

No. 719,655.

PATENTED FEB. 3, 1903.

S. GILETTI.

APPARATUS FOR MAKING HOLLOW ARTIFICIAL STONE BLOCKS.

APPLICATION FILED JULY 17, 1902.

NO MODEL.

Fig. 1.

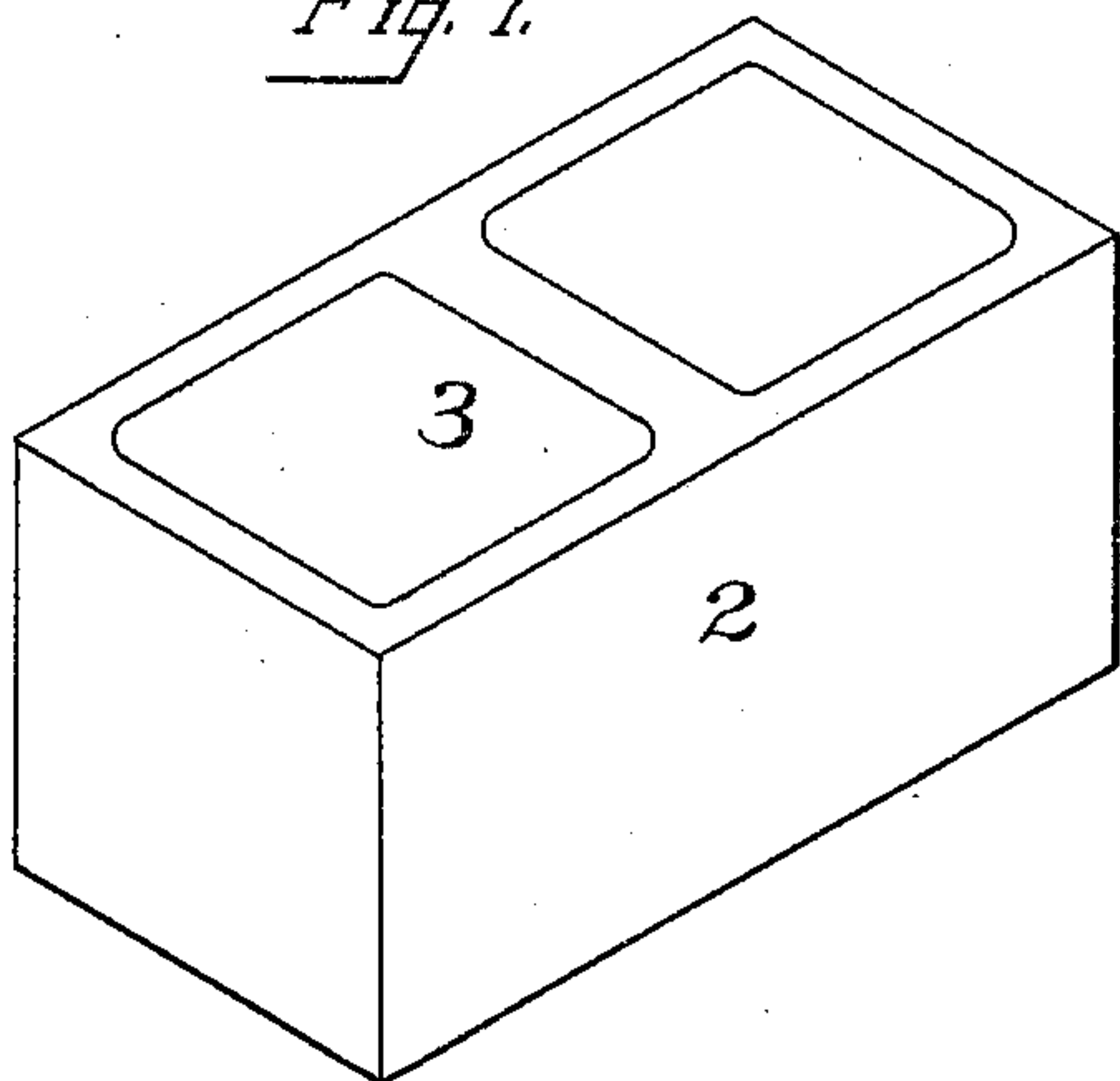


Fig. 2.

