

No. 777,070.

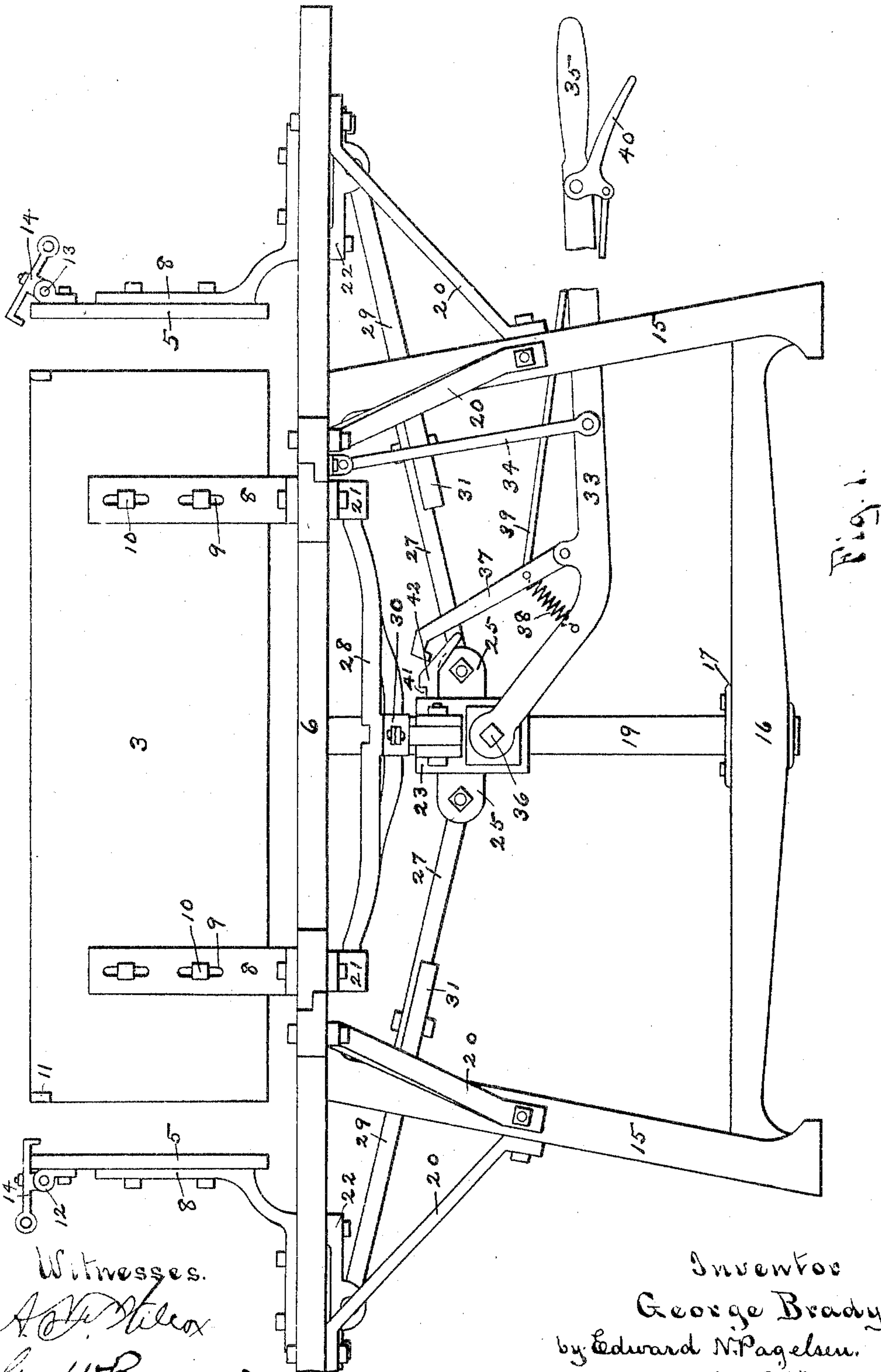
PATENTED DEC. 13, 1904.

