

J. H. CHIDESTER.
TILE MOLD.

APPLICATION FILED NOV. 15, 1904.

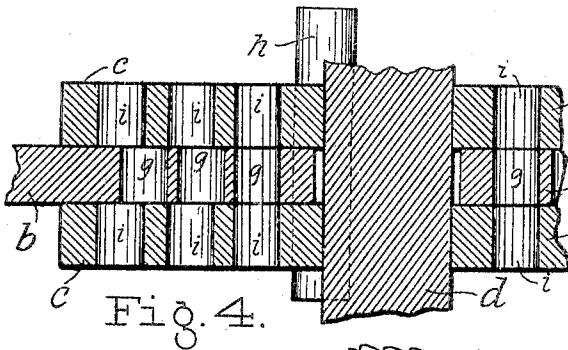


Fig. 4.

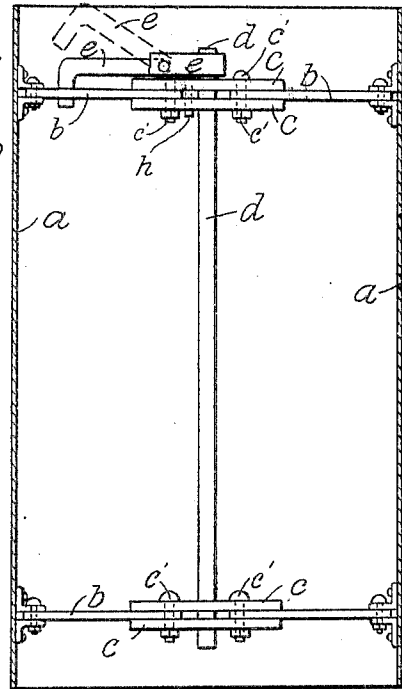


Fig. 3.

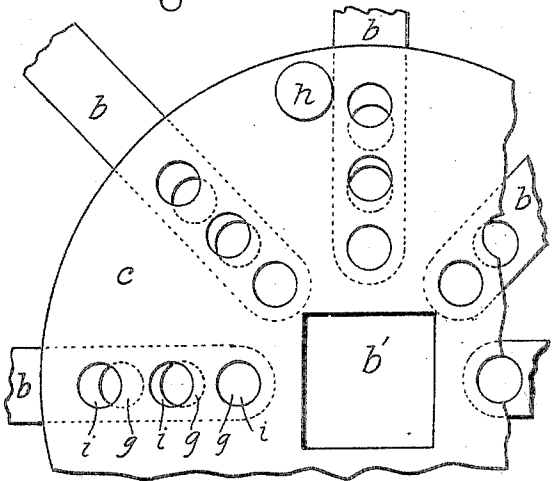


Fig. 5.

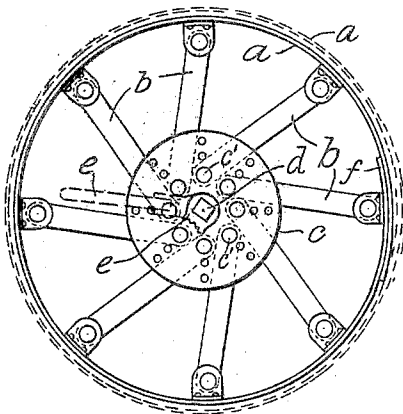


Fig. 2.

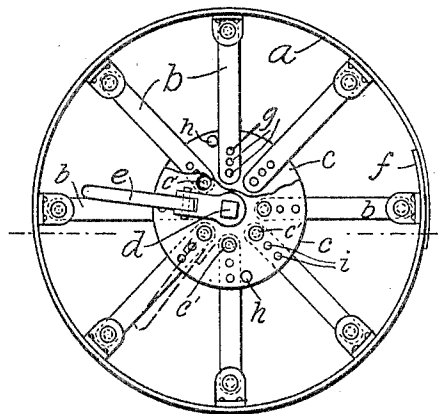


Fig. 1.

WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES H. CHIDESTER, OF SIBLEY, IOWA, ASSIGNOR OF ONE-THIRD TO
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TILE-MOLD.

No. 797,173.

Specification of Letters Patent.

Patented Aug. 15, 1905.

Application filed November 15, 1904. Serial No. 232,841.

