

No. 854,843.

PATENTED MAY 28, 1907.

J. H. REMPIS.

MOLD FOR CONCRETE BUILDING BLOCKS.

APPLICATION FILED DEC. 12, 1904. RENEWED FEB. 11, 1907.

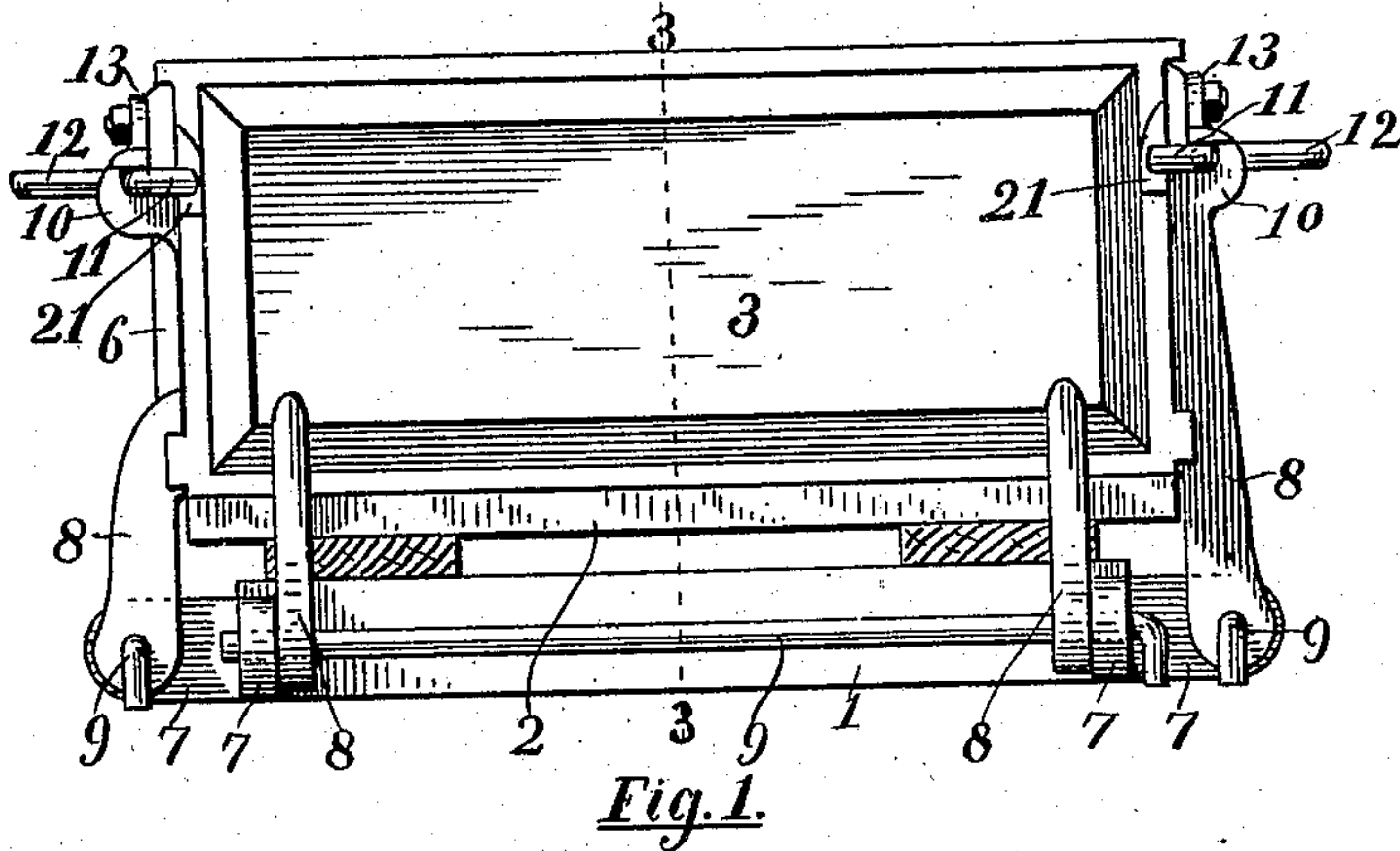


Fig. 1.

