B. E. GRANT.

CONCRETE MOLD.

APPLICATION FILED JUNE 20, 1912.

1,077,702. Patented Nov. 4, 1913.

Fig. 1.

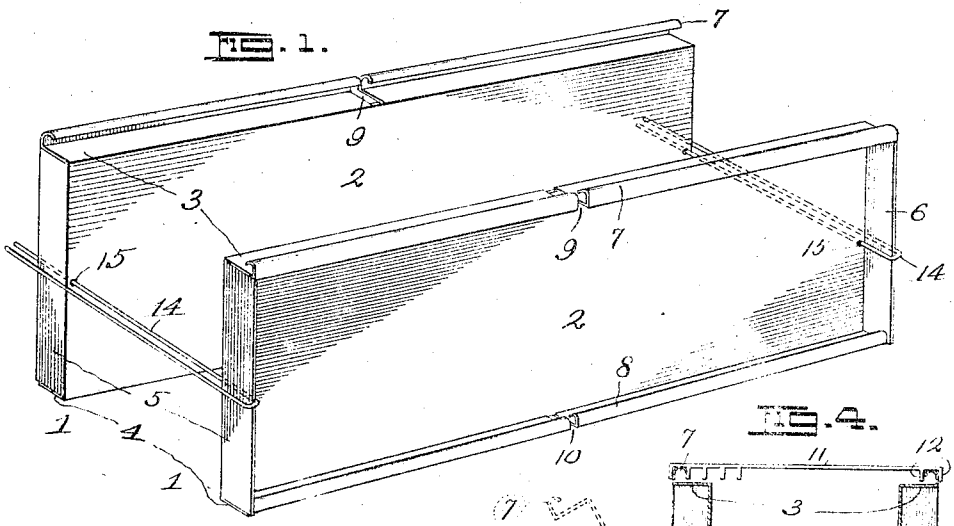


Fig. 2.

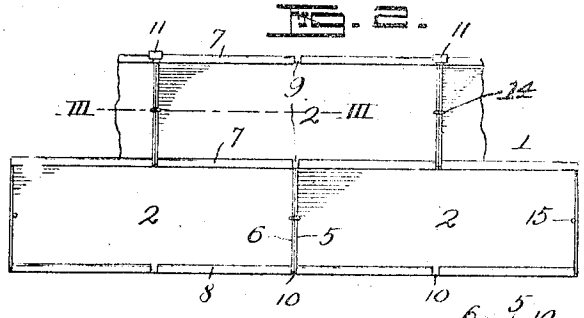


Fig. 3.

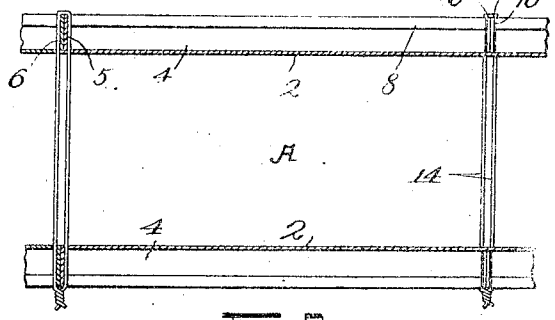


Fig. 4.

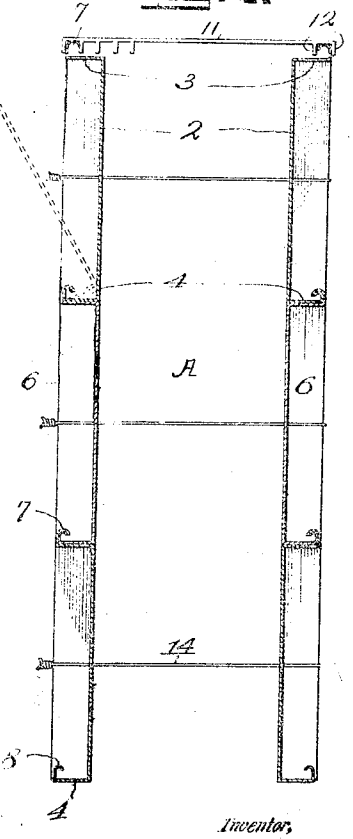
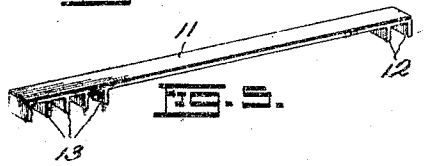


Fig. 5.



Witnesses:
R. Hamilton.
E. C. Lillian.

