

No. 850,038.

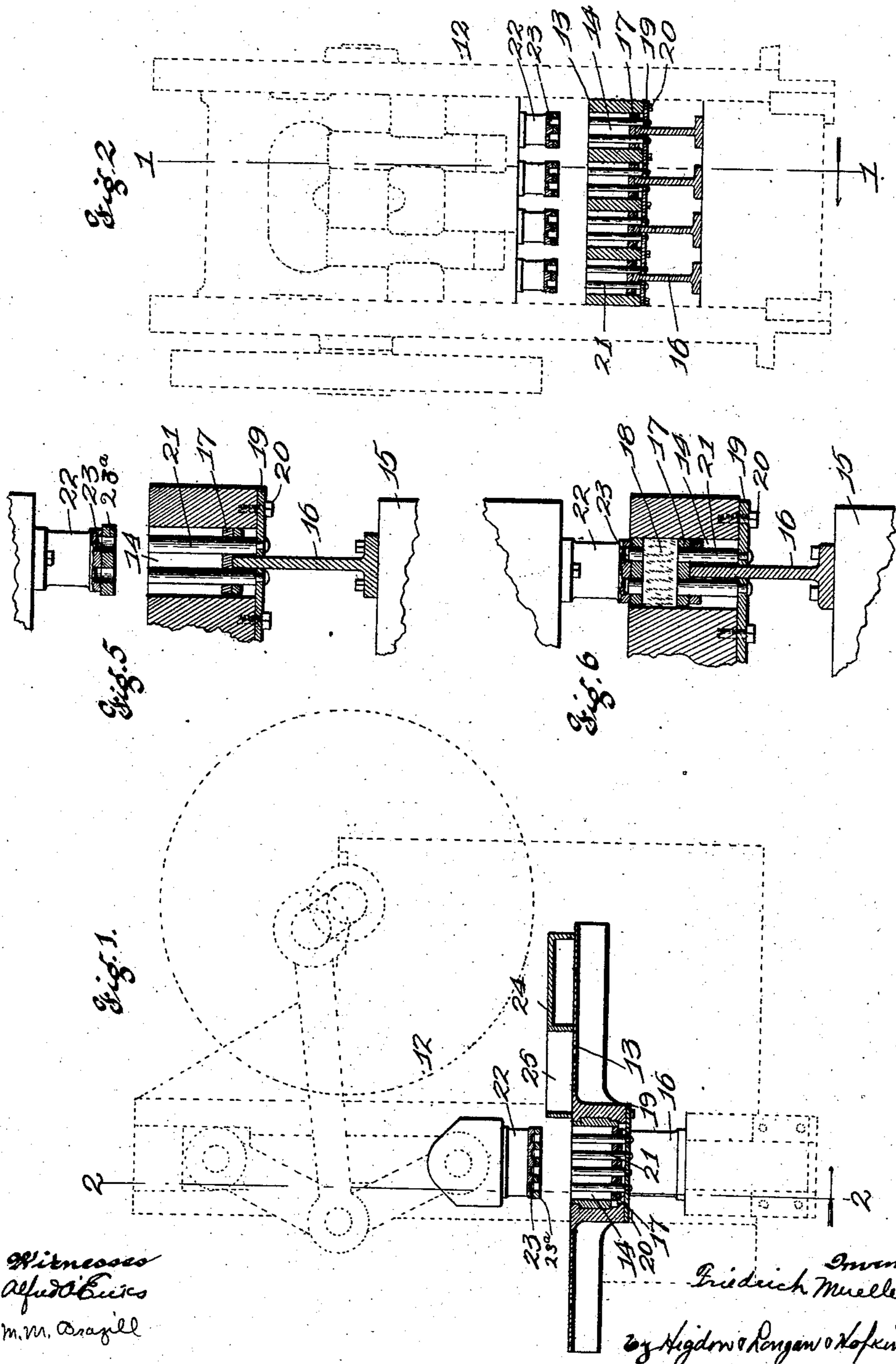
PATENTED APR. 9, 1907.