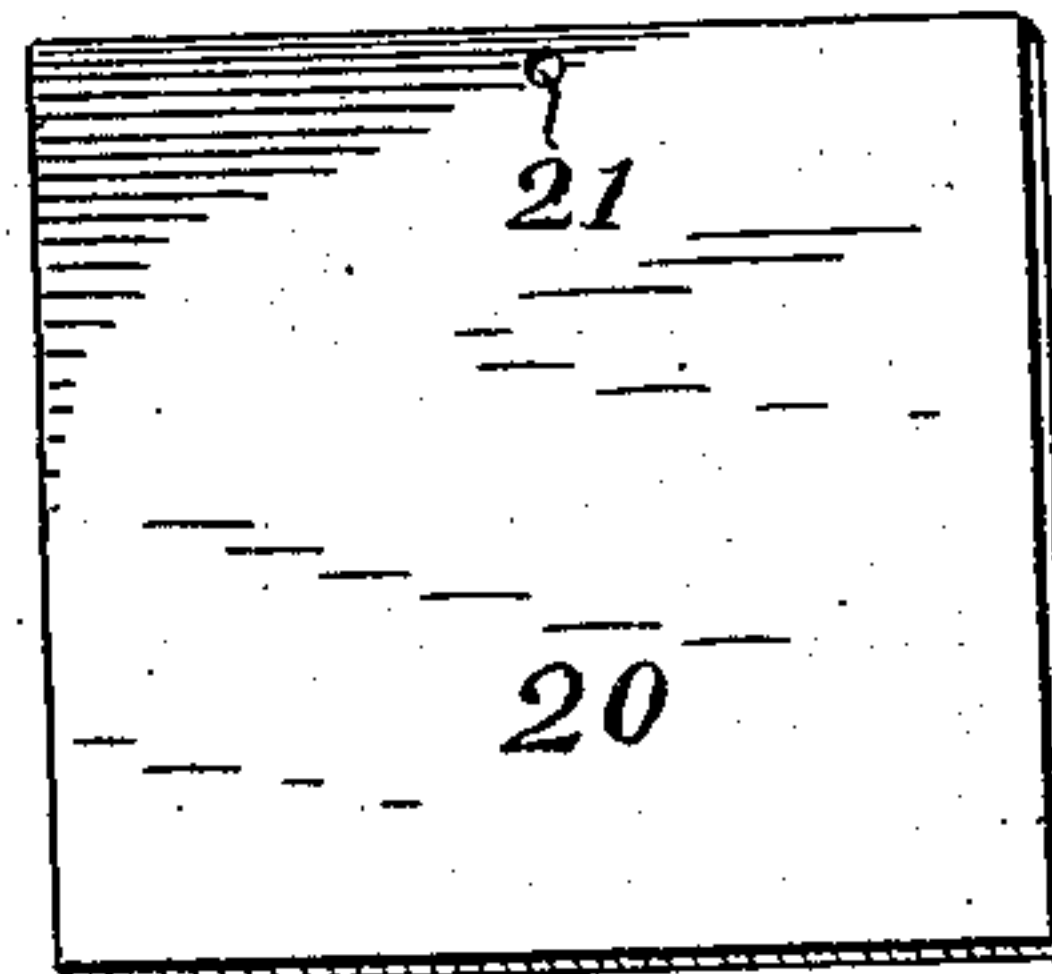


Fig. 5.

