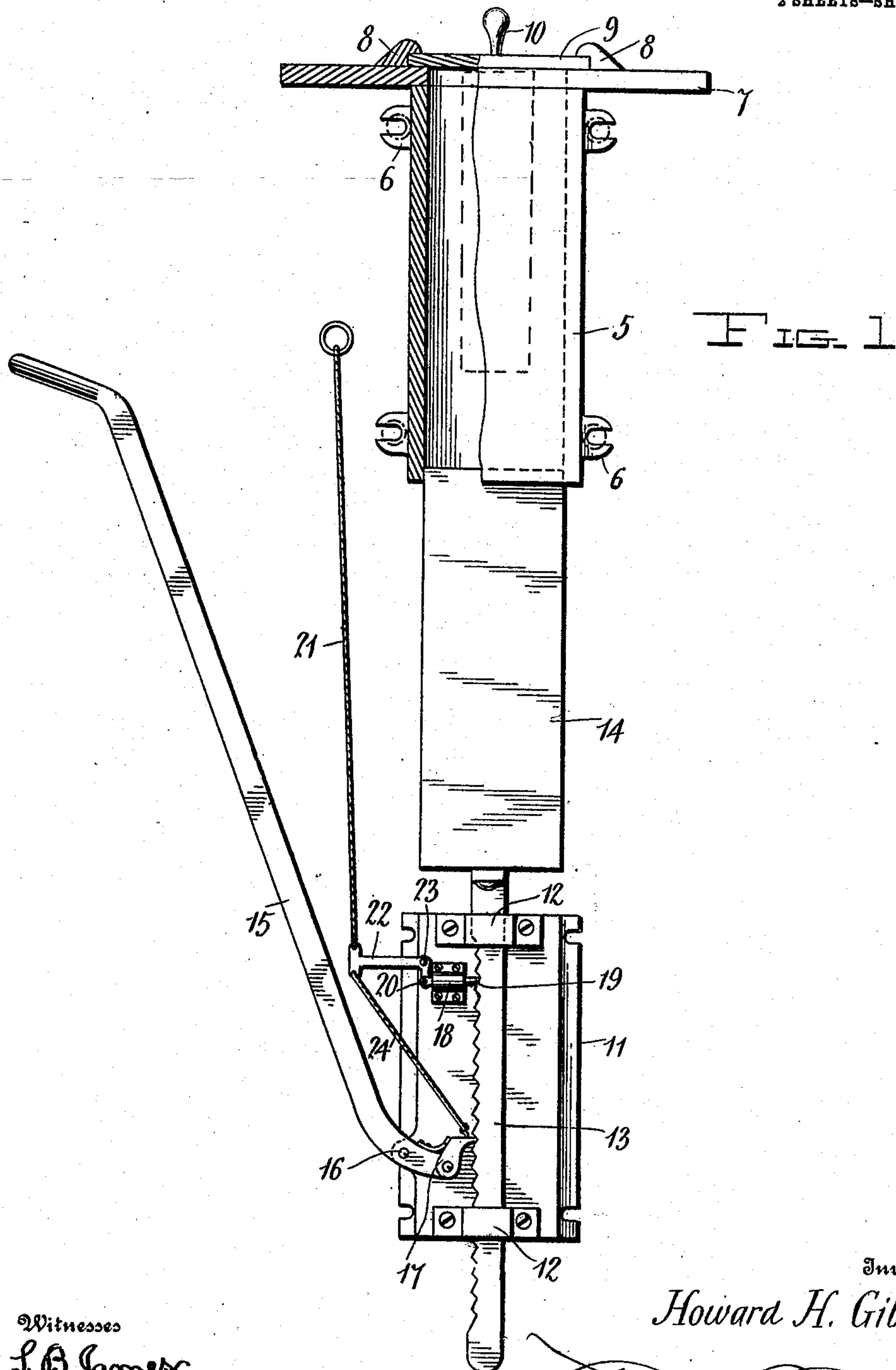


924,450.

H. H. GIBSON.  
TILE MACHINE.  
APPLICATION FILED FEB. 28, 1908.

Patented June 8, 1909.  
2 SHEETS—SHEET 1.



