No. 798,306. PATENTED AUG. 29, 1905.

D. D. STRINGER.

MACHINE FOR MOLDING CEMENT BLOCKS.

APPLICATION FILED OCT. 29, 1904.

Fig. 1.

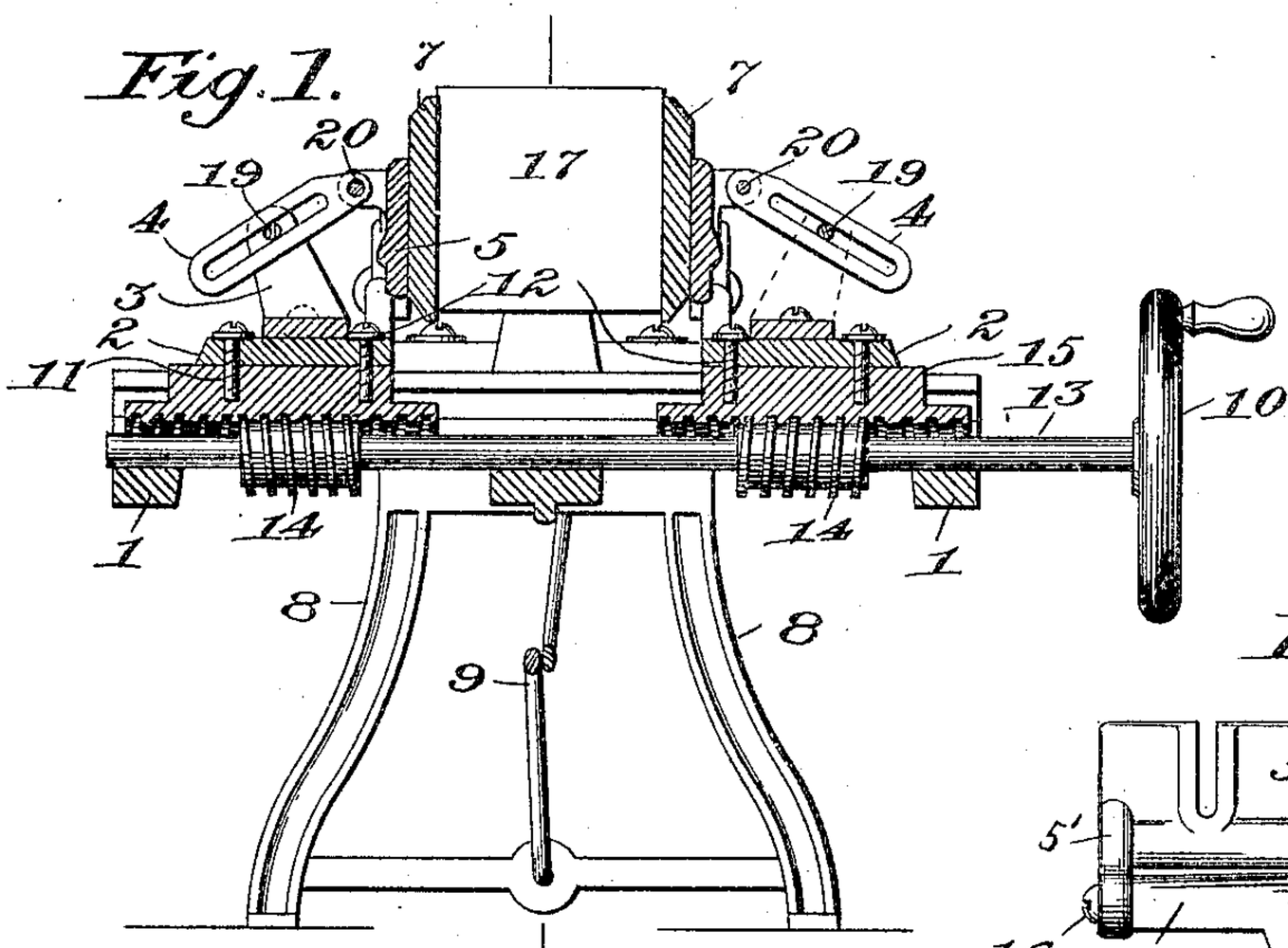


Fig. 2.