G. BRADY.  
CONCRETE BLOCK MACHINE.

APPLICATION FILED FEB. 12, 1904.

NO MODEL.

3 SHEETS—SHEET 1.



Witnesses.  
*A. H. Stiles*  
*Geo. W. Barnes*

Inventor  
George Brady.  
by *Edward N. Pagelsen*,  
his Attorney.

No. 777,070.

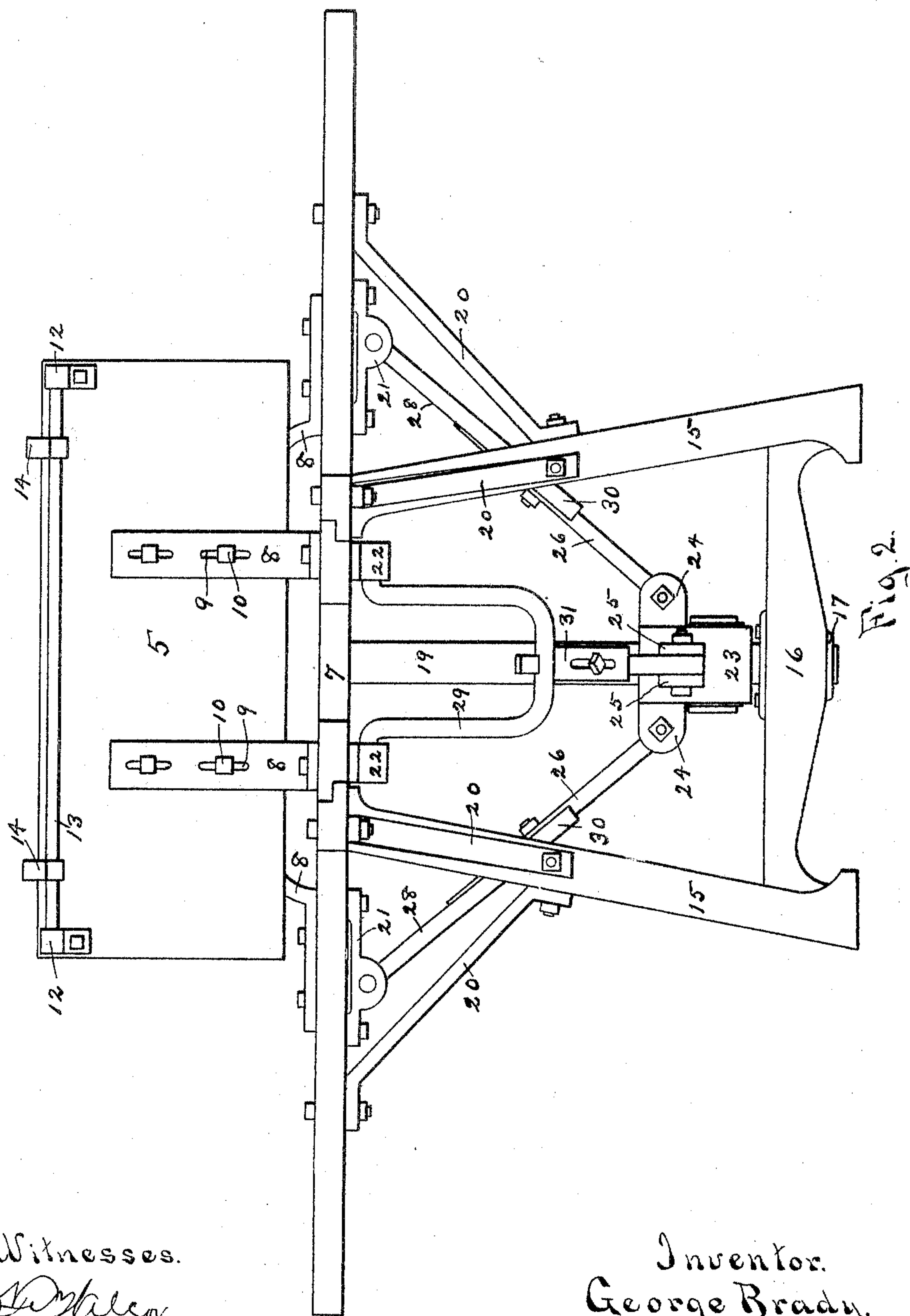
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NO MODEL.