Inventor.
B. E. Grant.
By F. G. Fischer,
Atty

UNITED STATES PATENT OFFICE.

BURT E. GRANT, OF KANSAS CITY, KANSAS, ASSIGNOR OF ONE-HALF TO EUGENE B. BOYNTON, OF KANSAS CITY, KANSAS.

CONCRETE-MOLD.

1,077,702. Specification of Letters Patent. Patented Nov. 4, 1913.

Application filed June 20, 1912. Serial No. 704,718.

To all whom it may concern:

Be it known that I, BURT E. GRANT, a citizen of the United States, residing at Kansas City, in the county of Wyandotte and State of Kansas, have invented certain new and useful Improvements in Concrete-Molds, of which the following is a specification.

My invention relates to improvements in sectional molds to be utilized in the construction of concrete walls, and the like, and my object is to provide a mold of this character consisting of sections of light, but rigid construction and having interlocking elements whereby said sections may be readily connected for use or disconnected when not in use.

In order that the invention may be fully understood, reference will now be made to the accompanying drawings, in which:

Figure 1 is a perspective of two sections constituting my mold. Fig. 2 is a side elevation of several sections of my mold interlocked and ready for use. Fig. 3 is an enlarged horizontal section on line III—III of Fig. 2. Fig. 4 is a vertical section of the mold in position to form a wall. Fig. 5 is a detail perspective of a spacing member forming part of the invention.

In carrying out the invention, I employ a number of sections 1, of like construction, made, preferably, from sheet-metal, so that they can be conveniently handled in setting up or taking down the mold. Each section comprises a body portion 2, longitudinal marginal flanges 3 and 4, and transverse marginal flanges 5 and 6, all of said flanges being bent at right angles to the body portion 2 to add rigidity thereto, so that it will not bulge when concrete is poured into the mold. The longitudinal flanges 3 and 4 are turned upward at their margins and curved inwardly and downwardly to form open beads 7 and 8 respectively, the latter being of less diameter than the former to fit into the bead 7 of a lower section, see Fig. 4. Flanges 3 and 4 and their beads 7 and 8, have centrally-disposed slots 9 and 10, respectively, to receive the transverse flanges 5 and 6 of the adjacent upper and lower tiers of the sections to interlock the tiers from independent longitudinal movement. The bead 7 of an upper section is inserted in the beads 8 of two lower sections by tipping the upper section as indicated by dotted lines, Fig. 4.

11 designates a transverse spacing-member having a pair of downturned fingers 12 at one end, and a plurality of downturned fingers 13 at its opposite end to accommodate walls of different thicknesses, as will hereinafter appear.

In practice the sections 1 are arranged in tiers, as shown on Figs. 2 and 4, with the beads 7 of one tier interlocking with the beads 8 of the next tier, and the transverse flanges 5 and 6 of one tier entering the slots 9 and 10 of the adjacent upper and lower tiers, thereby locking the tiers together both vertically and longitudinally and with the joints of one tier intermediate the joints of the other tier, as shown on Fig. 2. The tiers constituting one side of the mold are spaced from the tiers constituting the opposite side of the mold to form a wall of desired thickness, and the two sides of the mold are then connected by a plurality of spacing-members 11 and wire loops 14, as shown on Fig. 4. The wire-loops 14, which prevent the two sides of the mold from spreading when concrete is poured into the space A, extend through holes 15 in the ends of the sections. Each loop has its free ends twisted together, as shown on Figs. 3 and 4. Two or three tiers for each side of the mold suffice to form a wall of any desired height, because when the wall, during the progress of construction, is carried nearly to a level with the topmost tiers, the wire loops of the lowermost tiers are severed and the latter are placed in position upon the uppermost tiers. When the lowermost tiers are thus removed from opposite sides of the wall, the remaining tiers are supported by their loops 14, which extend through said wall.

The spacing-members 11 are always placed upon the uppermost sections, so that said spacing-members will not become embedded in the wall.

While I have shown and described my preferred form of mold, I, of course, reserve the right to make such changes as properly fall within the spirit and scope of the appended claim.

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

A mold consisting of a plurality of sections, locking elements on the upper and lower margins of each section adapted to interlock with corresponding elements on abutting sections when the same are arranged in tiers, said locking-elements having intervening slots, and transverse elements on each section adapted to enter the slots of abutting sections when the same are arranged in tiers.

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

BURT E. GRANT.

Witnesses:
E. C. LILLIAN,
F. G. FISCHER.