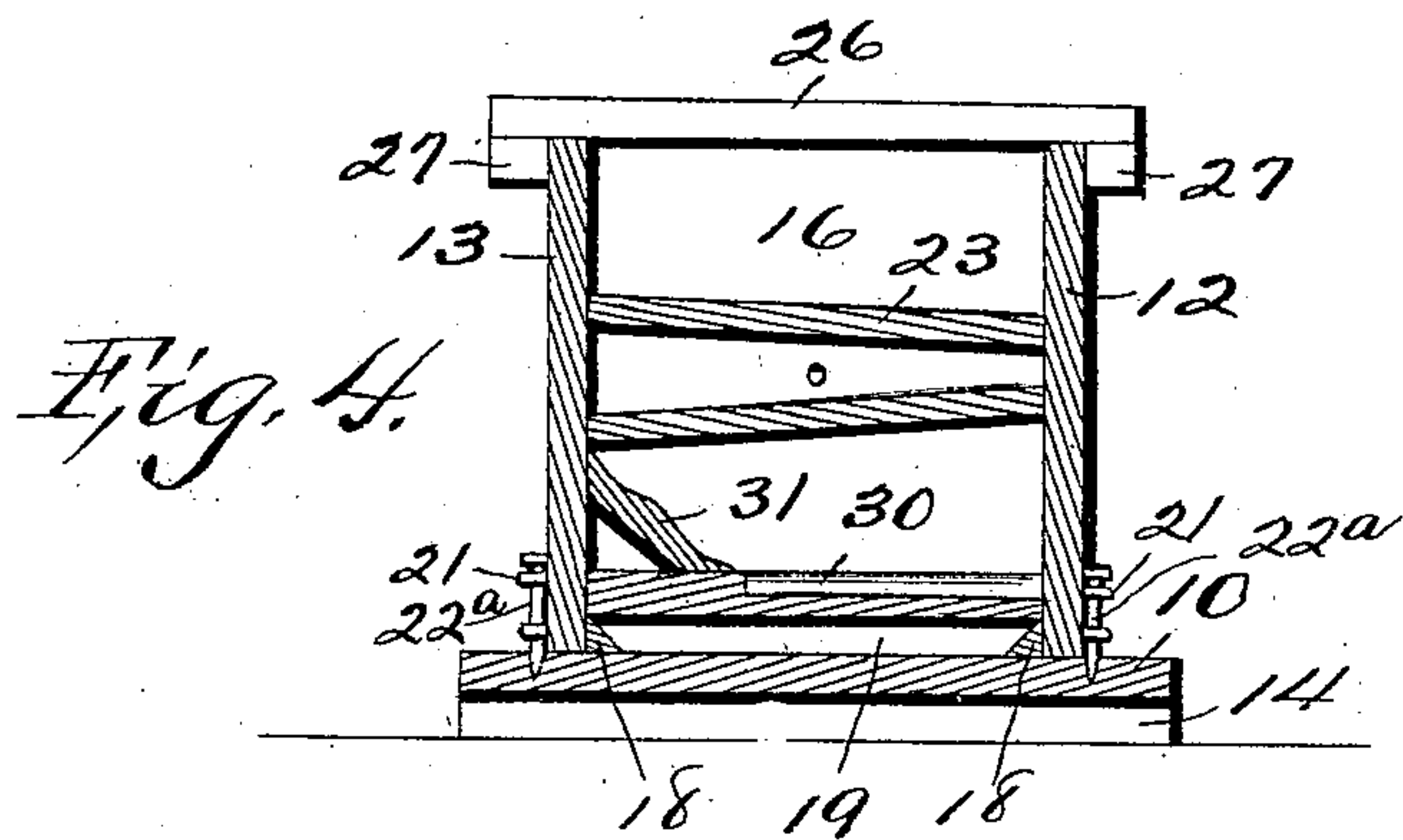


Fig. 5.