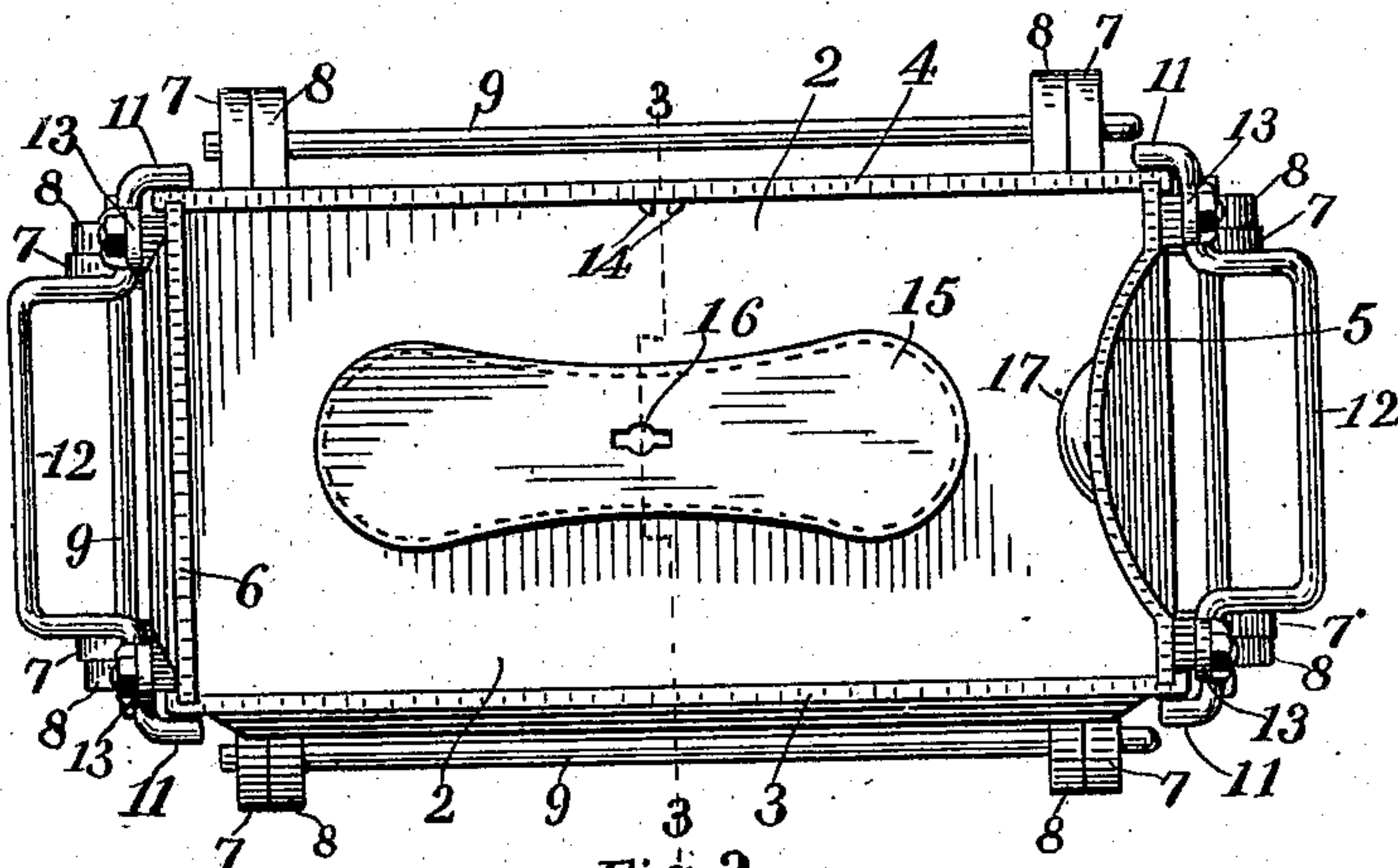


Fig. 2.

