

No. 720,536.

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E. W. SEAMANS.
MOLD FOR CONCRETE BLOCKS.

APPLICATION FILED OCT. 20, 1902.

NO MODEL.

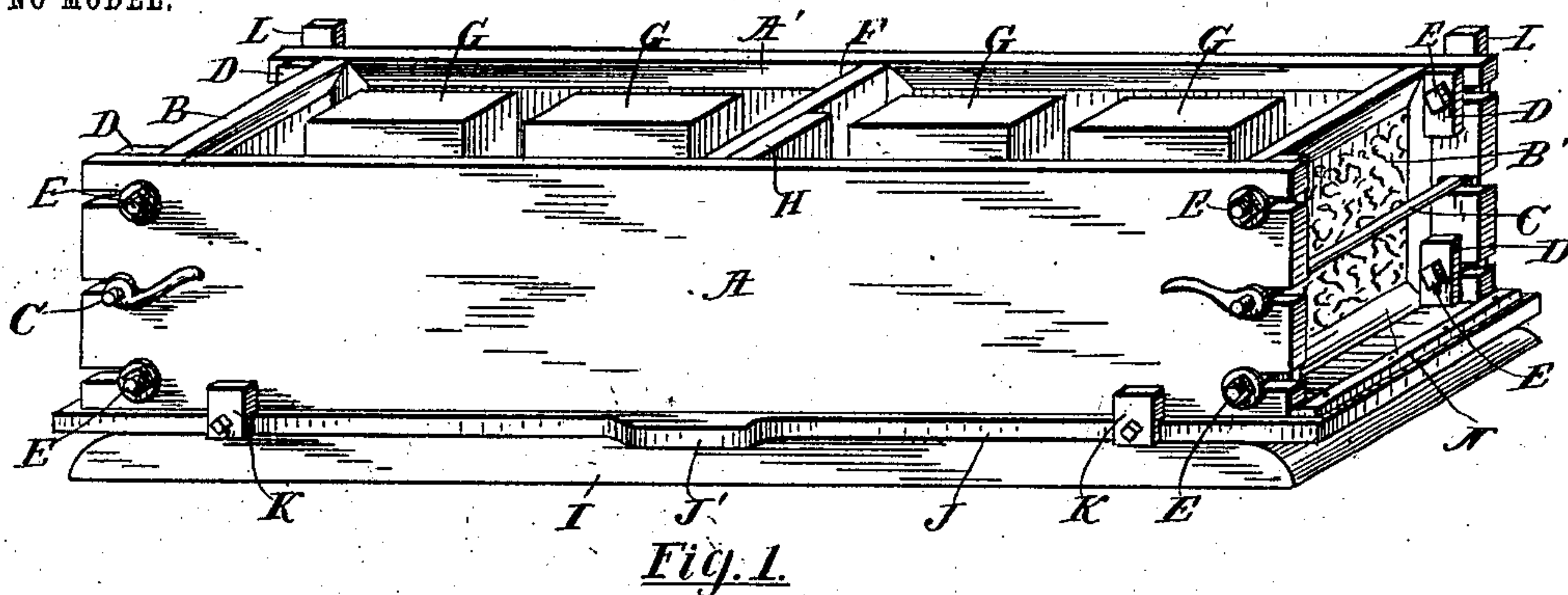


Fig. 1.