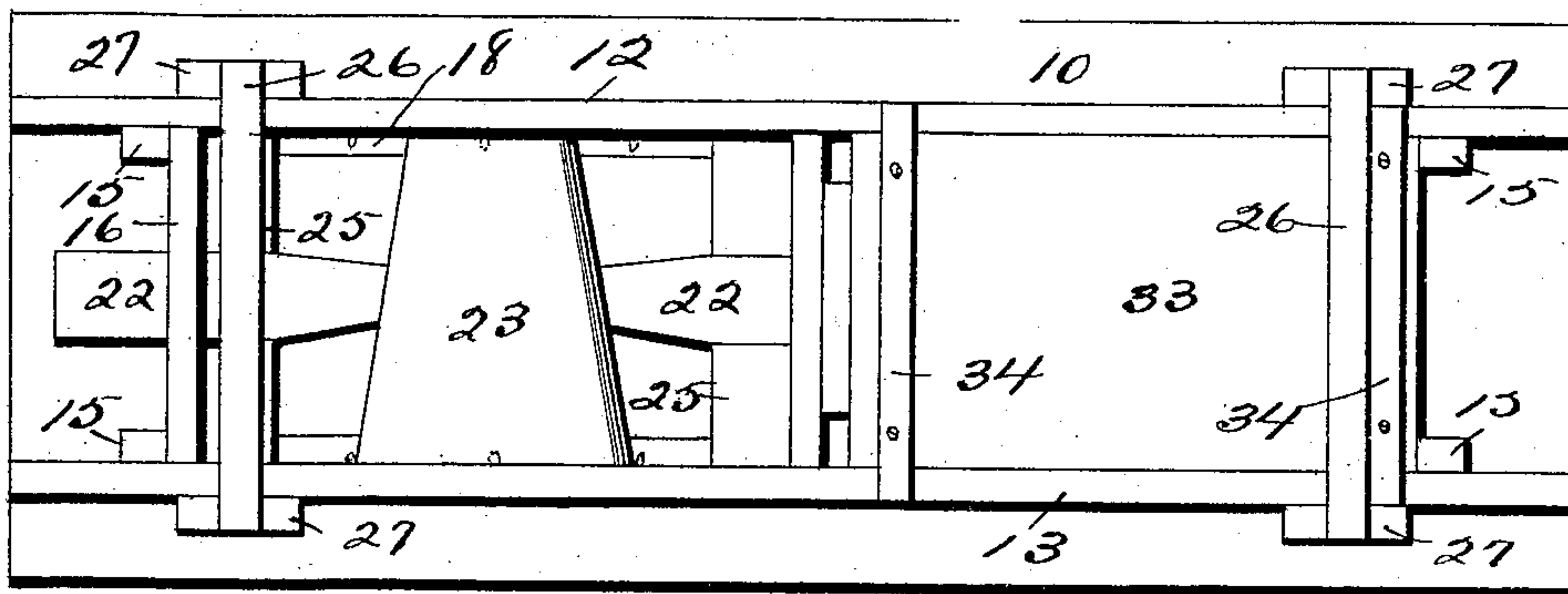
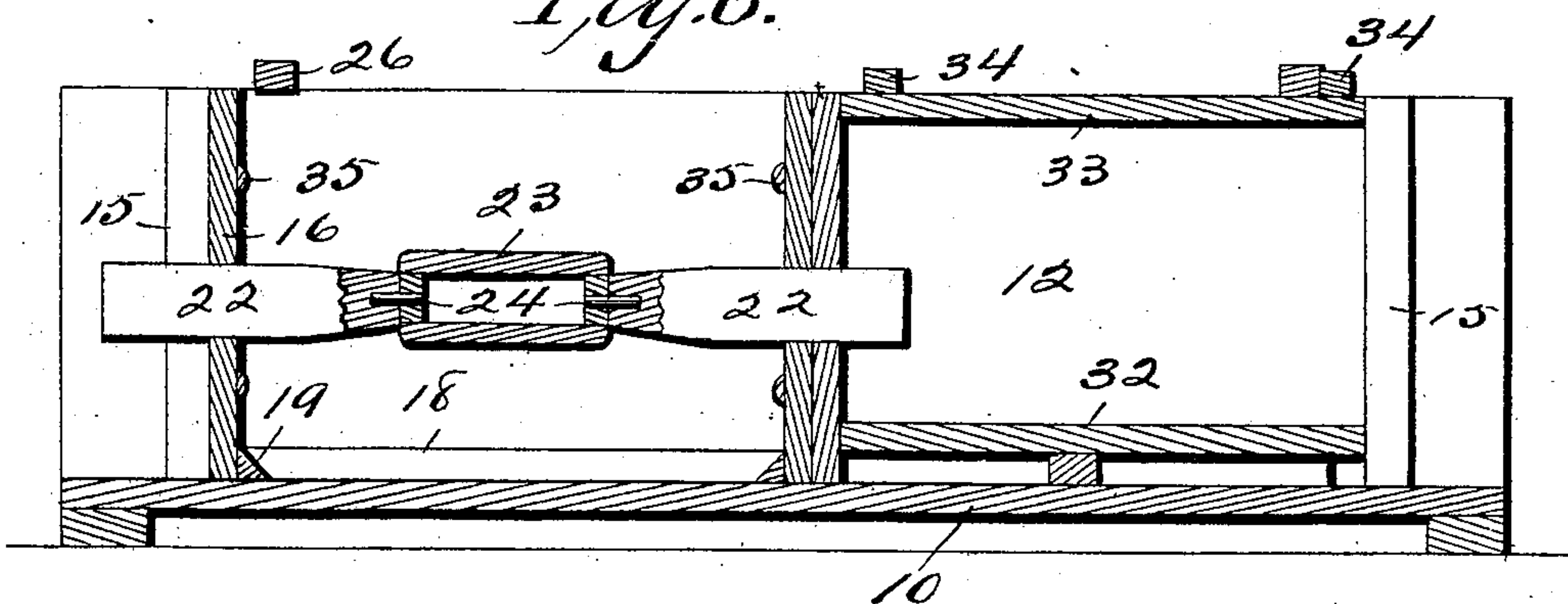