3 SHEETS--SHEET 2.



Witnesses.

Atkin Milcox

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No. 777,070.

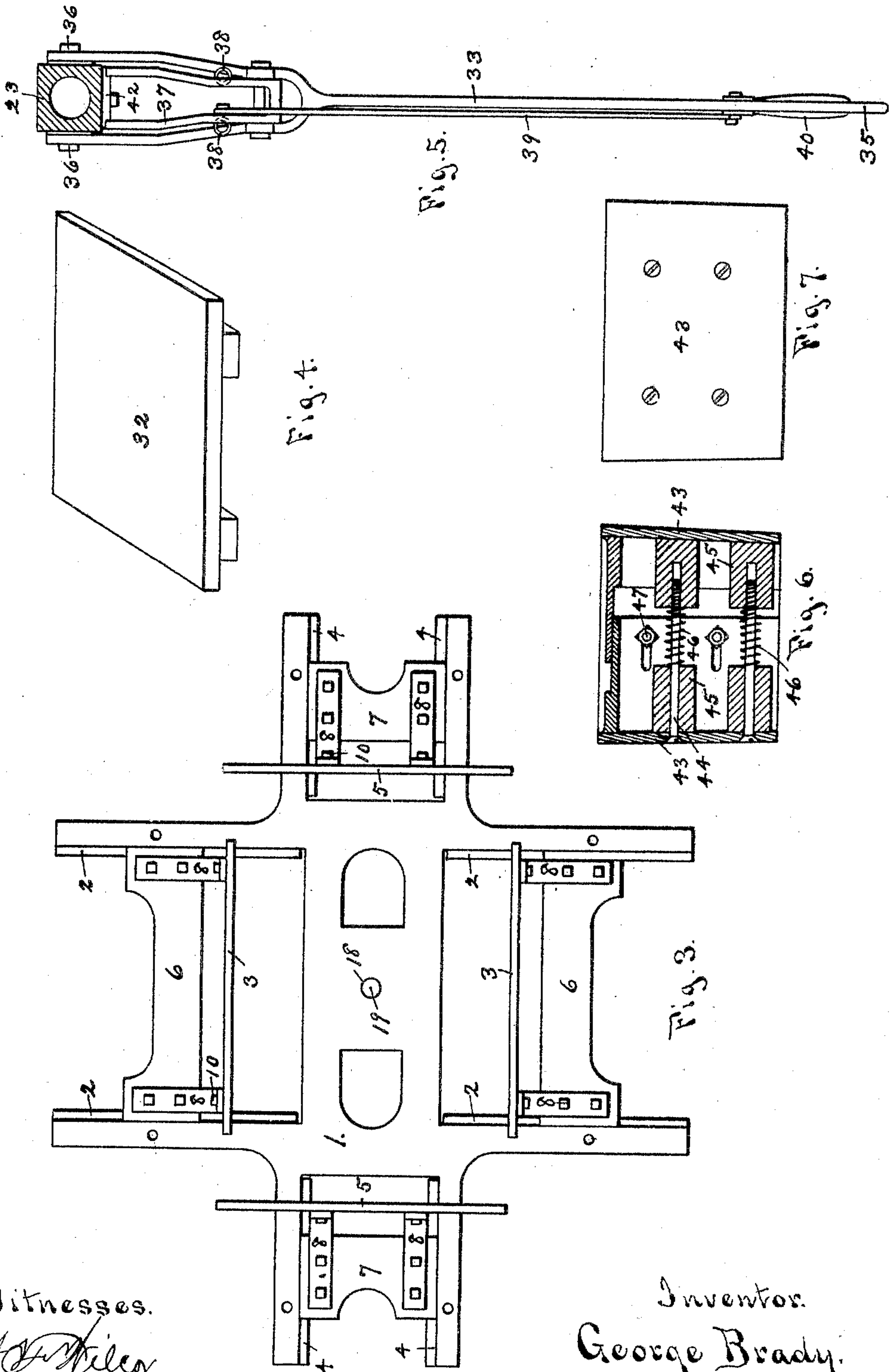
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CONCRETE BLOCK MACHINE.