To all whom it may concern:

Be it known that I, JAMES H. CHIDESTER, a citizen of the United States, residing at Sibley, in the county of Osceola and State of Iowa, have invented a new and useful Improvement in Tile-Molds; and I do declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to molds for cement or concrete work, and is especially adapted for the manufacture of tile.

The object of my invention is to provide a collapsible core around which the tile may be molded while the core is extended and rigid and which is easily removed after the material has hardened.

The invention consists of a continuous overlapping rim to the inside of which spokes or ribs are pivoted, the spokes radiating from a central plate to which the inner ends are pivotally secured.

The principal feature of the invention is the adjustment of the spokes to the central plates, the spokes being of an even number, each one being directly opposite another spoke on the other side of the plate, which braces each spoke against another when the rim is extended, holding the rim rigidly in position. The rim is thus collapsed by simply throwing the spokes off the line of the center.

I have fully illustrated my invention in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan view of mold, showing the spokes rigid with a portion of the upper plate broken away. Fig. 2 is a plan view showing mold collapsed, the dotted lines on the circumference indicating the position of the rim extended. Fig. 3 is a vertical cross-sectional view through the broken line on Fig. 1. Fig. 4 is a vertical sectional view through plates and ends of spokes. Fig. 5 is a plan view of one of central plates.

Similar parts are represented by similar letters of reference throughout the several views.

The outside or collapsible rim *a*, the edges overlapping, as seen in Figs. 1 and 2, is made continuous of steel, iron, or other suitable material. Near each end of the mold a set of spokes *b b b* is pivoted to the inner surface of

the rim, and for convenience I have shown eight spokes in each set. At the inner ends the spokes are pivotally secured to the circular plates *c c* by means of round bolts *c' c'*, which pass through round holes in the plates and through round holes *g g* in the ends of the spokes. The plates are double, the inner ends of the spokes passing between the upper and lower plates, and the spokes are adapted to turn freely on the bolts. Each of the plates has a square central opening *b'*, and through the openings in the plates a central shaft *d* is inserted, connecting the double plates at each end of the mold and extending somewhat beyond the plate at one end for the adjustment of the jointed lever *e*. This lever is secured to the outer end of the shaft for turning the shaft when the mold is made rigid or is collapsed. It is jointed near the middle, and the outer end is turned inward at right angles to the main part of the lever, which when the rim is rigid is nearly parallel with one of the spokes. After the shaft is turned the end of the lever can be pushed in against the side of the spoke, as seen in Fig. 3, which also tends to hold the mold firmly in its position.

In order to prevent the spokes from passing the line of the center or moving too far when the mold is made rigid, two bolts *h h* are provided on opposite sides of the rims of one set of plates, passing through the plates at the sides of the adjacent spokes, so that the spokes will strike the bolts when each of the spokes is directly opposite another spoke and the mold is extended to its fullest capacity.

There are three round holes *i i i* in the plates to correspond with the holes *g g g* in the ends of the spokes. By adjusting the bolts *c' c'* in the holes in the spokes and in the plates the mold can be enlarged or reduced in size, as may be required. The mold may be of any desired size, and while the number of spokes may be varied to correspond to the size of the mold care should be taken that an even number of spokes is used and that they are adjusted so that each spoke has a corresponding one in the same diameter.

It will be observed that the hardening of the material about the rim will have no effect upon the collapse or withdrawal of the mold, but that it may be withdrawn as easily as before.

I am aware that it is not new to provide a

collapsible rim with spokes secured to a central plate; but I know of no mold constructed so that each spoke is braced against another spoke holding the extended rim in a rigid position without the use of other devices or one which may be collapsed by simply turning a central shaft.

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

The combination of a continuous overlapping rim, double circular plates at each end of said rim having square central openings, spokes of an even number pivotally secured at the inner ends between said plates and at the outer ends pivotally secured to the rim, each spoke being normally directly in line with another spoke on the opposite side of the plate to which it is attached, each of the spokes and plates having convenient holes for the adjustment of bolts pivotally

securing them together, a square shaft connecting said plates through said central openings, a jointed lever secured at one end to said shaft for turning the same and throwing the spokes out of alinement whereby the mold is collapsed, the outer end of said lever being turned inward at right angles to the main part for adjustment against one of the spokes when the rim is rigid, and bolts passing through the rims of the plates at the sides of the spokes and adapted to prevent the spokes from turning beyond the line of the center when the mold is extended, substantially as described.

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

JAMES H. CHIDESTER.

Witnesses:

O. J. CLARK,

T. W. WERKHEISER.