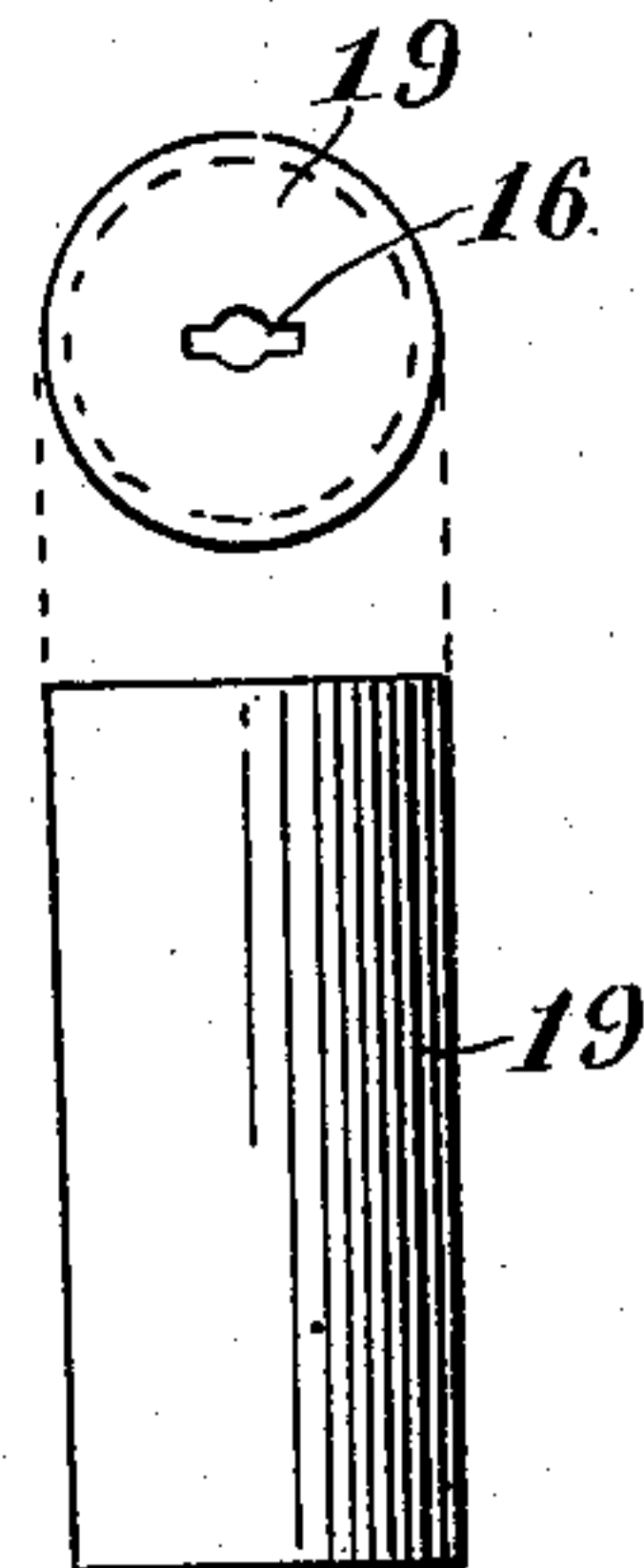


Fig. 6.