F. MUELLER.

BRICK MOLD.

APPLICATION FILED AUG. 27, 1904.

2 SHEETS—SHEET 1.



Witnesses
Alfred E. Evers
M. M. Craigell

Inventor
Friedrich Mueller
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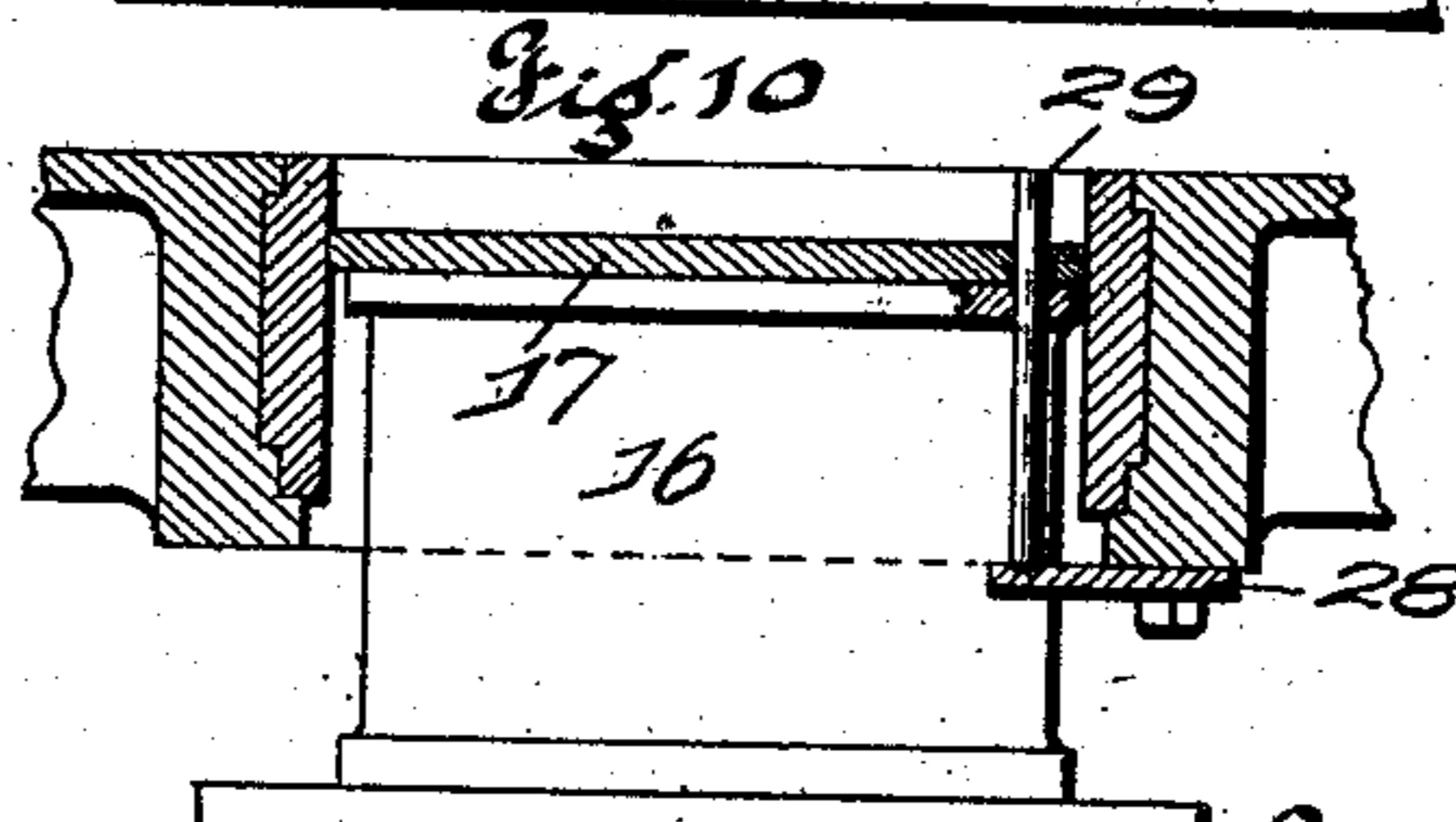