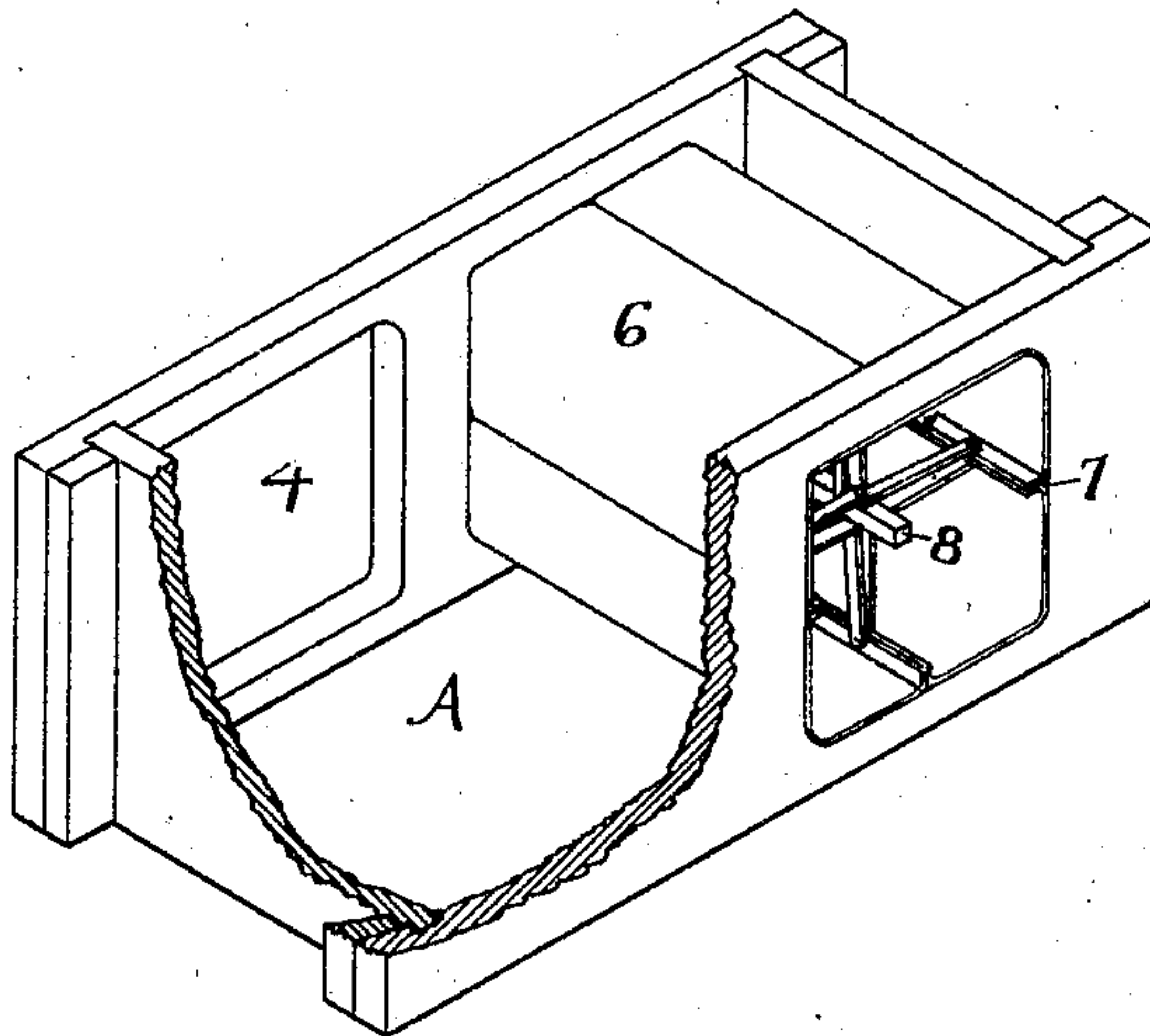


Fig. 5.