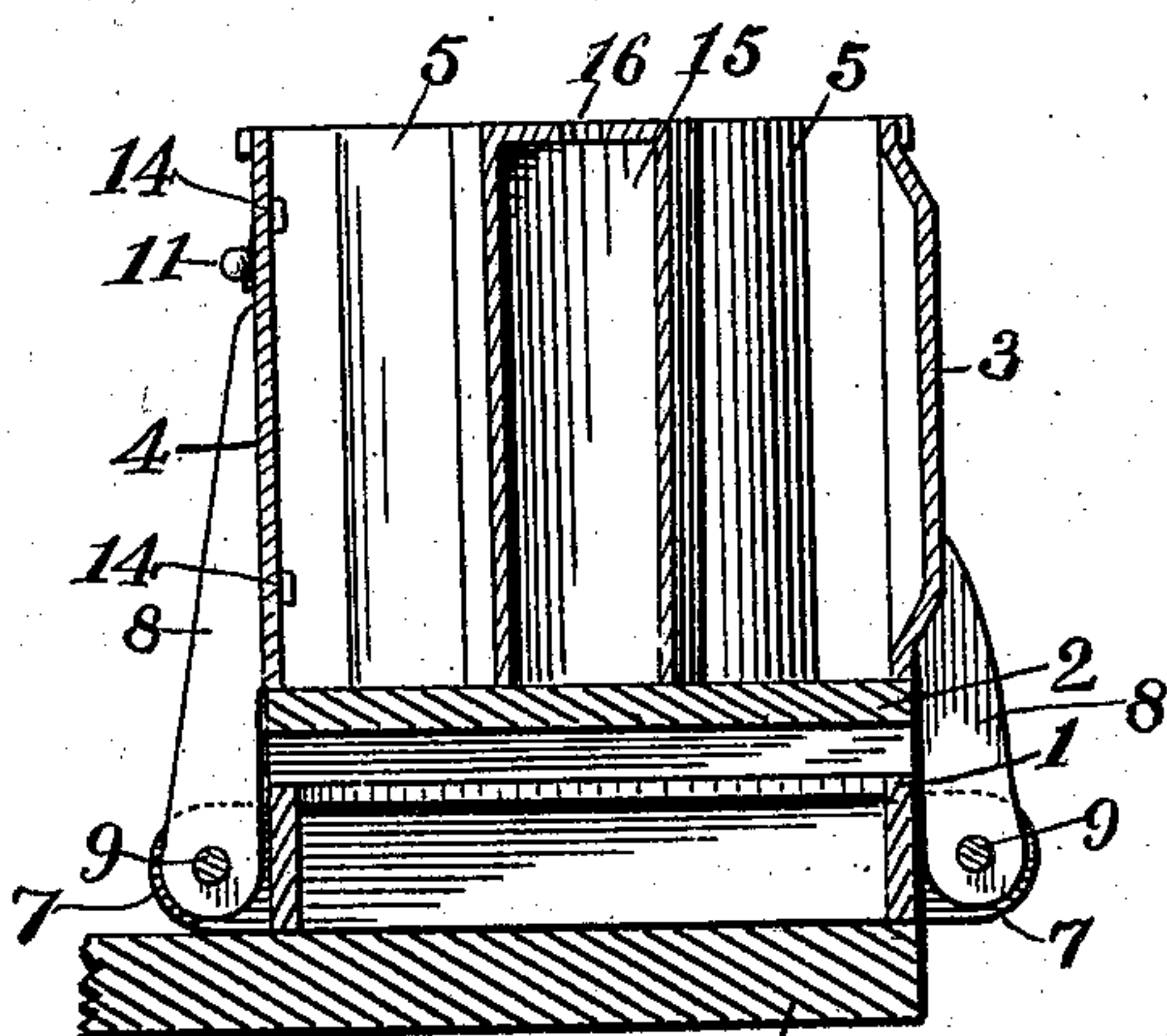


Fig. 3.