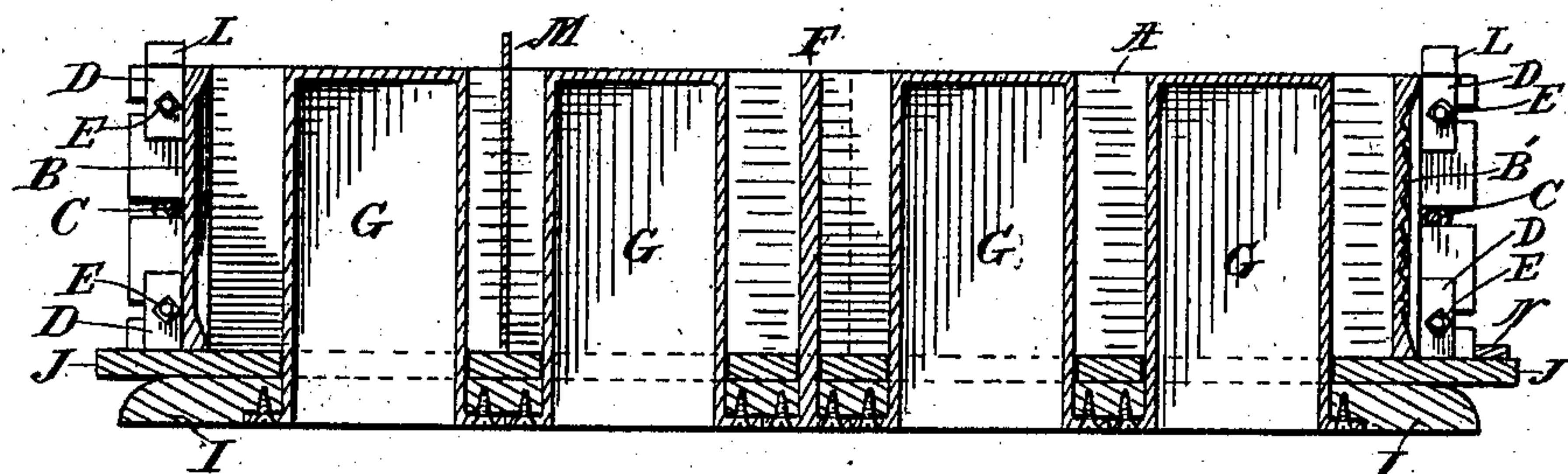


Fig. 2.

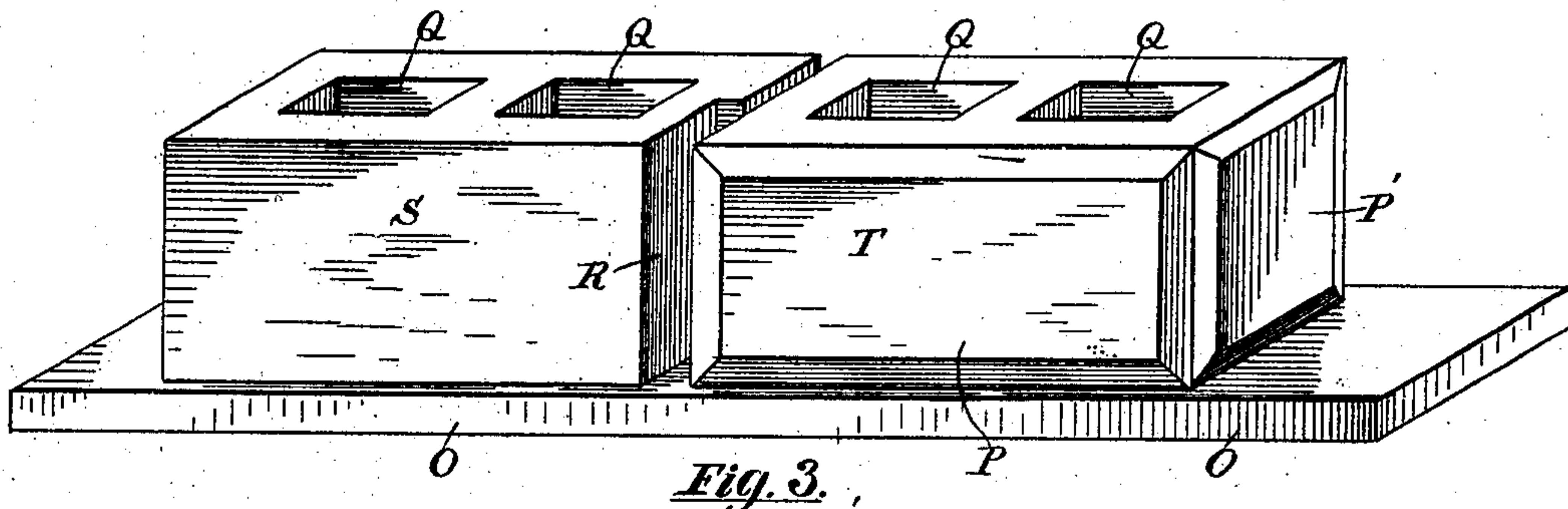


Fig. 3.

