H. W. REMINGTON.

CORE FOR MOLDING HOLLOW CONCRETE COLUMNS.

APPLICATION FILED FEB. 17, 1919.

1,346,844.

Patented July 20, 1920.

2 SHEETS—SHEET 1.

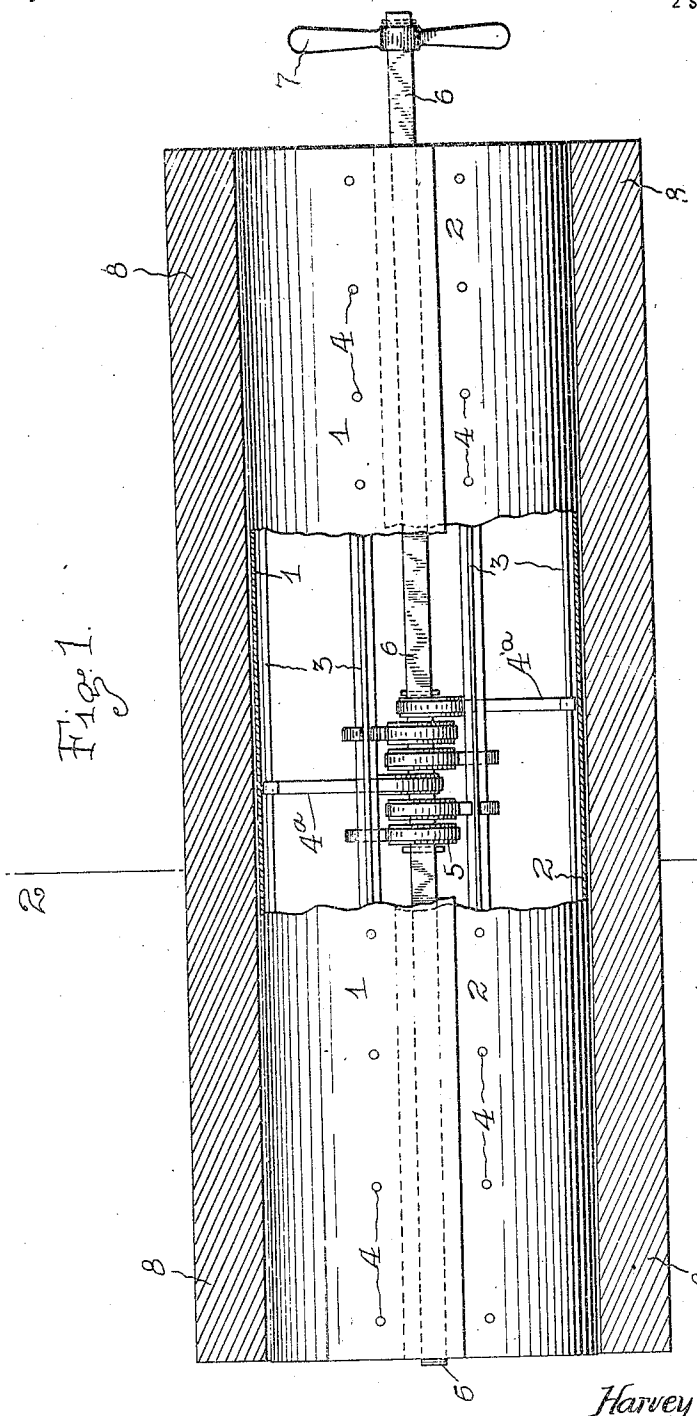


Fig. 1.

Inventor

Harvey W. Remington

By his Attorney

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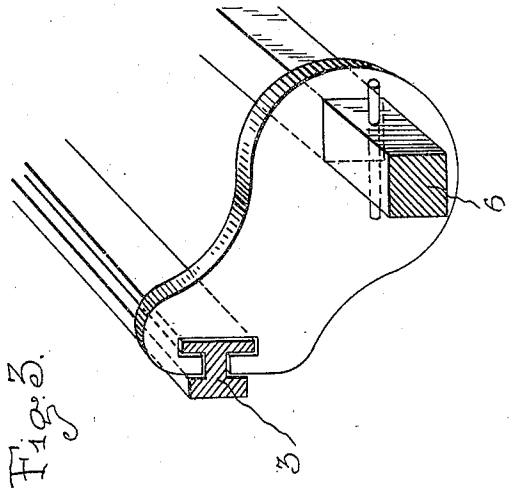


Fig. 3.

