Nov. 19, 1929. C. M. SHOWERS 1,736,376

CONCRETE MOLD

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Fig. 1.

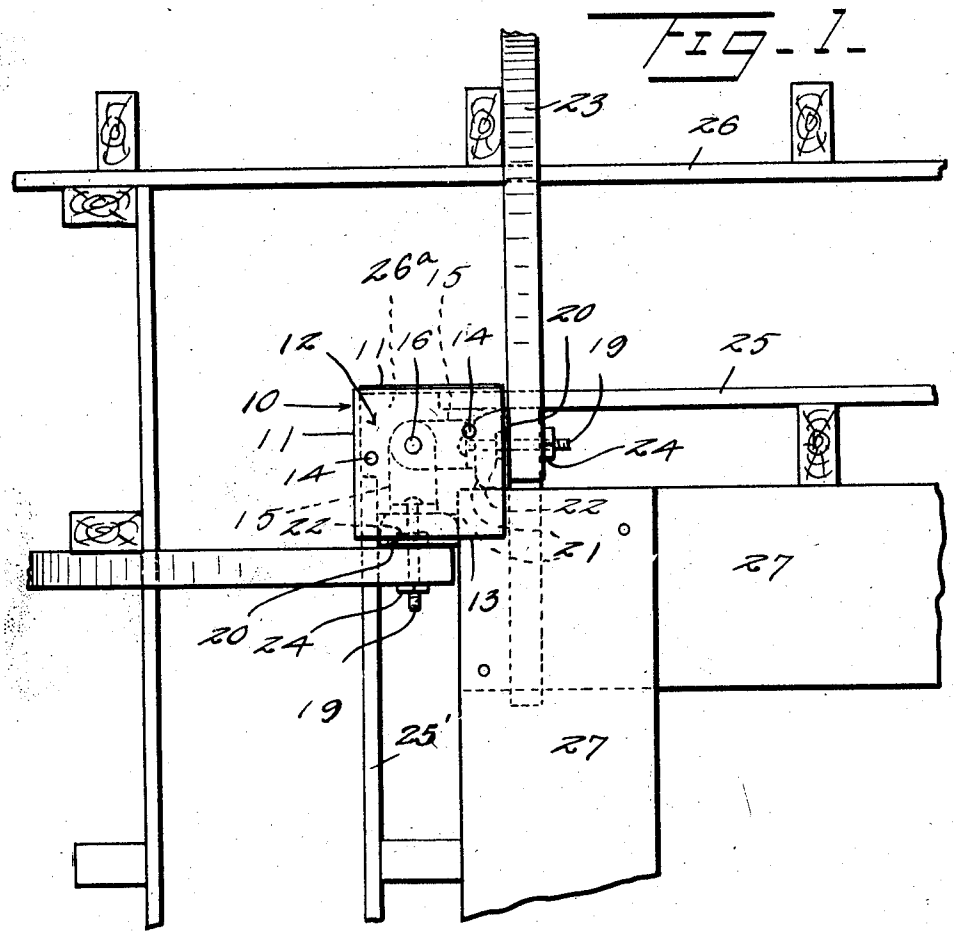
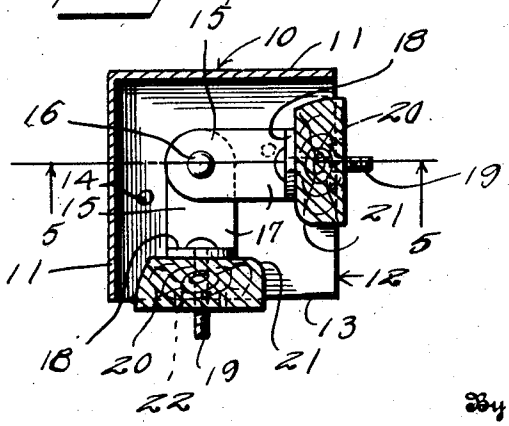



Fig. 4.




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Fig. 2.