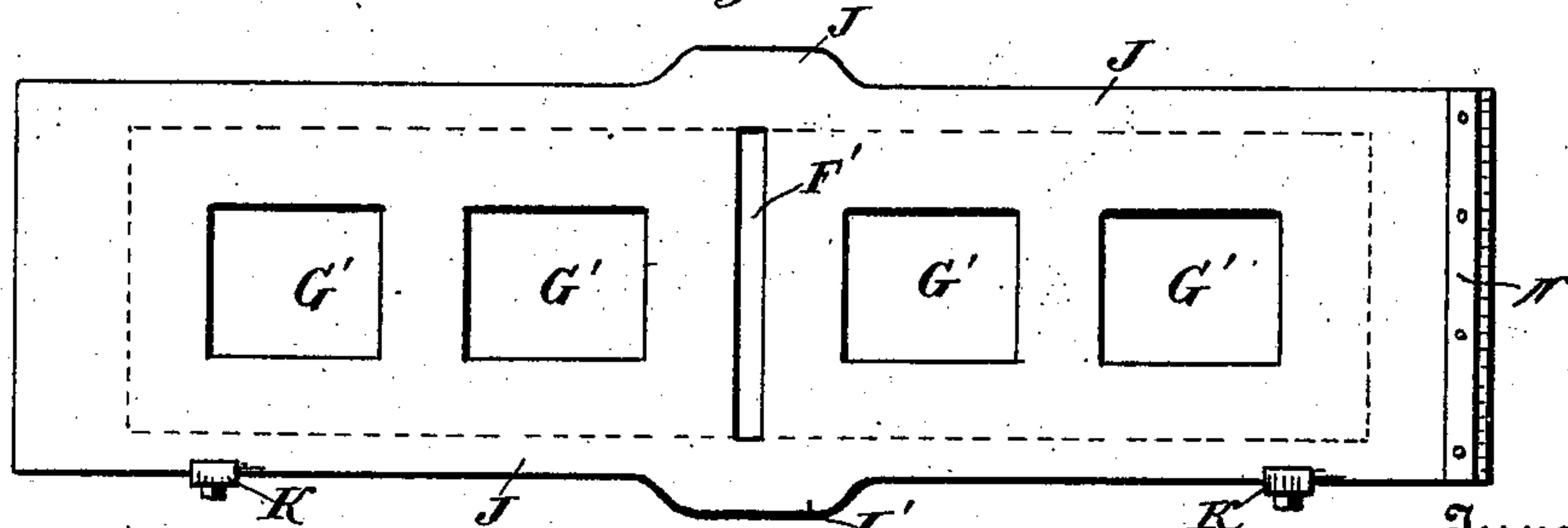


Fig. 4.

Witnesses

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MOLD FOR CONCRETE BLOCKS.

SPECIFICATION forming part of Letters Patent No. 720,536, dated February 10, 1903.

Application filed October 20, 1902. Serial No. 127,941. (No model.)

To all whom it may concern:

Be it known that I, EDWARD W. SEAMANS, 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 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 blocks; and its objects are to provide an improved mold that will produce hollow concrete bricks suitable for building purposes, to avoid the use of a number of perforated plates, to provide a cheap and convenient device for said purpose, and to provide the same with certain new and useful features hereinafter more fully described, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective of the device assembled and ready for use; Fig. 2, a longitudinal vertical section of the same with an addition of a feature for dividing a block to form a suitable half-block; Fig. 3, a perspective of two blocks produced in said mold, together with the supporting-plank on which they are deposited when they leave the mold; and Fig. 4, a plan of the stripper-plate and parts attached thereto.

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

A and A' represent the sides, and B and B' the ends, of a suitable rectangular mold, the same being provided with recessed sides, as indicated at A' and B', to form blocks resembling cut stone or rough ashlar work or masonry of any desired design, the other side of the same being made smooth or plane to form smooth surfaces. The sides A and A' are secured in place against the opposite ends of the ends B and B' by means of suitable clamping-bolts C, inserted in recesses in the ends of the sides A and A'. The ends B and B' are suitably located and supported in vertical position between the sides by means of adjustable blocks D, secured to the sides by

bolts or other suitable fastenings E, inserted in open-end slots in the sides.

The mold is adapted to form two blocks at a time by means of a partition F, and the blocks are made with rectangular openings Q therethrough by means of cores G, (preferably two in each block,) and the partition F and cores G are all securely attached to a bed-plate I and project upward within the mold, being thus suitably located and held in position by the said bed-plate. To guide these cores and partition when removed from the mold material and to insure their removal without breaking the said material, a stripper-plate J is provided, having suitable openings F' and G', in which the partition and cores are freely slidable and through which they project upward into the mold. The sides and ends of the mold rest upon said stripper-plate and are properly located laterally by stops K on the side of the plate and longitudinally on the plate by the stops N at one end of the same. This plate is laterally enlarged at J', opposite the opening F', to avoid weakening the same at the middle. Stops L are also provided on one of the sides, against which a suitable plank O is placed to receive the contents of the mold when discharged from the same and upon which plank the blocks are left to harden.