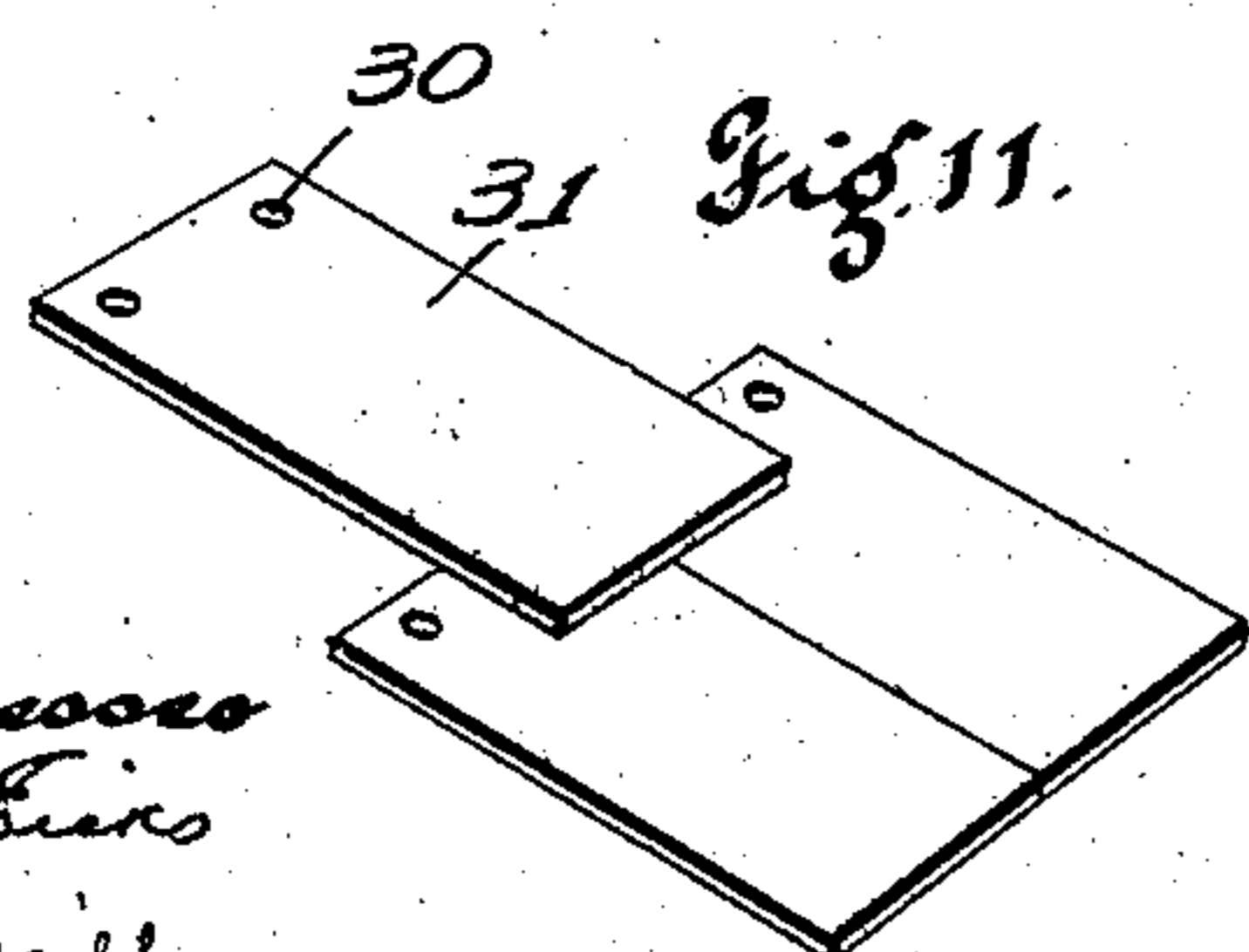
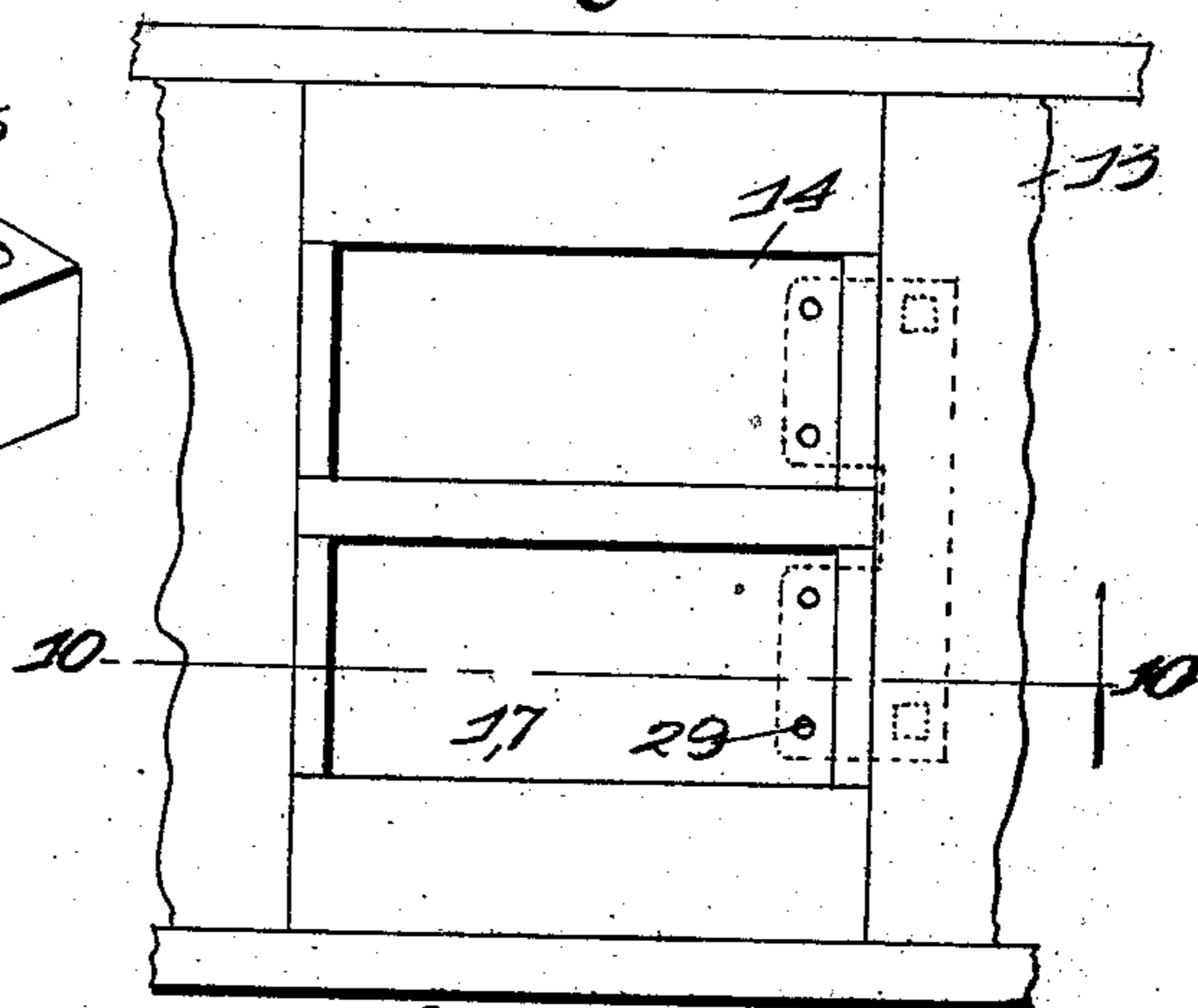
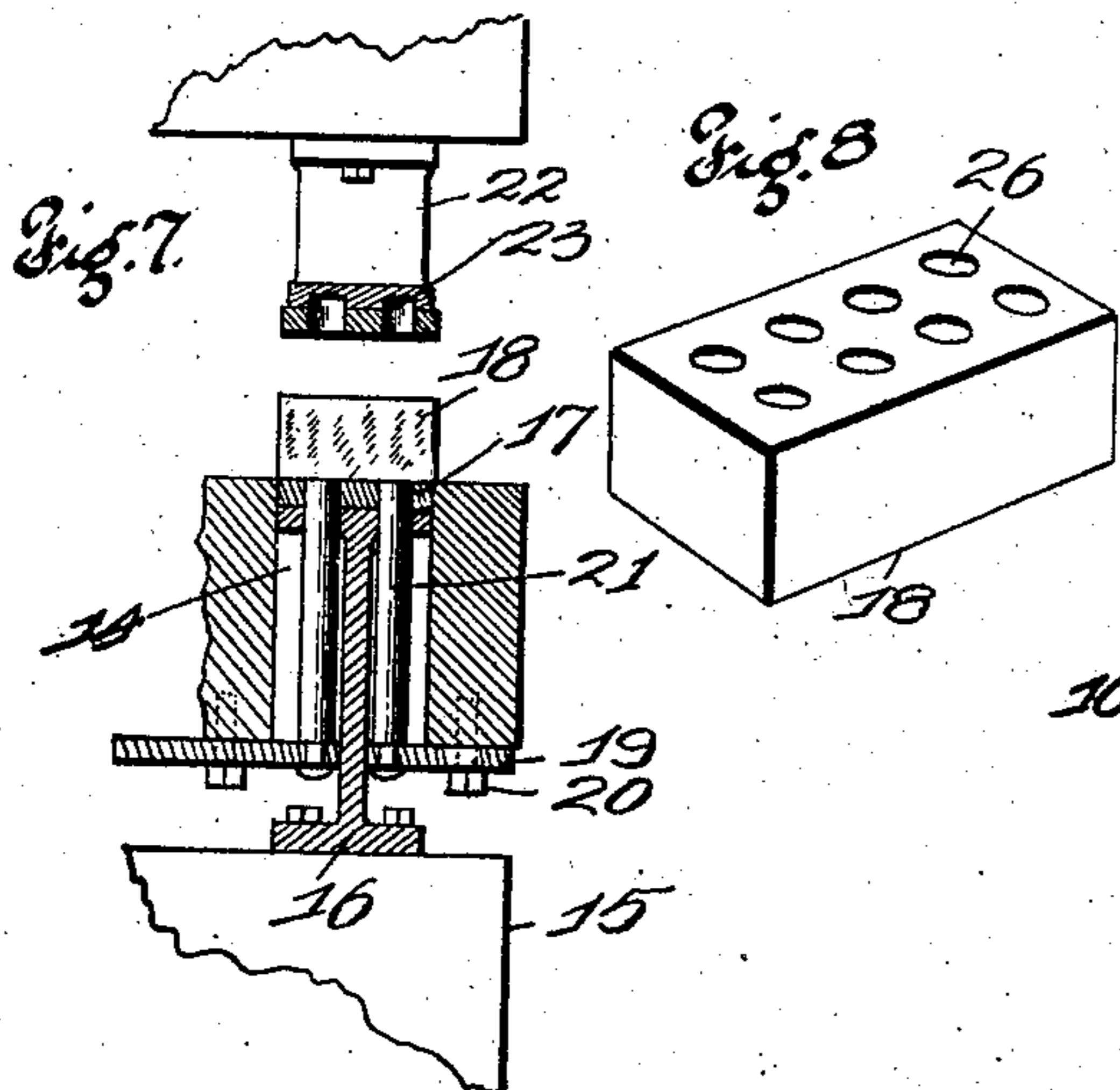