Witnesses  
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2 SHEETS—SHEET 2.

FIG. 2

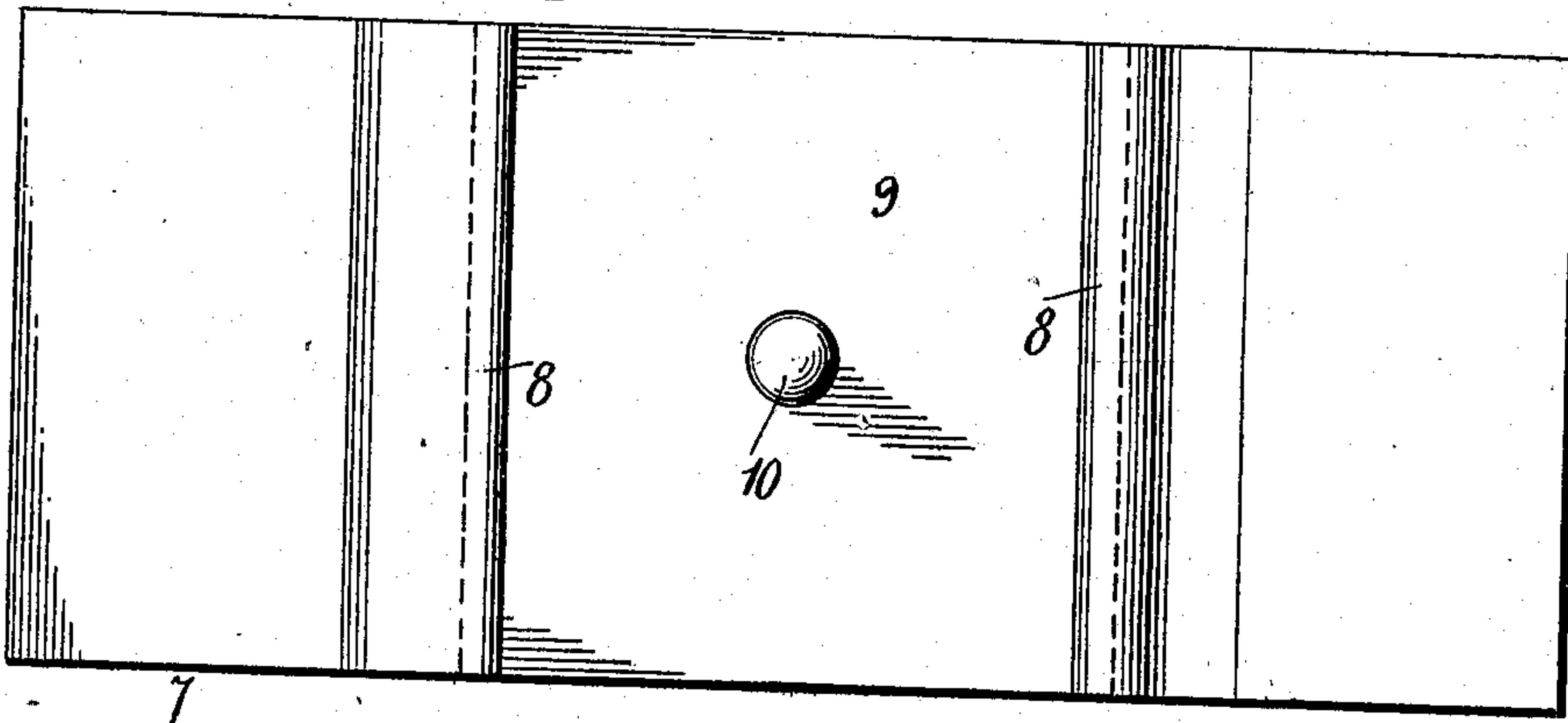


FIG. 3