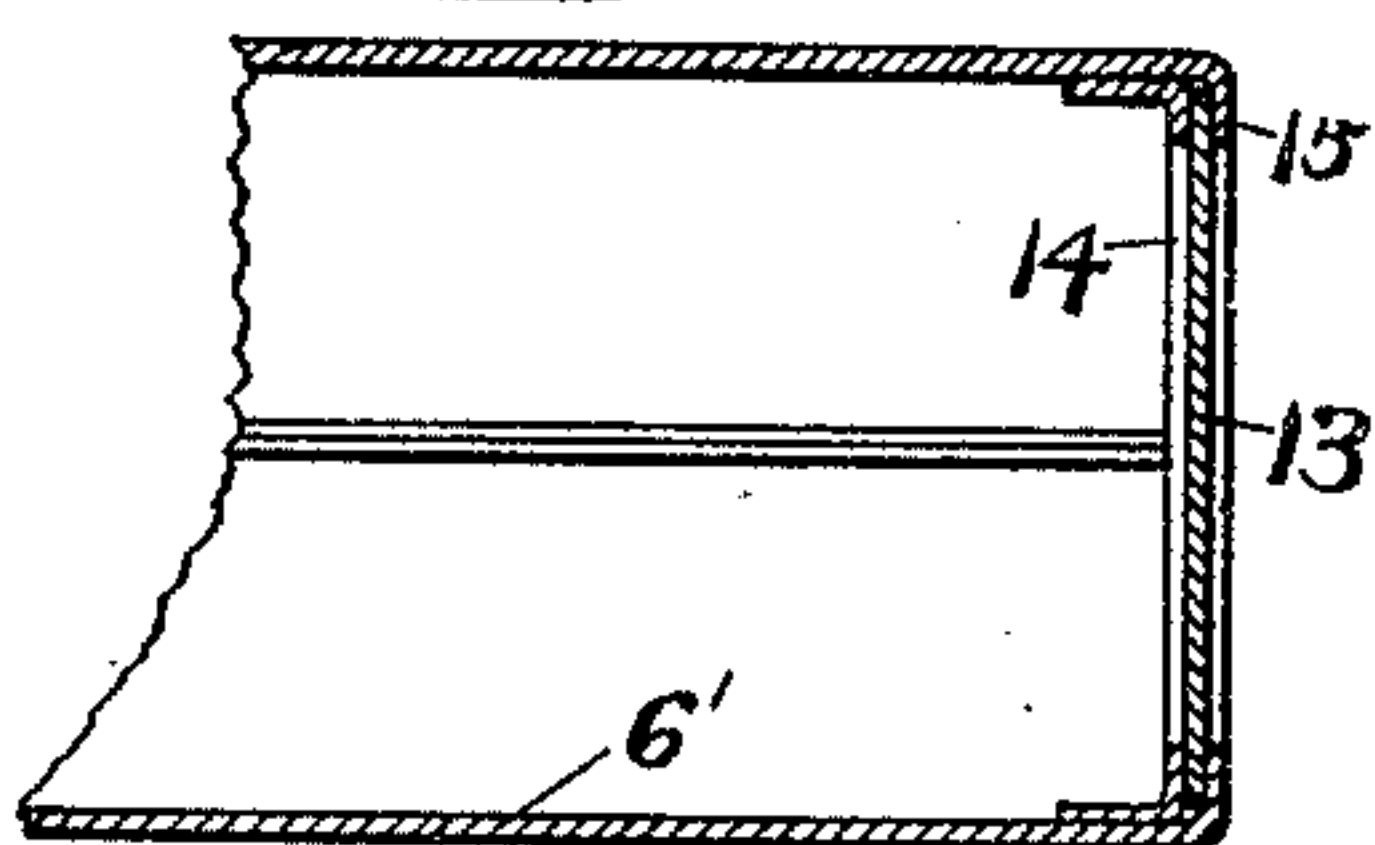


Fig. 3.