Fig. 6.



Witnesses: } Inventor: Harold A. Low,
R. H. Orwig. }
R. H. Orwig. } By Thomas G. Orwig, Attorney.

UNITED STATES PATENT OFFICE.

HAROLD A. LOW, OF LAKE CITY, IOWA, ASSIGNOR TO ELECTRICAL CON-
CRETE POST COMPANY, OF LAKE CITY, IOWA.

TRANSFORMABLE MOLD FOR BUILDING-BLOCKS.

No. 814,657.

Specification of Letters Patent.

Patented March 6, 1906.

Application filed May 26, 1905. Serial No. 262,511.

To all whom it may concern:

Be it known that I, HAROLD A. LOW, a citizen of the United States, residing at Lake City, in the county of Calhoun and State of Iowa, have invented a new and useful Transformable Mold for Building-Blocks, of which the following is a specification.

My object is to provide a transformable mold adapted for making, first, elongated building-blocks with vertical central openings; second, for making blocks adapted for corners of walls; third, for making blocks with central vertical openings and providing their front faces with water-tables; fourth, for making blocks of reduced length in the same mold.

My invention consists in the construction, arrangement, and combination of parts, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a top view of the mold, showing all the parts combined as required for filling in concrete to produce an elongated block with a tapering vertical central and open passage in its ends communicating with the central opening. Fig. 2 is a central longitudinal view of Fig. 1 and shows how the tapering core in the center is held in place by movable supports extended through apertures in the ends of the mold. Fig. 3 is a top view that shows the mold transformed as required for making blocks for corners of walls with the front and one end face smooth and solid. Fig. 4 is a transverse sectional view that shows an auxiliary bottom in the mold for making blocks with central vertical openings and providing their front faces with water-tables. Fig. 5 is a top view that shows how to make blocks of reduced length in the same mold. Fig. 6 is a longitudinal central sectional view of Fig. 5 and shows the manner of supporting one end piece of the mold in the central portion thereof in a vertical position.

The numeral 10 designates the bottom flat board, and 12 and 13 the movable sides of the mold. They may vary in width and height and length, as required for making blocks of different size. Cleats 15 are fixed to the inside faces and end portions of the movable sides 12 for supporting the movable ends 16 in vertical positions, and cleats 17 are preferably fixed to their outside faces, as shown in Fig. 1. Strips of molding 18 are fixed on the

top of the bottom 10 to engage the inside faces and lower portions of the sides 12 and 13, as shown in Fig. 4, to produce beveled edges of the blocks at the edges of their front faces produced on the bottom of the mold. Corresponding strips of molding 19 are fixed to the inside faces and lower portions of the end 16 to produce beveled edges at the ends of the blocks. By thus fixing the cleats 19 to the ends 16 the ends can be located at different points on the bottom 10, as required to produce blocks of different lengths in the same mold.

To aid in supporting the sides 12 and 13 in vertical positions, staples 21 are fixed in their outsides and pins 22 are passed down through the staples into apertures in the bottom 10, as shown in Fig. 4, or in any suitable way. The ends 16 have central apertures, through which core-supports 22 are extended, as clearly shown in Fig. 2, to be detachably connected with a tapering core 23, preferably hollow, by means of pins 24 or in any suitable way, as required to retain the core suspended in the mold and its ends in contact with the inside faces of the sides 12 and 13. At the sides of the apertures in the movable ends 16 and on their inside faces are fixed cores 25, that produce corresponding recesses in the ends of the blocks to admit the fingers of persons, as required to facilitate manually lifting and moving the blocks.

To lock the movable sides 12 and 13 against the movable ends 16, bars 26, having cross-pieces 27 fixed to their ends and under sides, are placed across the mold so the cross-pieces will engage the outside faces of the sides.