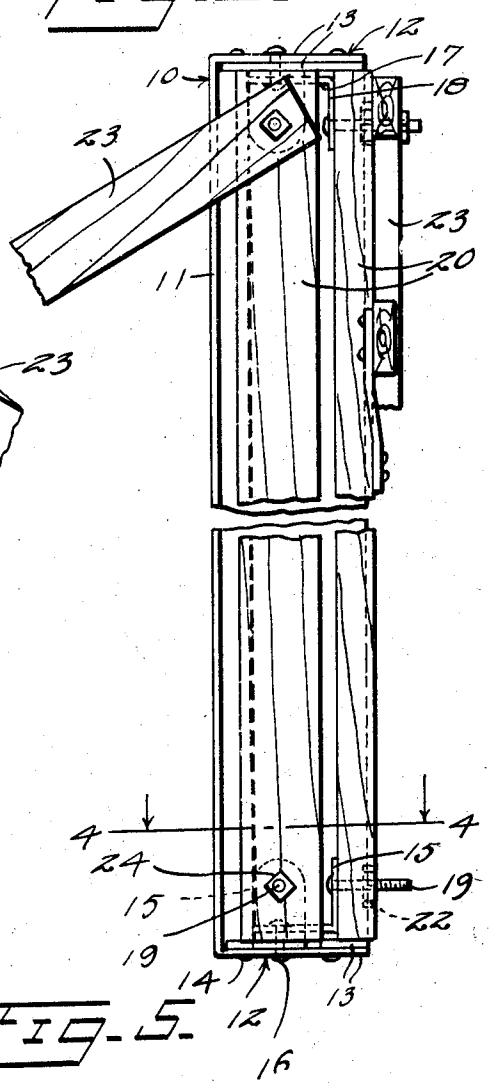
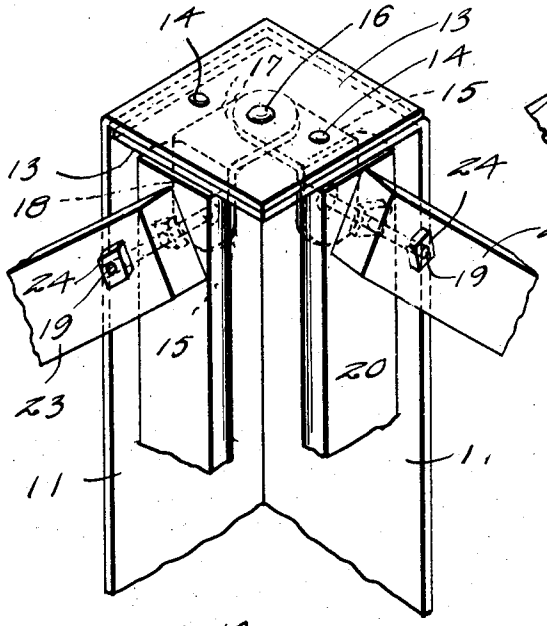



Fig. 3.



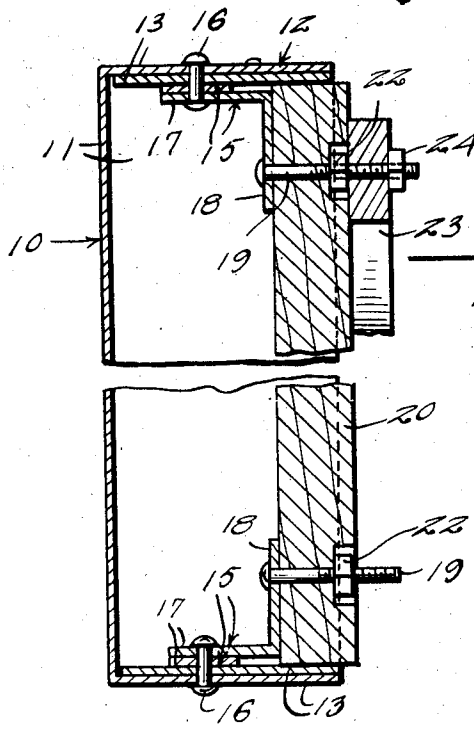




Fig. 5.

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# UNITED STATES PATENT OFFICE

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## CONCRETE MOLD

Application filed December 4, 1928. Serial No. 323,632.

This invention relates to concrete molds, and more particularly to a mold element for use in the formation of the inside corners of concrete walls.

In accordance with the present practice, molds for this purpose are simply assembled by nailing and in tearing away the mold structure, the corner is often severely damaged or entirely destroyed. An important object of the present invention is to provide a construction permitting assembly of the mold corner without the use of nails and in such a manner that the corner mold section may be readily removed without danger of damaging a completed wall.

A further object of the invention is the production in a device of this character of a structure such that it will not be damaged in use and accordingly may be used for a number of times.

A still further object of the invention is the production of a device of this character which materially facilitates the wall assembly and which may be readily employed with mold boards of varying thicknesses.

These and other objects I attain by the construction shown in the accompanying drawings, wherein for the purpose of illustration is shown a preferred embodiment of my invention and wherein:—

Figure 1 is a plan view of a wall mold including an inside corner form constructed in accordance with my invention;

Figure 2 is a side elevation of the corner form;

Figure 3 is a perspective view of the upper end thereof;

Figure 4 is a section on the line 4—4 of Figure 2;

Figure 5 is a section on the line 5—5 of Figure 4.