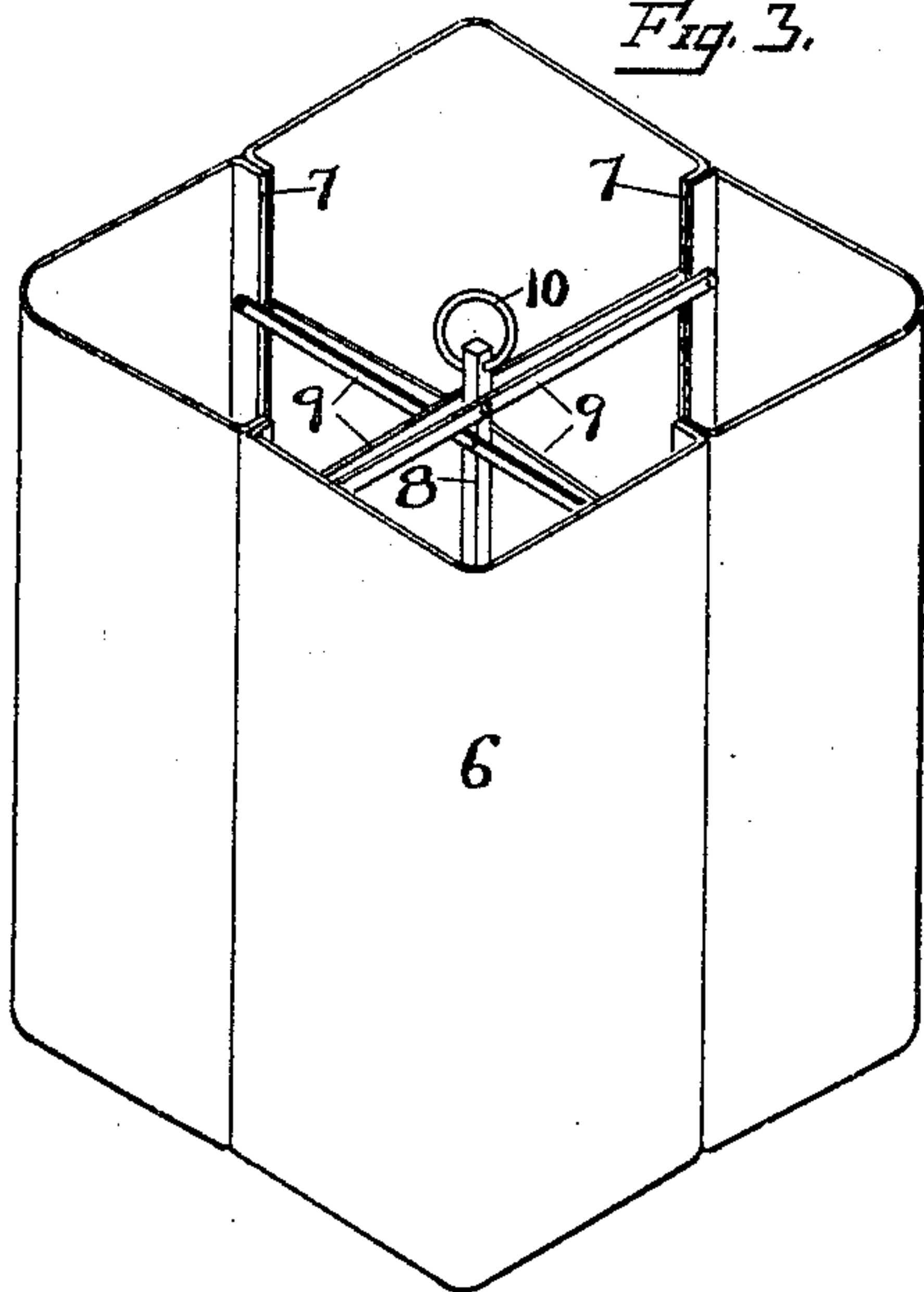