By flushing concrete into the mold when the movable parts are in position, as shown in Figs. 1 and 2, long blocks are produced with vertical central openings having cavities in their ends communicating with the central openings and recesses or handholds in their ends.

To produce a block adapted for corners of walls, the mold is transformed by using a smaller core 23 and placing a metal plate 28 in one end and supporting it by movable pins 29, as shown in Fig. 3, or in any suitable way, as required for producing a solid smooth-faced end.

To produce blocks having water-tables at the top edges of their front faces, an auxiliary bottom 30 is placed in the mold and a piece of

molding 31 on top of it, as shown in Fig. 4, and the top face of the auxiliary bottom is preferably grooved, as required to produce a corrugated front face on the block.

5 To produce short blocks, the mold is transformed, as shown in Figs. 5 and 6, by placing one of the ends 16 on the central portion of the bottom 10 and supporting it there by a board 32 in the bottom of the mold and a
10 board 33 in the top of the mold and provided with cleats 34, fixed on its top to extend over and rest on the top edges of the sides 12 and 13, as shown in Fig. 6. The outer ends of the boards 32 and 33 engage the cleats 15 on the
15 sides 10 and 12, as required to retain the movable end 16 in the center of the mold perpendicular.

It is obvious that by thus transforming the mold the four different kinds of blocks are
20 readily and advantageously produced by filling the molds with concrete and allowing it to dry sufficiently before separating the movable parts of the mold away from the blocks.

In Figs. 2 and 6 the cores 25 are removed
25 from the ends 16 and half-round strips 35 fixed on their inside faces to produce vertical grooves in the ends of the blocks in place of recesses for handholds.

Having thus set forth the purpose of my
30 invention and its construction and manner of use, the practical operation and utility thereof will be readily understood by persons familiar with the art to which it pertains.

What I claim as new, and desire to secure
35 by Letters Patent, is—

1. In a mold for building-blocks, a flat bottom having strips of molding fixed on its top near its longitudinal edges, movable parallel sides fitted on the bottom and against the
40 fixed strips of molding and movable ends having strips of molding at their bottoms and inside faces fitted on top of the bottom and against the movable sides and means to attach the movable sides and ends together
45 on the flat bottom.

2. In a mold for building-blocks, a flat bottom having strips of molding fixed on its top near its longitudinal edges, movable parallel sides fitted on the bottom and against the
50 fixed strips of molding and movable ends having strips of molding at their bottoms and inside faces fitted on top of the bottom and against the movable sides, a movable core and the movable ends provided with central apertures and core-supports extended through
55 the apertures and their inner ends connected with the core and means to detachably fasten the movable parts together.

3. In a mold for building-blocks, a flat bottom having strips of molding fixed on its top

near its longitudinal edges, movable parallel sides fitted on the bottom and against the fixed strips of molding and movable ends having strips of molding at their bottoms and inside faces fitted on top of the bottom and
65 against the movable sides, a movable core and the movable ends provided with central apertures and core-supports extended through the apertures and their inner ends connected with the core and cores fixed to the
70 inside faces of the movable ends at the sides of the apertures and means to detachably fasten the movable parts together.

4. In a mold for building-blocks, a flat bottom, having strips of molding fixed on its top near its longitudinal edges, parallel sides detachably connected with the bottom and its fixed moldings, a movable end having a fixed molding at the bottom of its inside face fitted between the parallel sides and provided with
80 a central aperture, a movable core-support fitted in the aperture, a movable core fitted between the parallel sides, means to connect the inner end of the core-support with the movable core, means to connect the ends of
85 the core with the inside faces of the parallel sides and a flat movable plate fitted between the parallel sides to close the end of the mold as required to make one end of a block solid and shorter in the same mold.
90

5. In a mold for building-blocks, a flat bottom, parallel movable sides, movable ends fitted between the parallel sides, an auxiliary movable bottom on top of the bottom and between the sides, a movable piece of molding on top of the auxiliary bottom and extended longitudinally against one of the sides and means for detachably fastening all the parts together as required to produce a water-table on the front face of the block, extending from end to end.
95 100

6. In a mold for building-blocks, a flat bottom having strips of molding fixed on its top near its longitudinal edges, movable parallel sides fitted on the bottom, movable ends, having fixed pieces of molding on their inside faces and bottom edges and central apertures, core-supports fitted in the apertures, a movable core connected with the inner ends of the core-supports and with the inside faces
105 110 of the parallel sides, means to retain one of the ends on the central portion of the bottom and means for detachably fastening all the movable parts together as required to produce short blocks in the same mold.

HAROLD A. LOW.

Witnesses:

J. B. SMITH,
H. JOHNSON.