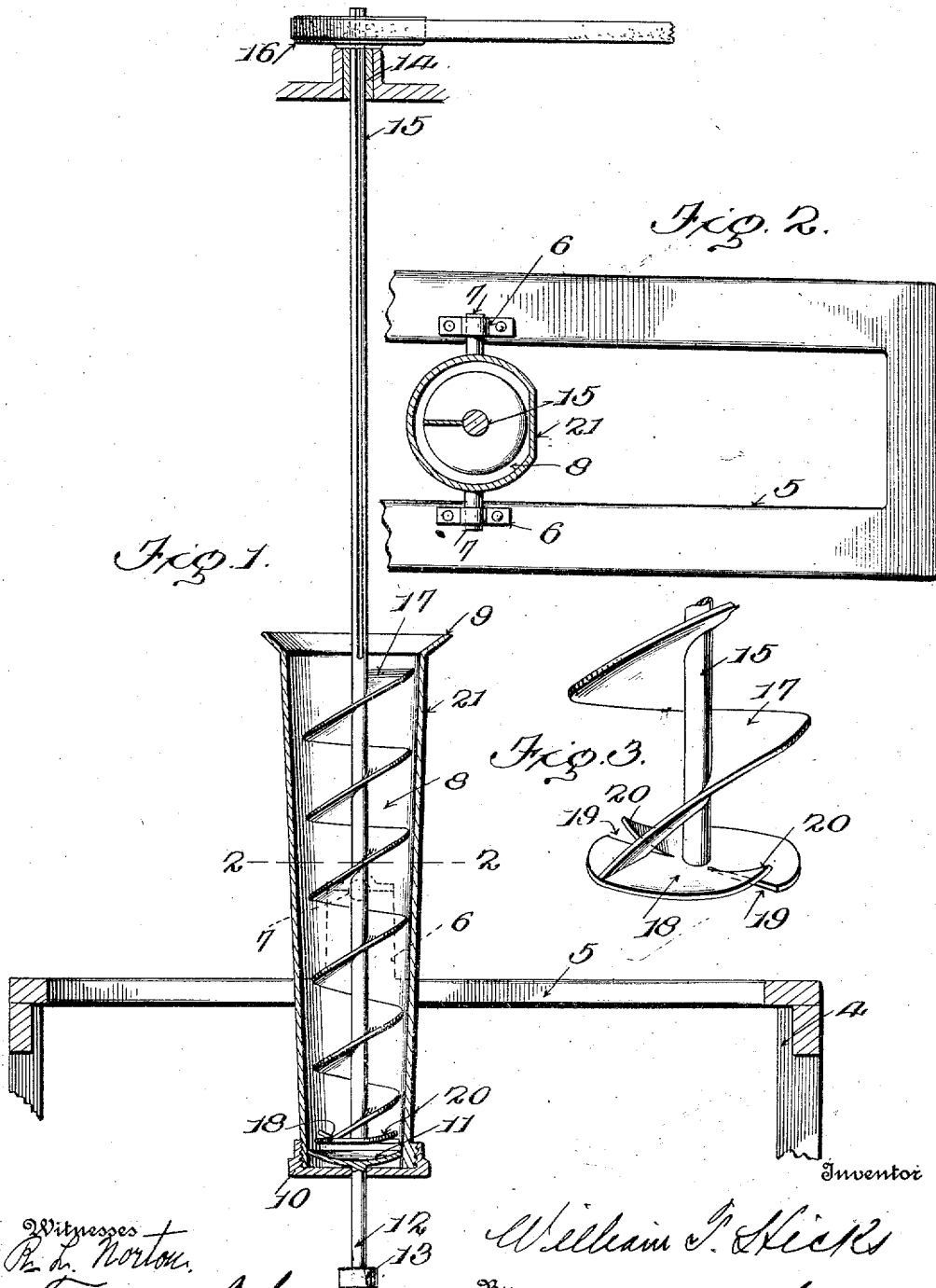


W. T. HICKS.
MOLD FOR POSTS.
APPLICATION FILED SEPT. 4, 1909.

962,760.

Patented June 28, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM T. HICKS, OF BLOOMINGTON, INDIANA.

MOLD FOR POSTS.

962,760.

Specification of Letters Patent. Patented June 28, 1910.

Application filed September 4, 1909. Serial No. 516,236.

To all whom it may concern:

Be it known that I, WILLIAM T. HICKS, a citizen of the United States, residing at Bloomington, in the county of Monroe and State of Indiana, have invented certain new and useful Improvements in Molds for Posts, of which the following is a specification.

My invention relates to an improvement in molds or formers for molding or forming a post or column from concrete, Portland cement, shale, or clay of the form shown in an application filed by me of even date herewith, Serial Number 516,235 and it has for its object the production of a machine of this character in which such posts or columns may be expeditiously and economically constructed, and the material from which the post is built up is molded or formed by mechanical means requiring the minimum of manual handling.