APPLICATION FILED FEB. 12, 1904.

NO MODEL.

3 SHEETS—SHEET 3.



Witnesses.  
*A. H. Miller*  
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# UNITED STATES PATENT OFFICE.

GEORGE BRADY, OF JACKSON, MICHIGAN.

## CONCRETE-BLOCK MACHINE.

SPECIFICATION forming part of Letters Patent No. 777,070, dated December 13, 1904.

Application filed February 12, 1904. Serial No. 193,235. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE BRADY, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented a new and Improved Concrete-Block Machine, of which the following is a specification.

My invention relates to that class of machines for forming blocks of concrete and other plastic materials in which the sides of the mold are moved away from and toward each other by the operating parts of the machine.

The objects of my improvements are to provide a machine of this class in which all the sides of the mold may be moved inward and outward by a single motion of a lever, to provide adjusting means by reason of which the various parts can be as well adapted for large as well as for small blocks, to provide a machine in which the sides of the mold will be locked together and the operating means will be independently locked while the mold is being filled, and to provide the machine with a core that may be adjustable in size. I attain these objects by the construction set forth in the accompanying drawings, in which—

Figure 1 is a side view of the machine, the left end of the table being broken away. Fig. 2 is an end view of the same. Fig. 3 is a plan of the table and the sides of the mold, the mold-locking means being omitted. Fig. 4 is a perspective of the bottom of the mold. Fig. 5 is a plan of the main operating-lever. Figs. 6 and 7 are a cross-section and a side view of the core.

Similar reference characters refer to like parts throughout the several views.

In the drawings, 1 is a table having ways for the sides of the mold. The ways 2 for the sides 3 of the mold are at right angles to the ways 4 for the ends 5 of the mold. Blocks 6 and 7 slide in the side and end ways, respectively, and attached to them are the brackets 8, having slots 9, through which pass the bolts 10, which engage in the sides of the mold. These slots permit the vertical adjustment of the sides of the mold. To the upper ends of the sides 3 are secured the lugs 11. To the upper edges of the ends 5 are secured the brackets 12, in which are revoluble the shafts 13, hav-

ing movably secured thereto the hooks 14, which are adapted to engage with the lugs 11 and so lock the mold together. These elements 11, 12, 13, and 14 are omitted from Fig. 3 for the sake of clearness.

The table 1 is supported by the legs 15, which are connected by the central frame 16, in the center of which is secured the sleeve 17, into which and in the hole 18 of the table is secured the shaft 19. Braces 20 serve to stiffen the legs and table.

To the lower side of the sliding blocks 6 and 7 are secured the bearings 21 and 22, respectively. Slidable on the shaft is the hub 23, having lugs 24 and 25 in pairs projecting in line with the centers of the ways 2 and 4. Pivoted to these lugs are the links 26 and 27, respectively. Pivoted in the bearings 21 and 22 are the yokes 28 and 29, respectively, having trough-shaped portions 30 and 31, respectively, into which are slidably and adjustably secured the ends of the links 26 and 27. It will therefore be seen that moving the hub 23 up and down will cause the sides of the mold to separate and approach each other. The bottom of the mold is formed by the board 32, which will be the size of the block desired. The sides are locked around this board and the relative positions of the yokes 28 29 and links 26 27 then determined.