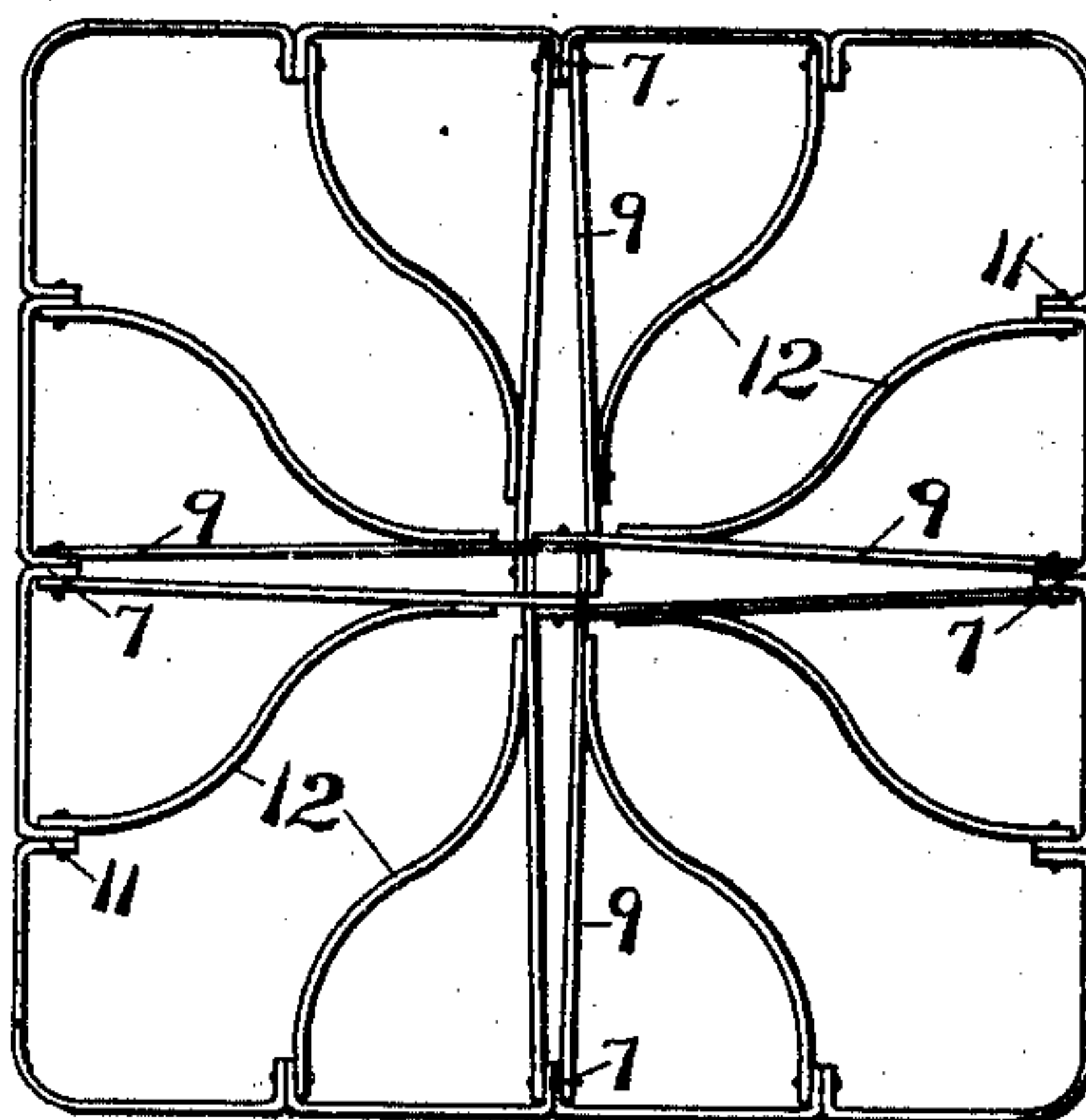