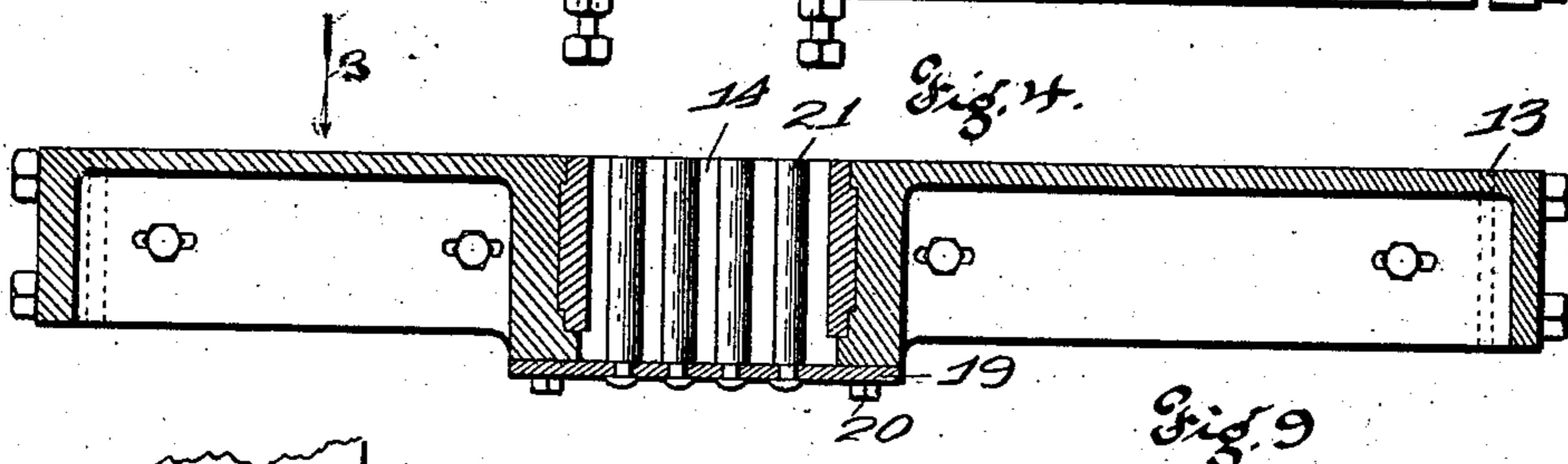
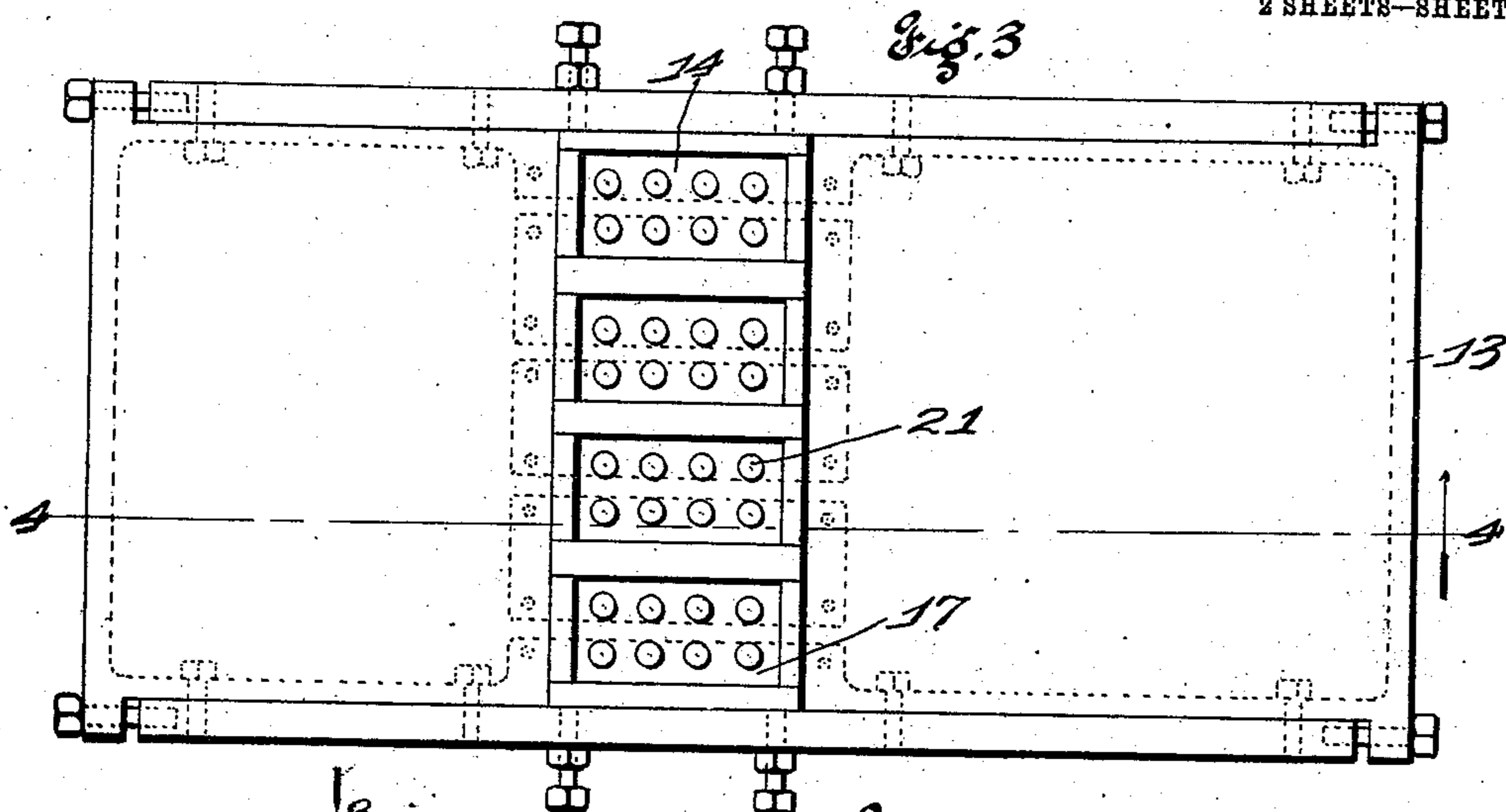
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2 SHEETS—SHEET 2.