For the purpose of moving the hub 23 up and down I provide the lever 33, supported by the link 34. In Fig. 1 this lever is shown broken. In practice the handle 35 projects beyond the end of the machine as far as may be desired. The forked inner end of the lever is pivoted to the hub by means of screws 36. The U-shaped hook 37 of the lever is pulled down by the springs 38 and is raised by the rod 39, that extends to the usual finger-piece 40. The hook 37 engages in the notch 41 of the double bracket 42, secured to the hub, when the hub is in its lowest position, and thus prevents said hub from rising and locks all the various parts of the machine. The core is made up of the two sides 43, secured together by the screws 44, which pass through hubs 45. The springs 46 serve to separate the sides and cause them to follow the screws. The top and ends are each made of two pieces



which permit the size of the core to be adjusted. Bolts 47 secure the two parts of each end together. As there is no bottom necessary, the nuts can be reached through that opening.

When it is desired to form a block, the outer end of the lever 33 is pushed down, the board 32 and the core are placed on the table 1, the end 35 of the lever is allowed to come up, so that the hook 37 may engage the bracket 42, and the hooks 14 are engaged with the lugs 11. The mold is then rammed full of concrete or any other desired plastic material. After the concrete has set hard enough to permit of handling the mold is opened and the board 32, with the block and core, is lifted off. As the core is slightly tapered, it can be easily pulled out of the block.

Many of the details of this machine can be varied according to the judgment of those skilled in the art without departing from the spirit of my invention.

Having now explained my improvement, what I claim as my invention, and desire to secure by Letters Patent, is—

1. In a block-molding machine, the combination of a table having a plurality of ways, blocks slidable horizontally on the same, plates secured to said blocks, bearings secured to said blocks, a vertically-slidable hub, yokes pivoted in said bearings, and links connected to said hub and having an adjustable connection with said yokes.

2. In a block-molding machine, the combination of a table having ways at right angles to each other, blocks slidable in said ways, brackets secured to said blocks, vertical plates adjustably secured to said brackets, bearings secured to said blocks and yokes pivoted in said bearings and a vertically-slidable hub connected to said yokes for sliding the blocks and plates.

3. In a block-molding machine, the combination of a table having ways at right angles to each other, blocks slidable in said ways, brackets secured to said blocks, vertical plates adjustably secured to said brackets, lugs on the ends of two of said plates, hooks pivoted on the other two plates to engage with said lugs to lock the plates together, bearings secured to said blocks, and yokes pivoted in said bearings for sliding the blocks and plates.

4. In a block-molding machine, the combination of a table having ways, legs for said table, a frame extending between the legs, a vertical shaft secured at one end in the table

and at the other in the frame, a hub slidable on the shaft, a notched bracket secured to said hub, a lever pivoted to said hub and having a hook to engage in the notch in said bracket, a link to support said lever, blocks and plates slidable in the ways, and adjustable means connecting the hub and blocks whereby upon the downward movement of the hub by the lever said blocks and plates will be caused to approach each other.

5. In a block-molding machine, the combination of a table, an adjustable core, the sides of the mold slidable on said table, a vertically-movable hub, links connecting the sides of the mold and the hub, a lever supported from the table and pivoted to said hub and adapted to move said hub up and down and thereby move said sides of the mold in and out.

6. In a block-molding machine, the combination of a table, sides of a mold slidable on said table, means on said sides to lock them together, a vertical shaft secured to said table, a hub slidable on said shaft, links connecting said hub and the sides of the mold, a link pivoted to said table, a lever supported by said link and having a forked end pivoted to said hub, a notched bracket on said hub and a hooked latch on said lever to lock said lever and hub and thereby all the movable parts of the machine.

7. In a block-molding machine, the combination of a table having ways at right angles to each other, blocks slidable in said ways, brackets secured to said blocks, vertical plates adjustably secured to said brackets, bearings secured to said blocks, yokes pivoted in said bearings, legs for said table, a frame extending between the legs, a sleeve in said frame, a vertical shaft secured at one end in the table and at the other in said sleeve, a hub slidable on the shaft and having lugs, links pivoted to said lugs and adjustably connected to said yokes, a notched bracket secured to said hub, a link pivoted to the table, a lever supported by said link and having a forked end pivoted to said hub, and a U-shaped hooked latch to engage said notched bracket and thereby lock all the movable parts of the machine.

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

GEORGE BRADY.

In presence of—

CHAS. L. AIRD,  
H. F. ABBOTT.