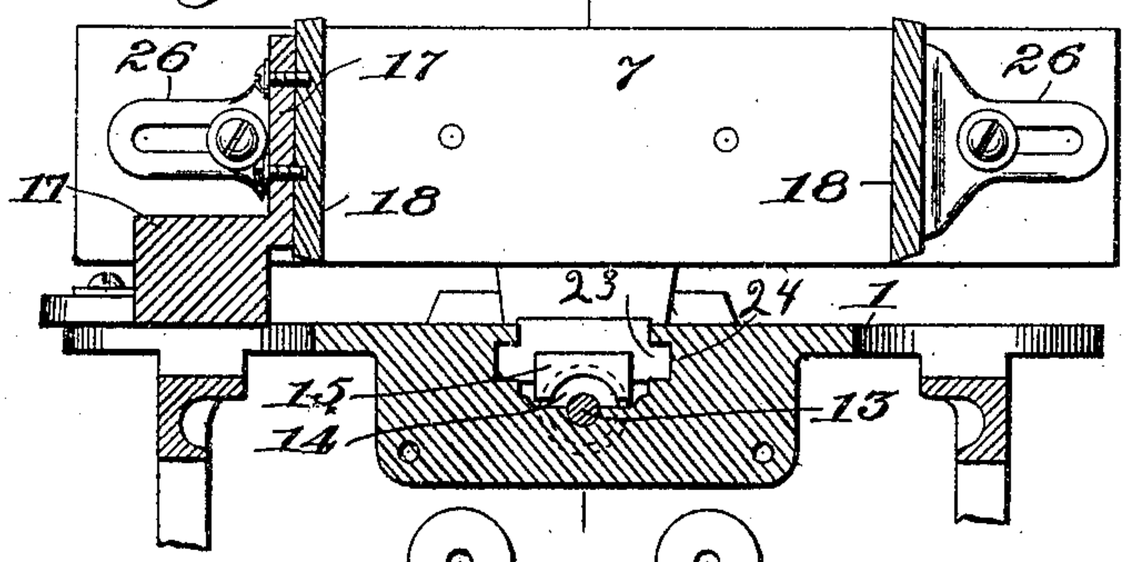


Fig. 3.