Witnesses
Edward R. Monroe.
Georgiana Chace

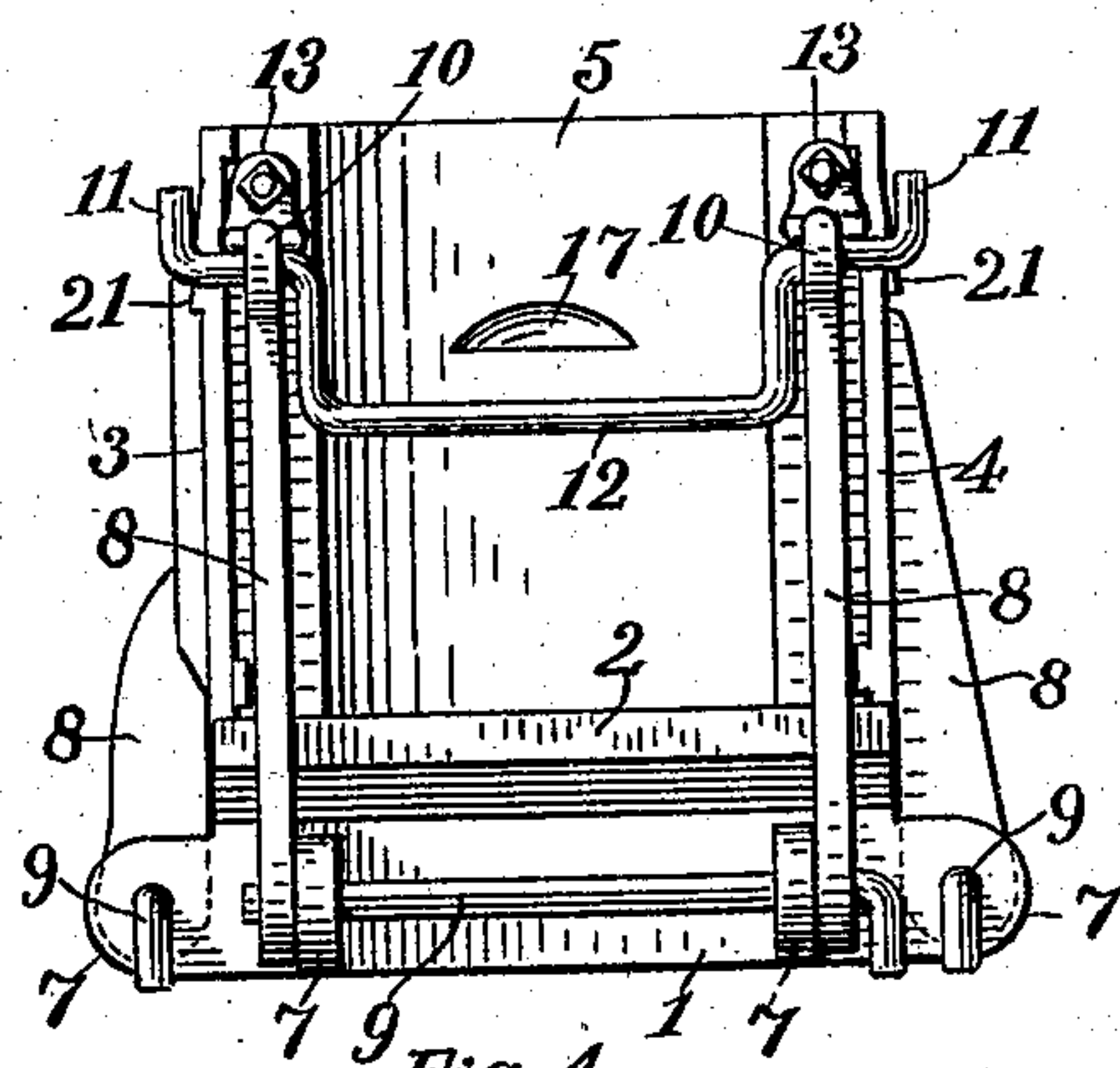


Fig. 4.

Inventor
John H. Rempis
By Luther V. Moulton
Attorney

UNITED STATES PATENT OFFICE.

JOHN H. REMPIIS, OF GRAND RAPIDS, MICHIGAN.

MOLD FOR CONCRETE BUILDING-BLOCKS.

No. 854,843.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed December 12, 1904. Renewed February 11, 1907. Serial No. 356,895.

To all whom it may concern:

Be it known that I, JOHN H. REMPIIS, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Molds for Concrete Building-Blocks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in molds for concrete building blocks; and its object is to provide a cheap and convenient device that can be operated by one person; and to provide the same with various new and useful features hereinafter more fully described and particularly pointed out in the claims.

My device consists essentially of the combination and arrangement of a bed, sides and ends detachably pivoted to the same and spaced apart from the same sufficiently to receive a supporting plank for the block, suitable clamps for holding the sides and ends, and various details of construction and arrangement, as will more fully appear by reference to the accompanying drawings in which:

Figure 1. is a side elevation of a device embodying my invention; Fig. 2. a plan view of the same; Fig. 3. a transverse vertical section on the lines 3—3 of Figs. 1 and 2; Fig. 4. an end elevation of the same; Fig. 5. a detail of the partition plate; and, Fig. 6. a detail of the core to be used in connection with the partition plate.

Like numbers refer to like parts in all of the figures.

1 represents any suitable bed plate having substantially the same width as the receiving plank 2 and somewhat shorter than the same to permit of easily grasping the ends of the plank to lift it off when the block has been deposited thereon; 2 is any suitable plank on which the block is formed and left to harden; this plank being preferably of somewhat greater width and length than the block to be formed thereon and supplied with suitable transverse cleats to keep the plank from warping; 3 and 4 are the side plates of the mold, the plate 3 being represented as adapted for forming a paneled block and the plate 4 being flat to form a block having a smooth surface. The end 6 is also represented of paneled form and the end 5 is made with con-