With these ends in view my invention consists in certain constructions and arrangements of parts hereinafter fully described and pointed out in the appended claims.

In the accompanying drawing illustrating my invention and in which like numerals designate the same parts wherever they occur, Figure 1 is a central longitudinal section, Fig. 2 is a section taken on line 2, 2 of Fig. 1 and Fig. 3 is a fragmentary perspective view of the lower end of the rotating packer.

4 designates a supporting table which, as shown, is provided with an opening 5, and 6 is a pair of journal boxes mounted on opposite sides of the opening in the table, and 7 are a pair of trunnions extending outwardly from opposite sides of the tube 8 which forms the mold. These trunnions 7 are mounted in the journal boxes 6, so that the mold tube can be swung in a vertical or horizontal position.

The tube 8 is slightly tapered from its upper to its lower end, and at its upper end the tube is flared, as shown at 9, to facilitate the filling of the mold. The lower end is closed by a cap 10 which, preferably and as shown, is screw threaded on the end of the tube. At the lower end of the tube I provide a concave disk 11 which operates to give the proper shape to the upper end of the completed post, said disk having a shaft 12 projecting from the rear face thereof, which shaft extends through a central opening in the head 10, and on its other

end, which is exterior of the tube, is provided with a head 13. By forcing the head 13 inward the post, after the same has been molded, can be loosened from the tube, so that it may be readily removed.

14 is a vertical bearing which is in line with the axis of the mold tube when the tube is vertical, as shown in Fig. 1. In this bearing is journaled a shaft 15, said shaft having a drive pulley 16 splined to the shaft, whereby the shaft can move vertically through the bearing and the drive pulley. The shaft at its lower portion is provided with a helical web or screw 17, said screw being tapered to correspond to the taper of the mold tube and is of a size to fit loose in the tube. At the termination of the spiral I secure a disk 18 having openings 19 formed therein by making slits in the periphery of the disk and turning up the portion of metal to the depth of the cut, the turned up portion 20 being preferably turned up at an angle, and the slits being so made in the disk that the turned up portions 20 will operate to force the material through the slits in the plate and then ride over the material to pack the same down.

Preferably and as shown the tube 8 is not circular but is provided with a flattened side 21 which extends from the smaller end of the mold any desired distance in order that the post molded by the machine will have a flat face for the purposes fully set forth in my companion application above referred to.

From the foregoing description of the construction of my apparatus it will be seen that when the tube is placed in vertical position with its larger end upward the shaft 15 can be slid down into the tube until the disk 18 reaches the ejector disk 11. The material from which the post is to be made is now fed into the mold and the shaft 15 rotated in a direction to cause the screw to force the material downwardly and outwardly. The material will be gradually forced through the slots 19 in the disk 18 by the turned up wings 20. As the operation is continued the screw will be gradually forced out of the tube until finally the tube has been completely filled with the material from which the post is made.

By using the construction described all parts of the post will be evenly and expeditiously packed, so that when the tube has

been completely filled the shaft 15 is moved up to be out of the way, and the tube can now be turned on its trunnions either upside down or into a horizontal position, and by means of the ejector 11 the molded post can be forced from the tube.

What I claim as new and desire to secure by Letters Patent is—

1. In a machine for molding fence posts and the like, the combination with the mold tube, of a shaft having a helical web on one end thereof, said shaft being movable longitudinally in the said tube, a disk mounted on the end of the shaft at the end of the helical web, said disk being provided with openings, wings extending up from the disk, one of said wings being located at one edge of each opening, and extending at an angle to the disk, and means for rotating the shaft.

2. In a machine for molding fence posts and the like, the combination with a table having an opening therein, journal boxes located on opposite sides of the opening, a mold tube provided with trunnions, said trunnions being mounted in the journal boxes, a shaft, a helical web on the shaft, said shaft being movable into said tube, a disk mounted on the end of the shaft at the end of the helical web, said disk being provided with openings, wings extending up from the disk, one of said wings being located at one edge of each opening, and extending at an angle to the disk, and means for rotating the shaft.

3. In a machine for molding fence posts and the like, the combination with the mold tube, of a shaft having a helical web on one end thereof, said shaft being movable longitudinally in the said tube, a disk mounted on the end of the shaft at the end of the helical web, said disk being provided with openings, wings extending up from the disk, one of said wings being located at one edge of each opening, and extending at an angle to the disk, means for rotating the shaft, a concaved ejector disk mounted in the end of the tube and having a stem projecting outside of the tube.

4. In a machine for molding fence posts and the like, the combination with the mold tube, of a shaft having a helical web on one end thereof, said shaft being movable longitudinally in the said tube, a disk mounted on the end of the shaft at the end of the helical web, said disk being provided with openings, wings extending up from the disk, one of said wings being located at one edge of each opening, and extending at an angle to the disk, and means for rotating the shaft, a portion of one side of said tube being flattened.

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

WILLIAM T. HICKS.

Witnesses.

GEO. S. LIVINGSTON,
R. L. NORTON.