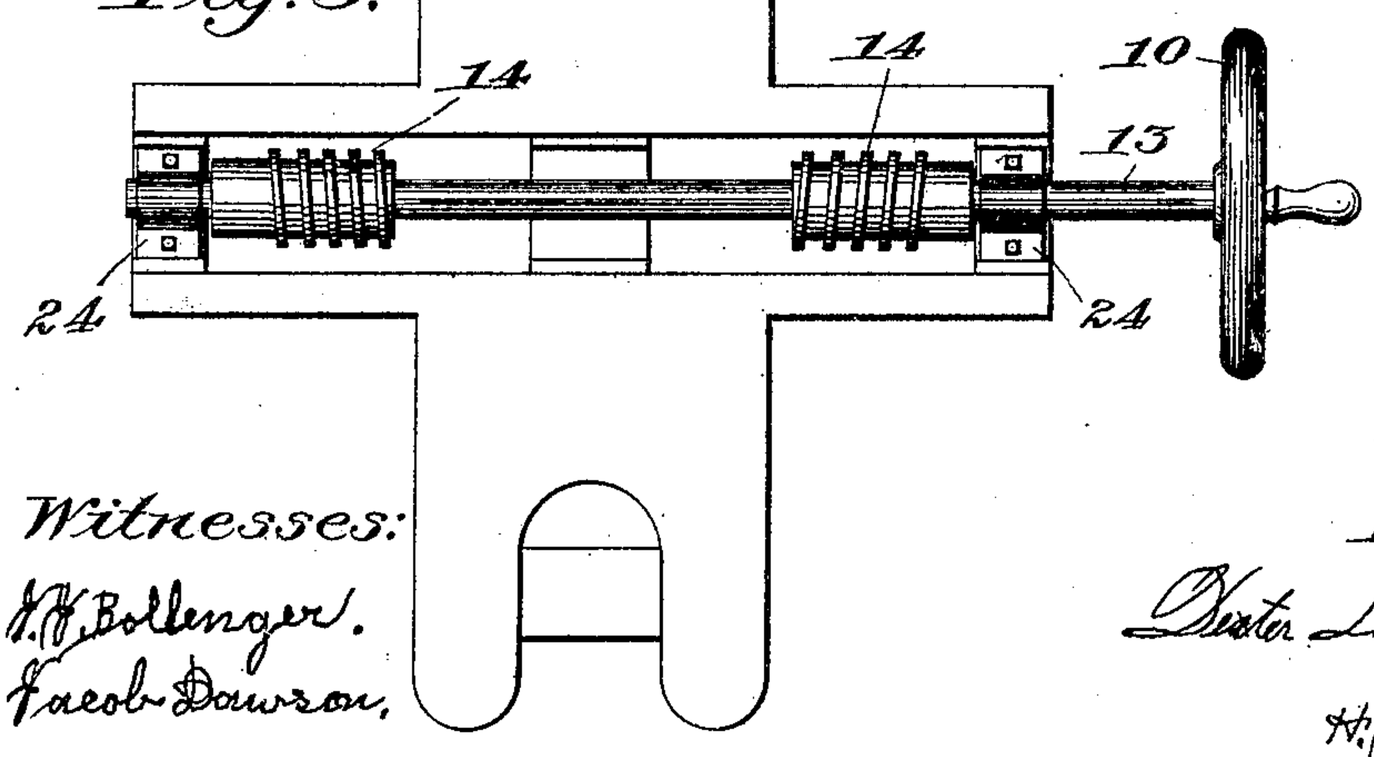


Fig. 4.

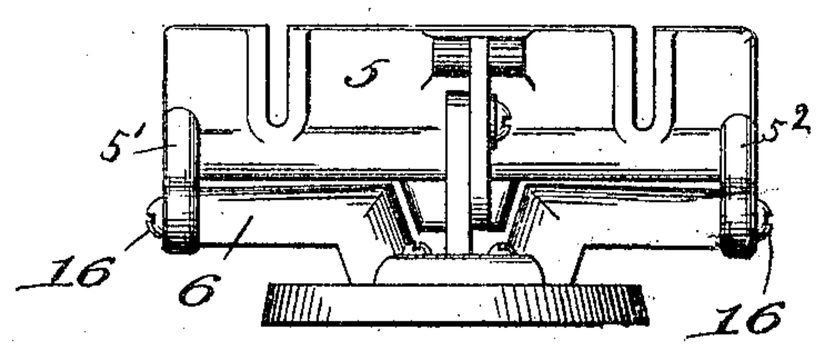
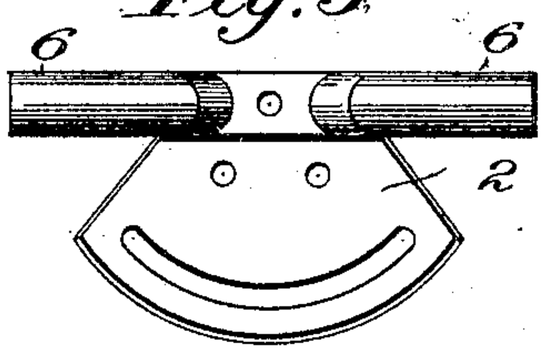


Fig. 5.



Witnesses:
H. F. Bollenger.
Jacob Dawson.

Inventor:
Dexter D. Stringer.
BY
H. J. Livergood
Atty

UNITED STATES PATENT OFFICE.

DEXTER D. STRINGER, OF JACKSON, MICHIGAN.

MACHINE FOR MOLDING CEMENT BLOCKS.

No. 798,306. Specification of Letters Patent. Patented Aug. 29, 1905.

Application filed October 29, 1904. Serial No. 230,476.

To all whom it may concern:

Be it known that I, DEXTER D. STRINGER, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Machines for Molding Cement 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 machines for molding cement blocks adapted for building and sewerage purposes; and my object is to provide a manually-operated machine that is simple, effective, and not likely to get out of order, to provide means for adjusting said machine to produce cement blocks of various dimensions and shapes, and to provide the same with certain new and useful features hereinafter more fully described, and particularly pointed out in the specification and claims.

My invention consists of the quadrant bed-plate and the parts attached thereto for operating the adjustable sides of the mold, as will more fully appear by reference to the accompanying drawings, in which—

Figure 1 is a transverse side and end section of the entire machine. Fig. 2 is a side elevation. Fig. 3 is a plan of the quadrant bed-plate as it appears after the removal of the quadrants, links, and movable sides, showing the location of the rotatory shaft having screw-pinions and balance-wheel on said shaft. Fig. 4 is a side elevation of the side plates, having the links secured to said sides and inclined post and edge view of quadrant and side view of quadrant-arms. Fig. 5 is a plain top view of quadrant and arm.