cavo-convex middle portion to form concave ends of the blocks, whereby a passage is formed between the blocks when they are laid in a wall. This end is also shown with a projecting portion 17 to form a recess in the end of the block to receive the fingers of the workmen, whereby the block may be more readily handled. These sides and ends may also be varied in form to represent a rough ashlar work, or brick work, or any other suitable design as occasion arises. These sides and ends are pivotally and detachably connected to the bed plate by means of projecting lugs 7 extending outward from the bed plate and hinged members 8 on the ends and sides extending downward adjacent to the lugs on the bed. These lugs are provided with alined openings in which are inserted removable rods 9 on which the ends and sides are pivotally supported in such position, that when brought to vertical planes, the sides and ends will rest upon the upper surface of the plank 2 near the margins of the same and being supported on the rods 9 outside the center of gravity, they will remain in vertical position. To secure the sides and ends to each other and thus hold them while the mold is being filled, the ends are provided with hooks 10, within which are journaled suitable rods each having its ends bent inward as at 11 to form a clamp to engage inclined surfaces 21 on the sides and thus force the sides against the ends and securely hold the same. To operate these clamps the middle portions of the rods are bent outward as at 12 thus forming pivoted handles for lifting or manipulating the mold and at the same time serving as suitable levers to operate the clamps. These rods are secured within the hooks 10 by means of suitable stops 13 bolted to the ends above the hooks. To form openings through the blocks for the purpose of producing hollow walls, a suitable core 15 is provided consisting of a suitable hollow casting provided with a key opening 16 in which a suitable key may be inserted to withdraw the core before opening the mold.

To form suitable half blocks to be used as occasion arises, the side 4 is provided with suitable lugs 14 located at its middle and a partition plate 20 is provided having an opening 21^a near its upper edge in which opening a suitable hook can be inserted to withdraw the same and a second plate similar to plate 4 is used instead of plate 3 and suitable ends 6 are attached whereby two half

blocks may be formed, as occasion requires. To core these half blocks round cores 19 are provided as shown in Fig. 6 with a similar key opening 16 for withdrawing the core.

5 From the foregoing description, the operation of my device will be readily understood without further explanation, it being understood that a suitable number and variety of ends and sides are provided which are utilized as occasion may require, the same being
10 interchangeable and readily attached and detached by withdrawing the pivot rods 9. By placing this device on a suitable bench 18 and close to the edge thereof, as in Fig. 3, the
15 side next the operator will turn down to a vertical position and below the level of the bench and thus be out of the way in removing the plank with the block thereon.

Having thus fully described my invention,
20 what I claim and desire to secure by Letters Patent is:

1. In a mold, a bed plate, outwardly extended lugs on the bed plate, sides and ends having hinge members extending opposite
25 the lugs, removable rods extending through the hinge members and lugs, and rods journaled on the ends, said rods having their respective ends bent to engage the sides and also having their middle portions bent outward to form pivoted handles.
30

2. In a mold, the combination of a bed, sides and ends hinged to the bed, a removable plank above the bed and extending beneath the sides and ends at its margins, a
35 hollow core having a key opening and supported on the plank, rods journaled on the ends and having their ends bent to engage the sides, inclined surfaces on the sides en-

gaged by the ends of the rods, and means for rotating the rods. 40

3. In a mold, sides and ends detachable from each other, inclined surfaces on the sides, and rods journaled on the ends and having their ends bent to embrace the sides and engage the inclined surfaces thereon, 45 said rods also having their middle portion bent outward to form pivoted handles.

4. In a mold, detachable sides and ends, inclined surfaces on the sides, hooks on the ends, rods journaled in the hooks, and having 50 their ends bent to embrace the sides and engage the inclined surfaces thereon, said rods also having their middle portions bent outward to form pivoted handles, and stops attached to the ends to retain the rods in the 55 hooks.

5. In a mold, a bed plate, lugs on the bed plate, sides and ends spaced apart from the bed plate to receive a plank therebetween, hinge members on the sides and ends, re- 60 movable rods extending through the lugs and hinge members, a plank above the bed and beneath the sides and ends at its margins, a removable core supported on the plank, rods journaled on the ends and having their 65 ends bent to embrace the sides and also having their middle portions bent outward to form pivoted handles, and inclined surfaces on the sides engaged by the ends of the rods.

In testimony whereof I affix my signature 70 in presence of two witnesses.

JOHN H. REMPIS.

Witnesses:

LUTHER V. MOULTON,
GEORGIANA CHACE.