Referring now more particularly to the drawings, the corner mold comprises a sheet metal angle 10 of the desired length, the upper and lower ends of the flanges 11 of which are connected by end walls 12. These end walls may be conveniently formed by slotting the angle at the junction of the flanges and then bending the ends of the flanges upon one another and securing the overlapping flaps 13 thus provided with rivets 14. To the inner face of each end wall, I pivot a pair of angles 15, these angles having a common pivot 16 preferably in the form of a loose rivet and each having one flange 17 thereof opposing the end wall. The vertical flanges 18 of the angles are apertured for the passage of bolts 19 upon which are secured the ends of longitudinally extending anchor bars 20. These anchor bars 20 may be conveniently formed from 2 x 4 or other standard stock and each thereof has the edge face 21, which opposes the adjacent flange 11 of the angle bar, slightly rounded, as indicated.

Nuts 22 secure the clamping bars in position and the bolts 19 project therebeyond for the reception of the inner ends of braces 23 held in position by nuts 24.

In the use of the apparatus, the mold boards 25 of the inner face of the wall or the face of the angle are inserted between the inner face of the corresponding flange 11 of the angle bar and the adjacent clamping bar 20. The mold boards are maintained in properly spaced relation to the outer wall 26 of the mold in the usual manner, and will accordingly serve to align the angle. By exerting strain upon the braces, the bars 20 will obviously, by their engagement with the inner face of the mold boards 25, draw the inner face of the flange in engagement with the outer faces of these boards, thus properly seating the angle to form a mold element for the corner, filling the gap $26^a$ left between adjacent ends of the mold boards 25, 25′ at opposite sides of the angle. With the mold element properly positioned, planks 27 or other suitable braces may be engaged against the inner edge faces of the bars 20 to reinforce the same, preventing movement of the unsupported ends of the mold boards 25, 25′ and securing the clamping action of the bars and angle upon these mold boards.

Since the construction hereinbefore set forth is capable of a certain range of change and modification without materially departing from the spirit of the invention, I do not limit myself to such specific structure except as hereinafter claimed.

I claim:—

1. In a mold for forming reentrant angles, an angle bar, angularly disposed mold sections having their ends extended into and engaged with corresponding faces of the flanges of the angle bar and clamping bars pivoted to said angle bar and swingable to engage the inner faces of said mold sections.

2. In a mold for forming reentrant angles, an angle bar, angularly disposed mold sections having their ends extended into and engaged with corresponding faces of the flanges of the angle bar, a clamping bar associated with each flange of the angle bar, said clamping bar being pivotally connected with the angle bar for bodily swinging movement toward and away from the associated flanges of the angle bar.

3. In a mold for forming reentrant angles, an angle bar, end walls connecting the flanges of the angle bar, angularly disposed mold sections having their ends extended into and engaging with corresponding faces of the flanges of the angle bar, elements pivoted to the inner faces of the end walls of said angle bar and bars having their ends secured to said elements and swingable toward and away from the flanges of the angle bars to engage the inner faces of the mold sections and clamp them against said flanges.

4. In a mold for forming reentrant angles, an angle bar, end walls connecting the flanges of the angle bar, angularly disposed mold sections having their ends extended into and engaging with corresponding faces of the flanges of the angle bar, elements pivoted to the inner faces of the end walls of said angle bar, bars having their ends secured to said elements and swingable toward and away from the flanges of the angle bars to engage the inner faces of the mold sections and clamp them against said flanges, and means for securing braces to said bars.

5. In a mold for forming reentrant angles, an angle bar, end walls connecting the flanges of the angle bar, angularly disposed mold sections having their ends extended into and engaging with corresponding faces of the flanges of the angle bar, a pair of angle elements associated with each end wall at the inner face thereof, said angle elements each having a flange thereof opposing the associated end wall, a common pivot extending through the flanges of each end wall and end wall to pivotally connect the flanges thereto and bars secured to the remaining flanges of corresponding angles of opposite end walls and adapted to swing toward and away from the flanges of the angle bar.

6. In a mold for forming reentrant angles, an angle bar, end walls connecting the flanges of the angle bar, angularly disposed mold sections having their ends extended into and engaging with corresponding faces of the flanges of the angle bar, a pair of angle elements associated with each end wall at the inner face thereof, said angle elements each having a flange thereof opposing the associated end wall, a common pivot extending through the flanges of each end wall and the end wall to pivotally connect the flanges thereto and bars secured to the remaining flanges of corresponding angles of opposite end walls and adapted to swing toward and away from the flanges of the angle bar, the securing elements for said bars comprising bolts extending through the bars and projecting through the outer faces thereof to permit the attachment of braces to the bars.

In testimony whereof I hereunto affix my signature.

CHARLES M. SHOWERS.