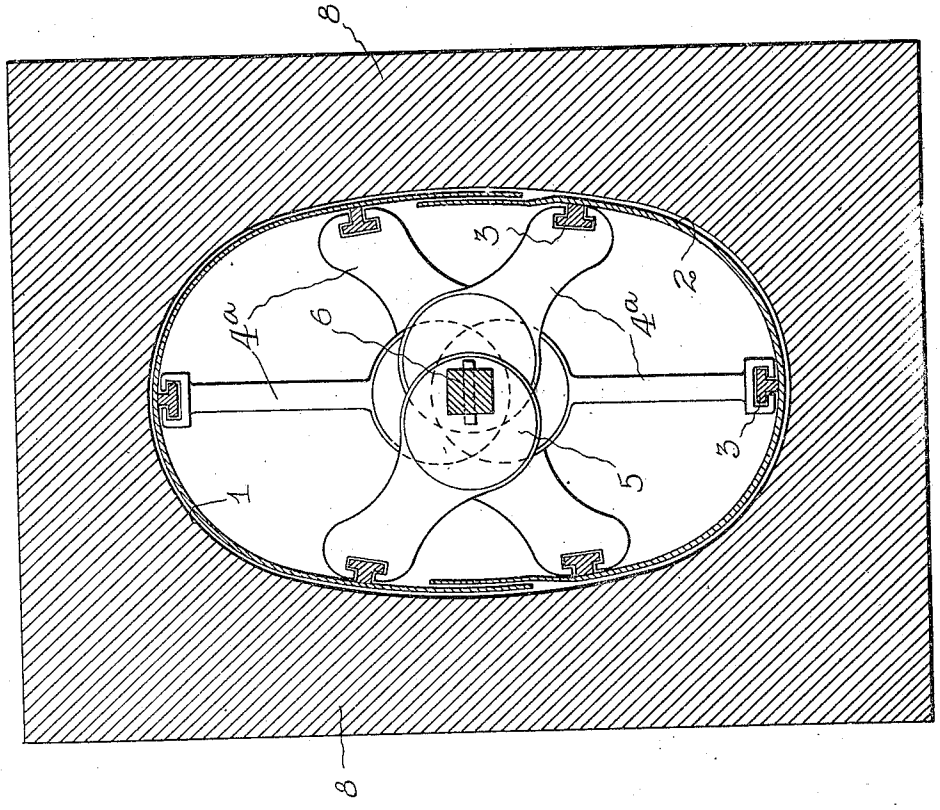


Fig. 2.

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UNITED STATES PATENT OFFICE.

HARVEY W. REMINGTON, OF NEW YORK, N. Y.

CORE FOR MOLDING HOLLOW CONCRETE COLUMNS.

1,346,844. Specification of Letters Patent. Patented July 20, 1920.

Application filed February 17, 1919. Serial No. 277,516.

To all whom it may concern:

Be it known that I, HARVEY W. REMINGTON, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Cores for Molding Hollow Concrete Columns, of which the following is a specification.

This invention relates to concrete columns, and my improvements are directed to means in the production of such columns whereby they may be molded in hollow form in a convenient and expeditious manner. Primarily my invention comprises the use of a collapsible core composed of sections, as of sheet metal, which are provided with means for distending them in tubular form, so that, the concrete column may be molded thereabout; means also being provided interiorly of the core whereby the members thereof may be collapsed for the purpose of removal when the concrete column has been formed and set.

Other features and advantages of my said invention will hereinafter appear.

In the drawings:

Figure 1 is a side sectional view of my improvement showing the collapsible core, broken away to expose its operating mechanism, and a concrete column which has been molded about said core.

Fig. 2 is a section through line 2—2 of Fig. 1,

Fig. 3 is an enlarged perspective view of a part of the operating mechanism.

As will be observed from the drawings, my improved collapsible core consists of semi-cylindrical segments of sheet metal which should be of flexible character, said segments being adapted to be arranged in lapped relation to form a hollow cylinder which is capable of expansion and contraction through the movement of said segments relatively to each other. As here shown, in the example of this application, two segments 1 and 2 are illustrated, and the cylindrical form thereof is oblong in cross-section, in order to serve in the formation of a hollow concrete column of like cross-sectional configuration. Obviously other cross-sectional contours may be used if desired.

The members 1 and 2 are each provided at their interior surfaces with lengthwise rails or stiffening members 3. These members are disposed in the present example respectively in opposite positions, and are secured to the members 1 and 2 as by bolts 4. Rigidly carried by the rails 3 are the inwardly extending arms 4^a, each having inner ends that center within the core, said inner ends being provided with revoluble hubs 5 that are eccentrically fitted over a square shaft 6 that extends lengthwise through the entire core and is provided with an operating handle 7. The purpose of the shaft 6, thus carrying the eccentrically arranged hubs within the arms 4^a, is that, through the act of turning said shaft in one direction the arms 4^a will thereby be all simultaneously drawn inwardly to release the members 1 and 2 from engaging contact with the inner wall of the hollow concrete column section that has been molded about said core, whose segments may again be distended to permit the core to assume the desirable extended condition that it may serve as a core for a succeeding length of concrete column formation.

In the drawings, the hollow concrete column is indicated by the numeral 8, representing a molded hollow concrete column section. According to the length of a concrete column section which is to be produced at one time, so will a desirable number of arms 4^a be arranged along the shaft 6 in association with the core segments.

It will be noted that the arms 4^a exert thrust in straight lines through opposite pairs when their eccentric hubs have been turned to effect the expanding movement of the segments 1 and 2, by which means the expanded core is held locked against contraction until a reverse movement is given shaft 6.

Variations may be resorted to within the spirit and scope of my said invention and parts thereof used without others.

I claim:

A core for molding hollow, concrete col-

umns, comprising longitudinal, curved segments of sheet material arranged in interfitting slidable relation, longitudinal rails extending inwardly from said segments, a central shaft, rigid internal members slidably engaging said rails respectively at their outer ends, and revoluble hubs for the inner ends of said members, said hubs respectively having eccentric engagement with said shaft, whereby movement of said shaft in one direction of rotation will draw said segments inwardly, and movement of said shaft in the other direction will expand said segments.

In testimony whereof I affix my signature.

HARVEY W. REMINGTON.