Fig. 4.



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APPARATUS FOR MAKING HOLLOW ARTIFICIAL-STONE BLOCKS.

SPECIFICATION forming part of Letters Patent No. 719,655, dated February 3, 1903.

Application filed July 17, 1902. Serial No. 115,891. (No model.)

To all whom it may concern:

Be it known that I, SECONDO GILETTI, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Apparatus for Making Hollow Artificial-Stone Blocks; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to improvements in devices for forming hollow blocks, tiles, and the like used in building construction. Its object is to provide a mold with a contractible core, which can be readily withdrawn after the block has been cast about it.

The invention comprises the combination, with a suitable mold, of a core having its walls pivotally connected by radially-disposed links, with a bar extending centrally through the core, whereby the walls of the core may be expanded or contracted, according as the links are operated in the act of inserting the core into the mold or withdrawing it therefrom.

It also comprises details, which will be more fully set forth hereinafter, having reference to the accompanying drawings, in which—

Figure 1 is a view of hollow artificial-stone block. Fig. 2 is a view of mold, with one core-casing in place. Fig. 3 is a view of mold-casing. Fig. 4 is a top view of large mold-casing. Fig. 5 is a section of casing to make stone, with one end closed.

A represents a suitable mold in which it is desired to cast an artificial-stone block, as 2, having the transverse flues 3 extending through it. The mold is preferably open at two sides. The closed sides are provided with openings 4 of a shape corresponding to the cross-section of the hollow portion of the tile or block to be cast. Where a block is to be made with the flues extending entirely through it, the cores, which form the essential part of this invention, are inserted through the openings 4 and supported at each end by the walls of the mold. These cores each consist of a hollow metal casing 6, preferably made of a number of sheets or sections of galvanized iron bent into proper shape and having their edges united in a flush joint. Usually the adjacent edges of the sections will be formed with inwardly-

turned flanges 7, which stand perpendicular to the respective wall-surfaces of the casing, and so form a reinforcing-web centrally the length of each wall. A bar 8 extends centrally through the casing, and a series of radially-disposed links 9 have one end pivoted to the bar and the other to the flanges 7. The length and operation of the links are such that when the bar 8 is moved to bring the links perpendicular to the walls of the casing the latter will be expanded, and when the bar is moved to carry the inner ends of the links either side of the vertical line the outer ends of the links are drawn or pressed together and the walls of the casing necessarily contracted. The application of this principle is seen in the operation of forming a block. Assume the cement filling to have been packed in the mold about the core, the bar 8 having been pushed in at the time the core was inserted in the mold to straighten the links and expand the casing to the desired size of the flue-space. When it is desired to remove the core, the simple act of the operator taking hold of the handle 10 on bar 8 and giving a moderate pull causes the links to turn on their pivots, freeing the casing from the surrounding stone or cement, and the core is withdrawn through the hole 4 in one side of the mold, leaving the still green block entirely uninjured.

With this device it is not necessary to wait for the block to dry. It is unaffected by moisture and is applicable for any character, design, style, or size of hollow artificial stone or tile formation.

In the manufacture of larger sizes of blocks the walls of the casing may be reinforced, as shown in Fig. 4, by forming the flanges 7 deeper and interposing a parallel flange 11 between each of the flanges 7 and the adjacent corners of the casing and pivotally connecting the flanges 11 and links 9 by the supplemental links 12. Each wall is thus supported from the center of the casing at three points instead of one.

The same principle of a contractible core is applicable in forming hollow blocks or tiles which are open only at one end. Such blocks are used often in cornice, lintel, or other ornamental structures. In Fig. 5 is represented a casing 6' having one end closed, but

which in other respects and in operation is similar to that first described.

The bottom 13 is of slightly-less diameter than the casing and is held in place by means of flange 14 on the interior of the casing, against which the bottom rests, and by the overlapping edges 15 of the casing engaging the outer edge. Any suitable ornamented form may thus be given the end or sides of a block, and the core can always be removed without danger of its sticking or binding.

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

1. The combination of a mold having openings in its opposite sides, and a contractible core comprising a hollow flexible casing having inseparable flanges or webs upon the inner surfaces of its walls, a longitudinal central support, links extending from the support to the flanges, and bolts passing through both the ends of the links and said flanges.

2. The combination of a mold having openings in its opposite sides, and a contractible core comprising a hollow flexible casing hav-

ing pairs of inseparable flanges or webs upon the inner surfaces of its walls, a longitudinal central support, links extending from the support to some of the pairs of flanges each of said links bolted to a pair of flanges, and supplemental links lying between the first-named links and pivotally connected to other of the pairs of flanges.

3. The combination in a mold having openings in its opposite portions, of a contractible core comprising a hollow flexible casing having inseparable flanges or webs upon the inner surfaces of its walls, a longitudinal central support, links extending from the support to the flanges, supplemental links lying between the first-named links, and bolts passing through the ends of both sets of links and the said flanges.

In witness whereof I have hereunto set my hand.

SECONDO GILETTI.

Witnesses:

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JESSIE C. BRODIE.