Witnesses
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UNITED STATES PATENT OFFICE.

FRIEDRICH MUELLER, OF ST. LOUIS, MISSOURI.

BRICK-MOLD.

No. 850,038.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed August 27, 1904. Serial No. 222,440.

To all whom it may concern:

Be it known that I, FRIEDRICH MUELLER, a subject of the Emperor of Germany, and a resident of St. Louis, Missouri, have invented certain new and useful Improvements in Brick-Molds, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to a machine for making perforated brick and tile, and consists of the novel features shown, described, and claimed.

Figure 1 is a sectional elevation taken substantially on the line 1 1 of Fig. 2 and looking in the direction indicated by the arrow. Fig. 2 is a cross-section on line 2 2 of Fig. 1 and looking in the direction indicated by the arrow. Fig. 3 is a top plan view of the bed and dies as seen looking in the direction indicated by the arrow 3 in Fig. 4. Fig. 4 is a longitudinal vertical section taken on line 4 4 of Fig. 3 and looking in the direction indicated by the arrow. Fig. 5 is an enlarged sectional detail analogous to Fig. 2, parts being broken away and omitted to economize space. Fig. 6 is a view analogous to Fig. 5 and illustrating the operation. Fig. 7 is a view analogous to Fig. 6 and showing a further operation. Fig. 8 is a perspective of a perforated brick formed in my improved machine. Fig. 9 is a view analogous to Fig. 3 and showing machine set up for perforated tile instead of brick, said figure being a modified construction and parts being broken away to economize space. Fig. 10 is a sectional detail on line 10 10 of Fig. 9 and looking in the direction indicated by the arrow. Fig. 11 is a perspective of perforated tile or shingle, as formed in my machine, as set up in Figs. 9 and 10.

Referring to the drawings in detail, the press-frame and operating mechanism 12 (shown in dotted lines in Figs. 1 and 2) is of the ordinary construction. The bed 13 is rigidly mounted in a horizontal position and is of the ordinary construction and has compression-chambers 14 extending vertically through its center. The lower compression member 15 is mounted and operated in the ordinary way, and I-beams 16 are mounted upon the compression member, said I-beams fitting in the compression-chamber 14 and reciprocating up and down in said chamber. A finished plate 17 is mounted upon each of the I-beams, the upper face of said

plate being finished to make a finished surface upon the lower side of the bricks 18. The perforator-plates 19 are secured to the beds 13 by cap-screws 20, there being one plate 19 upon each side of the web of each I-beam 16, and the perforators 21 are rigidly secured to the plates 19 and slidingly mounted in the openings formed through the upper flanges of the I-beams and through the plate 17, said perforators 21 being round pins not longer than the depths of the compression-chambers 14. The upper compression member 22 has recesses 23 formed in its lower face to correspond with the perforators 21, and fixed to the under side of said compression member is a perforated finishing-plate 23^a, identical with the finishing-plate 17.

The carrier 24 has a vertical opening 25 to receive the clay or material to be pressed. When the carrier 24 is in the position shown at Fig. 1—that is, at one side of the compression-chambers 14—the opening 25 is filled with the material. Then the carrier is slid over the compression-chambers until the material falls into the compression-chambers. Then the upper compression members 22 pass downwardly into the compression-chambers, the perforators 21 forming perforations 26 in the material. The lower compression members 15 pass upwardly, and the material is compressed within the compression-chambers around the perforators between the two compression members, as shown in Fig. 6. Then the continued operation of the machine raises the upper compression members, raises the lower compression members, and pushes the brick 18 upwardly from the compression-chambers to a level with the upper face of the bed. (See Fig. 7.) Then the brick is moved laterally upon the bed and carried away.

In the modification shown in Figs. 9, 10, and 11 perforator-plates 28 are inserted under the ends of the compression-chambers, and the perforators 29 extend upwardly from these plates, so as to form perforations 30 in the tile 31.

My invention may be applied to any of the ordinary brick or tile presses and consists in placing the perforators in position to form openings in the tile or brick.

I claim—

In a brick-mold, a fixed bed-plate, provided with compression-chambers, a lower compression member, I-beams carried by the compression member and fitting in the com-

pression-chambers, a finishing-plate carried
by each I-beam, the tops of which I-beams
and finishing-plates are perforated, plates
secured to the under side of the bed-plate,
5 pins secured to said plates and projecting
upwardly through the perforations in the I-
beams and finishing-plates, and upper com-
pression members operating in opposition to
the lower compression members, and being
10 provided in their under sides with recesses to
receive the upper ends of the pins and per-

forated finishing-plates rigidly fixed to the
under sides of the upper compression mem-
bers; substantially as specified.

In testimony whereof I have signed my 15
name to this specification in presence of two
subscribing witnesses.

FRIEDRICH MUELLER.

Witnesses:

ALFRED A. EICKS,
M. M. BRAZILL.