No. 772,319. PATENTED OCT. 11, 1904.

J. W. WILSON.

PLASTIC BLOCK MACHINE.

APPLICATION FILED APR. 15, 1904.

NO MODEL.

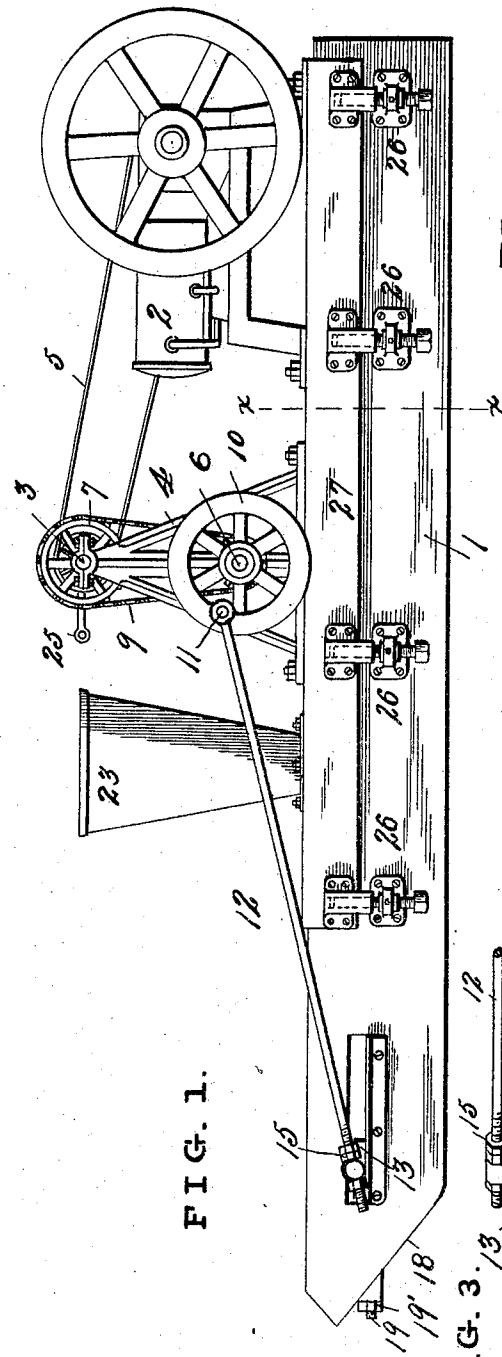


FIG. 1.

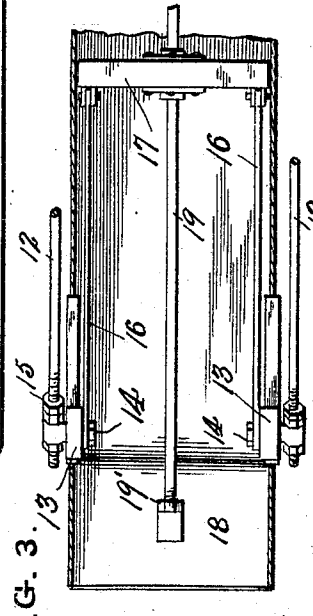


FIG. 3.

FIG. 2.

FIG. 4.

Witnesses
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No. 772,319. Patented October 11, 1904.

UNITED STATES PATENT OFFICE.

JOHN W. WILSON, OF MARSHALL, OKLAHOMA TERRITORY.

PLASTIC-BLOCK MACHINE.

SPECIFICATION forming part of Letters Patent No. 772,319, dated October 11, 1904.

Application filed April 15, 1904. Serial No. 203,317. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. WILSON, a citizen of the United States, and a resident of Marshall, in the county of Logan, Territory of Oklahoma, have invented certain new and useful Improvements in Plastic-Block Machines; and I do hereby declare the following to be a full and clear description thereof.

My invention relates to plastic block and tube making machines.

The machine is specially adapted for making hollow or solid continuous blocks of plastic material of any desired length and for any commercial purpose.

With these objects in view my invention consists of the following construction and combination of parts, the details of which will be first fully described and the features of novelty then set forth and claimed.

Figure 1 represents a side elevation of a machine to which my improvements have been applied. Fig. 2 is a vertical sectional longitudinal view of the same. Fig. 3 is a plan view of the rear of the machine. Fig. 4 is a transverse section through the line *x x* of Fig. 1.

The machine consists, essentially, of a longitudinal frame 1 of the shape in cross-section which it is desired to form the block. In the present instance the cross-section is rectangular and hollow.

The machine is self-contained. The motor 2, as a gasolene-engine, is mounted on the front of the frame 1 and gives rotary motion to a rotary shaft 3, carried upon standards 4, also mounted upon the frame 1 through any intervening means, as belt 5. Shaft 3 imparts motion to a counter-shaft 6 by means of gears or wheels 7 and 8 and belt or chain 9. Upon either end of the shaft 6 are cranks or wheels 10, having wrist-pins 11. Connecting or pitmen rods 12 upon each side of the shaft 6 are secured to wrist-pins 11 at one end and at the other to reciprocating heads 13, the rods 12 being threaded and passing through threaded oscillating wrist-pins 14. Adjusting-nuts 15 serve to adjust the length of the connecting-rods between the wrist-pins 11 and 14, and thereby regulate the stroke of the reciprocating heads 13. To each of the heads 13 is secured a piston-rod 16, connecting the piston 17 with the motor.

The right-hand end of the machine is the front, the inclined end 18 the rear.

Intermediate of the double piston-rods 16 is the central core-rod threaded at the rear end 18 and provided with adjusting-nuts 28 for securing longitudinal adjustment thereof. Core-rod 19 passes freely through piston 17 and at its front end is provided with means for securing a core 20 thereto. Rod 19 slides into a conical frontispiece 21, connected to the core 20, a rod 22 connecting core, core-rod, and conical frontispiece together and supporting the same within the interior of the frame or core-box 1 by being secured to a wall of the core-box.

In operation the plastic material is deposited in the hopper 23, where it falls in the box 1 through the throat 24 of the hopper and in front of the piston 17. Upon the reciprocation of the piston the plastic is moved to the front of the box 1, filling the same around the core 20. As the plastic sets a point is reached where the piston will not push farther forward or compress the plastic, after which the movement of the piston acting upon the set-block already formed causes the whole machine to slide rearwardly. In this manner a continuous block of any length may be formed of the cross-section of the particular shape of the box.

The frame or box may be round, square—in short, of any desired shape. Any size or form of core may be employed, or the core may be taken out and the block made solid. In forming curved hollow blocks the core 20 is made of rubber.

If desired, the motor may be removed and the machine operated by hand. For this purpose the hand-crank 25 is furnished.

The size of the block may be varied by providing a telescopic cover 27, adjusting-screws 26 being used for raising and lowering the same.

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

In a molding-machine, the combination of a box having ways thereon, a piston within the

box, a piston-rod, a reciprocating head sliding on said ways and connected to the piston-rod, a rotary shaft upon the box provided with a crank or wheel, a pitman-rod connecting the reciprocating head and the rotary shaft, and adjusting-nuts upon the pitman-rod for varying the stroke of the piston.

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

J. W. WILSON.

Witnesses:
C. R. HIGDON,
ALFRED HARRIS.