Like numerals refer to like parts in all the figures.

1 represents the quadrant bed-plate, supported on legs 8, made as shown in Figs. 1, 2, and 3.

Fig. 1 shows a side view showing the location of the shaft journaled in boxes 24, also having the screw-pinions 14, secured to the shaft 13, working in conjunction with the threaded caps 15.

In Fig. 3 the bed-plate shows at each end curved openings which are for the operator to get his hand in to get hold of the pallet-board on which the cement block is made for removal from machine. The inverted screw-threaded caps 15, located on top of the screw-pinions 14, secured to the shaft 13, prevent sand and dirt from getting into the threads. The shaft 13 when rotated by the hand-wheel 10 moves all the parts attached to the caps 15 backward and forward. The quadrant 2 is secured to the movable caps 15 by the bolts 11 and 12. This bolt acts as a pivot. The bolt 11 acts as a set-bolt to hold the quadrant in any set position which is placed in the circle opening in the quadrant. To this quadrant are secured by bolts the inclined posts 3. The quadrants 2 have an arm 6, made integral with them, extending each way from their centers, as shown in Fig. 5. The plates 5 are secured to the arms 6 by the bolts 16, passing through the lugs 5′ and 5² into the ends of the arms 6. The inside plates 7 are secured by bolts to the outside plates 5, passing through the long slotted holes shown in Fig. 4. They may be set out of plumb to any angle desired. By the use of the curved openings in the quadrant 2, the bolts 11 and 12 loosened, the quadrants may be turned, placing the sides 5 and 7 out of parallel line lengthwise of the quadrant bed-plate. By this manner of operating the sides 5 and 7 cement key-blocks, window-sills, water-tables, or any block the sides of which are not parallel may readily be made. The bolts 11 and 12 being tightened in the quadrants 2, the machine is ready for operation. The links 4 are secured at the upper ends to the outer side plates 5 by the bolts 20 and to the incline-posts 3 by the bolts 19, the links 4 having long slots in them. By loosening the bolts 19 the sides 5 and 7 may be set out of plumb, as the sides are hinged on the bolts 16 in the quadrant-arm 6. The quadrant bed-plate 1 has parallel ways 24 made in it. The threaded caps 15 have tenons 23 on them which traverse backward and forward in the ways, carrying the quadrants 2, inclined posts 3, links 4, sides 5 and 7. The tail-block 17 is secured direct to the quadrate bed-plate 1, as shown in Fig. 2, having an offset for the reception of the pallet-board on which is made the cement block. 18 is a crosswise end block. One end is bolted to the tail-block 17. The other end 18 is loose, so that it is easily removed for the removal of the block made. The crosswise end blocks 18 determine the width of the block. At both ends a stop 26 is shown in Fig. 2 secured to the inside of the sides 7 for support-

ing the ends 18. By turning the hand-wheel 10 backward it releases the sides 7 from the cement block. It may then be removed from the machine. The same operation may be continued.

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

1. In a cement-block machine of a quadrate cross bed-plate, a transverse shaft, journaled in boxes as shown in the right and left hand outward projecting ends, said quadrate cross bed-plate having on each end hand-holes as shown in Fig. 3 for the purpose specified.

2. In a cement-block machine, of the threaded caps movable backward and forward in ways in the quadrate bed-plate, the quadrants secured to the movable threaded caps, the inclined posts made integral with the base secured to the quadrants, the links secured at the upper ends to the plates 5 and to the inclined posts 3, supporting the sides and forming hinge-joints as shown and for the purpose specified.

3. In a cement-block machine, of the quadrant-bars, 6 carrying the side plates 5 and 7, said plates secured together, oscillating on the bolts, 16, passing through the brackets or lugs 5′, and 5^2 shown in Fig. 4, the bolts 16, secured in the ends of the quadrant-arms 6 as shown and for the purpose described.

4. In a cement-block machine having a transverse shaft, means secured on said shaft for moving the threaded caps, the quadrants mounted on and secured to said caps and inclined posts the links secured to said posts and to the side plates 5 when said transverse shaft is rotated it moves the whole moving parts as is required for the purpose specified.

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

DEXTER D. STRINGER.

Witnesses:

J. J. BOLLENGER,

JACOB DAWSON.