To produce suitable recesses R in the blocks to receive the ends of the joists when constructing the building with these blocks, suitable recess-cores H are provided having the dimensions of the desired recesses, which in the case shown extend wholly across the end of the block. These are placed in the mold in suitable position and are readily detached from the block after the same has been formed.

In operation the parts are first assembled, as shown in Fig. 1, the sides and ends being adjusted with either their plane or recessed sides inward, as occasion may require, to form either plane surfaces, as shown in the block S, or molded surfaces, as shown at P and P', in the block T, and in the event that a block is to be divided in the middle to form a half-block a thin metallic partition M is inserted between the cores of said block, the plate being of substantially the same thickness as the

seam of mortar used in laying the blocks, and for making recessed blocks to receive the joists the recess-cores H are inserted in the mold. The prepared concrete is thrown into
 5 the mold and compressed therein by any suitable rammer until the mold is filled a little above the top, and the excess is then removed by a suitable straight-edged scraper. Dry sand is then dusted over the surface of the
 10 concrete and the plank O placed thereon with its edge against the stops L, and the whole is then rolled over and reversed with the plank at the bottom. The cores G and partition F are then withdrawn, and to assist in starting
 15 the same the lever may be inserted under the rounded ends of the bed-plate and the ends of the stripper-plate J used as a fulcrum on which to pry up the bed-plate, together with the attached cores and partition. The strip-
 20 per-plate J holds the concrete intact and prevents breaking the same as the cores and partitions are withdrawn therefrom.

The bed-plate and parts attached are deposited in proper position for assembling the
 25 device. The stripper-plate is next removed and placed thereon. The clamp-bolts are then removed and the sides and ends assembled on the stripper-plate and the device again filled and operated, as before. The re-
 30 cess-core H and partition M are only used occasionally, and the latter can be best withdrawn before the device is rolled over. It will thus be seen that the buliding-blocks having all the necessary features are readily
 35 and easily formed in this mold and the same quickly and properly removed from the blocks without injury to the same, that said blocks are deposited on planks or other solid plates which are cheaper and stronger than per-
 40 forated bed-plates, that the mold may be turned over and the cores easily and safely drawn out by hand, and that the device is simple and durable and not likely to get out of order.

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

1. In a mold, the combination of sides and ends detachably secured to each other, a bed-
 50 plate, a core attached to the bed-plate and projecting within the mold, a stripper-plate

having an opening through which the case extends, and stops on the stripper-plate to locate the sides and ends of the molds thereon.

2. In a mold, the combination of sides and
 55 ends detachably secured to each other, a bed-plate, a partition and cores attached to the bed-plate and projecting within the mold, a stripper-plate, inserted between the bed-plate and the mold, and having openings through
 60 which the partition and cores extend, and stops on the stripper-plate to locate the sides of the mold thereon.

3. In a mold, the combination of sides having open-end slots in their respective ends,
 65 ends abutting against the sides, adjustable blocks to locate the ends, bolts in the blocks and adjustable in the slots, clamping-bolts inserted in the slots, a bed-plate, cores attached to the bed-plate and projecting with-
 70 in the mold, a stripper-plate having openings through which the cores project, and stops on the stripper-plate to locate the sides of the mold.

4. In a mold, the combination of sides and
 75 ends detachably secured to each other, a bed-plate, a partition and cores rigidly attached thereto and projecting within the mold, a stripper-plate having openings to receive the partition and cores and lateral enlargements
 80 opposite the opening to receive the partition, and stops on the stripper-plate to locate the sides of the mold thereon.

5. In a mold for concrete blocks, reversible sides and ends having one side plane and the
 85 other side recessed, means for reversibly and detachably securing the sides and ends to each other, a bed-plate, cores rigidly attached to the bed-plate and projecting within the mold, a stripper-plate between the mold and
 90 bed-plate and having openings through which the cores project, stops on one of the sides, a plank to engage the stops, and receive the contents of the mold when the same is reversed.

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

EDWARD W. SEAMANS.

Witnesses:

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