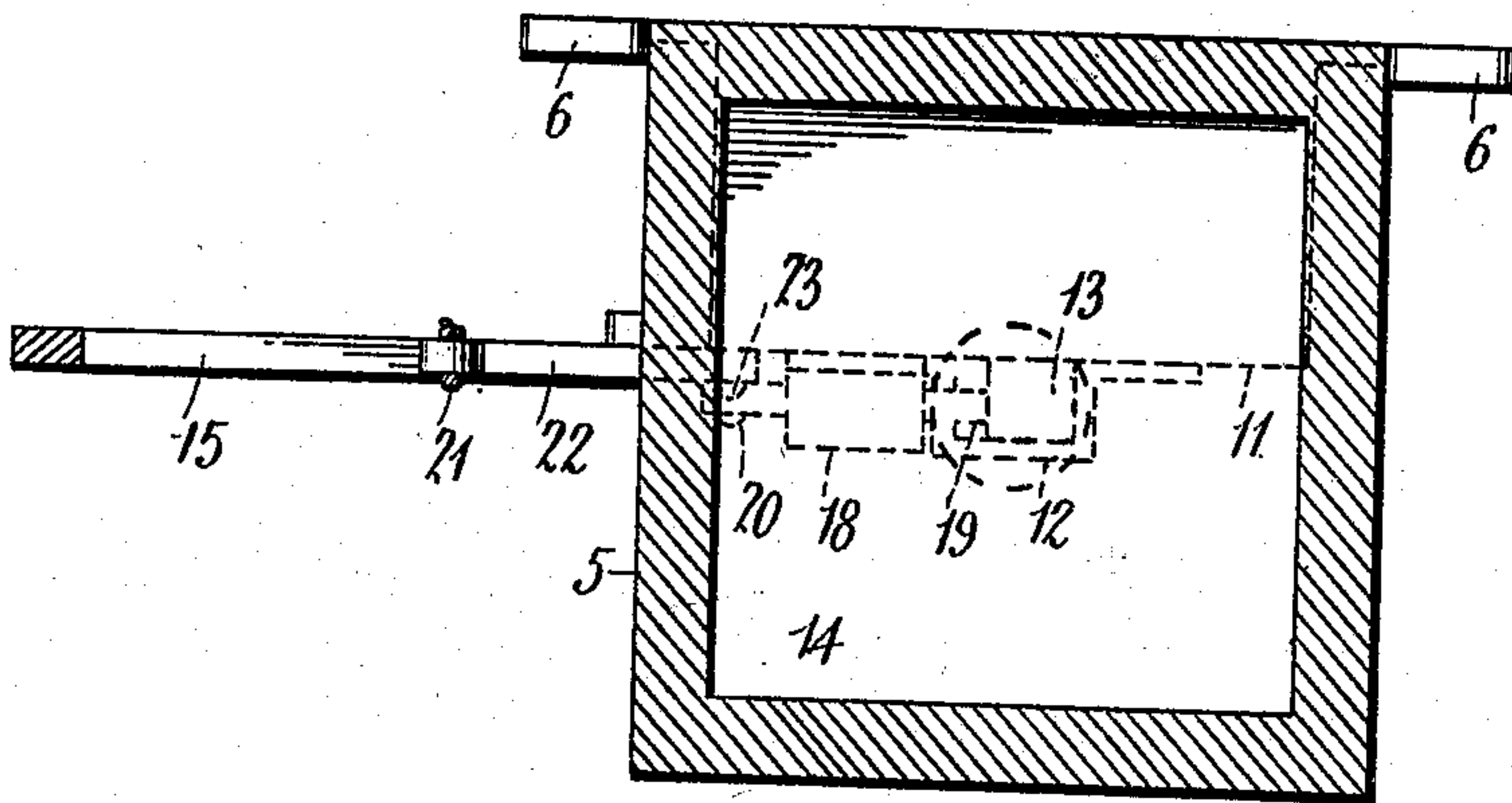
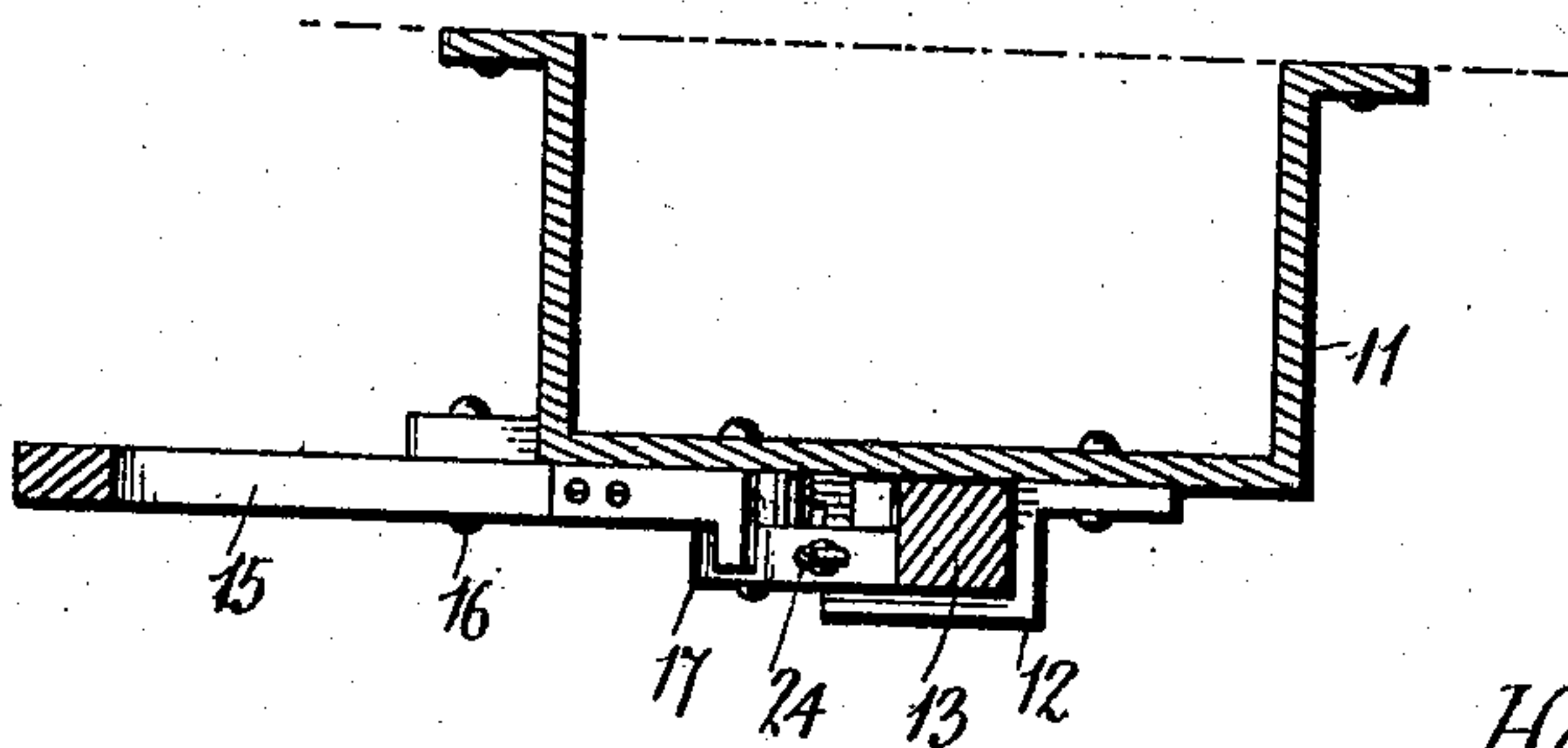


FIG. 4



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# UNITED STATES PATENT OFFICE.

HOWARD H. GIBSON, OF STERLING, MICHIGAN.

## TILE-MACHINE.

No. 924,450.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed February 28, 1908. Serial No. 418,267.

*To all whom it may concern:*

Be it known that I, HOWARD H. GIBSON, a citizen of the United States, residing at Sterling, in the county of Arenac, State of Michigan, have invented certain new and useful Improvements in Tile-Machines; 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.

This invention relates to new and useful improvements in machines for forming and pressing cement tile and it has more particular reference to a machine comprising a mold box and a plunger movable therein to press the blocks into form.

The invention aims as a primary object to provide a cement tile machine of the above general type, which shall have a novel construction, combination and arrangement of parts.

The details of construction will appear in the course of the following description, in which reference is had to the accompanying drawings, forming a part of this specification, like characters of reference designating similar parts, throughout the several views wherein:—

Figure 1 is a front elevation partly in section of a machine constructed in accordance with the present invention. Fig. 2 is a top plan view of the machine. Fig. 3 is a transverse sectional view of the mold box. Fig. 4 is a further transverse sectional view through the machine.

In the accompanying drawings, the numeral 5 designates a mold box which, as arbitrarily shown, is rectangular in cross section to form rectangular blocks or tiles. The box 5 is formed at one side thereof projecting from its upper and lower edges with attaching lugs 6 which are arranged in pairs and which are spaced to allow of fastening means to be engaged therebetween into a suitable support (not shown). The box 5 has its ends open and at one end thereof is provided with a flange 7 which is formed at opposite points with confronting spaced angular lugs 8 which serve as guides and keepers for a slidably displaceable end wall 9. The wall 9 is designed to normally close the outer end of the box 5, and is movable manually to either open or closed position, such movement being facilitated by the provision of a projecting finger piece or handle 10.

At some distance from the box 5, a plate 11 is secured to the support above referred to, which plate is constructed with alined guides 12 for a slidable rack bar 13. The bar 13 carries at one end thereof, a plunger 14 which is movable longitudinally of the box 5, and which is designed to compress the cement or other plastic material employed, the plunger 14 toward this end, being comparatively heavy. Upon the plate 11, there is pivoted an operating lever 15, the pivot 16 of the latter being located above its lower end. Upon the lower end of the lever 15, a pivoted spring controlled pawl 17 is provided which is designed, during the active movement of said lever, to engage one of the teeth of the rack bar 13 and to advance said rack bar, and upon the return movement of said lever to ride over said teeth. The plate 11 is provided with an extension 18 in which is mounted a slidable spring held pawl 19 which is designed to engage the teeth of the rack bar 13 and to hold said rack bar from rearward movement. The pawl 19 has its upper end formed with an eye 20 having pivotal connection with an L-shaped lever 22 pivoted at 23 to the plate 11 and with said lever 22 is connected one end of a pull cord 21, which is employed to retract the pawl 19, and also connected to the lever 22 and the pawl 17 is a cord 24 which simultaneously raises said pawl 17 out of engagement with the teeth of the rack bar 13, to allow of said rack bar being lowered in its guides.

In the use of the device, the cement is introduced into the box 5 through the front end thereof, the cover 19 having been previously removed. Said cover is then replaced and the plunger 14 is advanced to press and form the tile or block, which, after the operation of the machine, is removed from the front end of the box 5.

Within the mold box is shown in dotted lines diagrammatically a core of the ordinary type. The particular shape and manner of mounting the core however, form no part of the present invention for which reason an extended description thereof is omitted.

What is claimed is:

1. A machine for forming and pressing cement tile, comprising a stationary mold box having open ends, a displaceable imperforate cover for one of said ends, a plate, a lever pivoted thereon, a rack bar, a plunger



provided at one end of said rack bar and movable in said box longitudinally thereof, a spring controlled pawl carried by the lever and normally in engagement with the teeth of said rack bar, a second displaceable pawl mounted upon said plate for engagement with the teeth of said rack bar, and flexible means connected to both pawls, whereby the same will be simultaneously released.

10 2. A tile machine of the class described comprising a mold box, a plunger movable within and correspondingly shaped to said mold box, a tooth rack bar secured to the plunger, spaced alining guides for the rack

15 bar, a lever pivoted adjacent said rack bar, a pawl pivotally connected to one end of

said lever and engaging the teeth of the rack bar, a spring normally maintaining the pawl in engagement with said rack bar, a spring held pawl engaging the rack bar to hold the latter against back movement, a pivoted L-shaped lever connected to the last mentioned pawl, and means adapted to simultaneously raise the said pawls out of engagement with the rack bar.

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

HOWARD H. GIBSON.

Witnesses:

D. H. HALLETT,  
SUSIE HALLETT.