

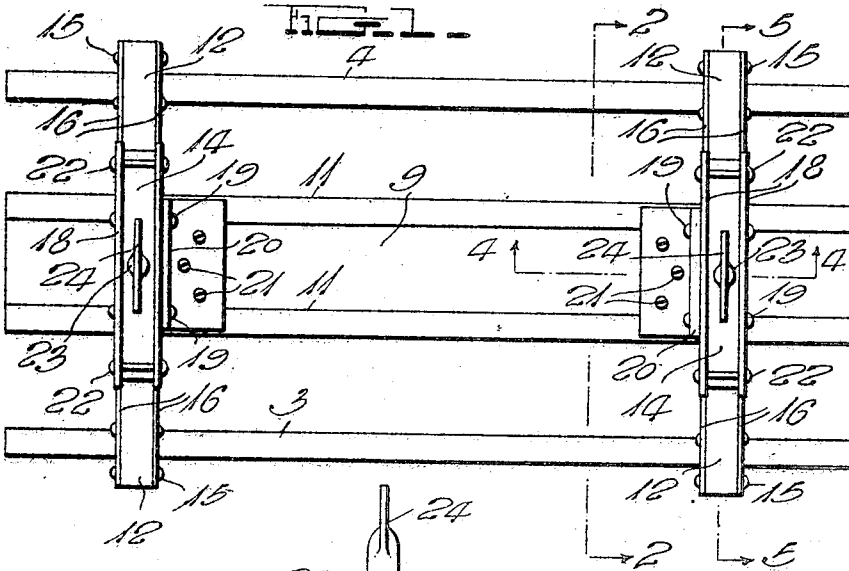
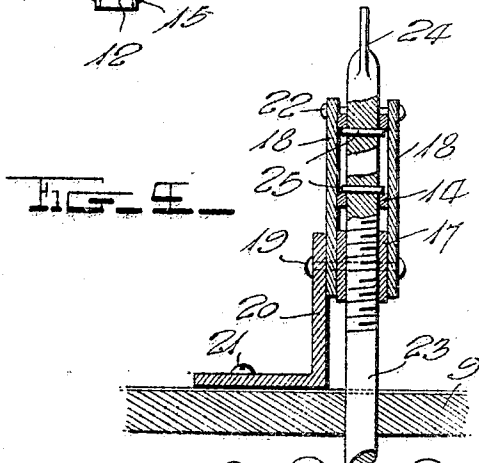
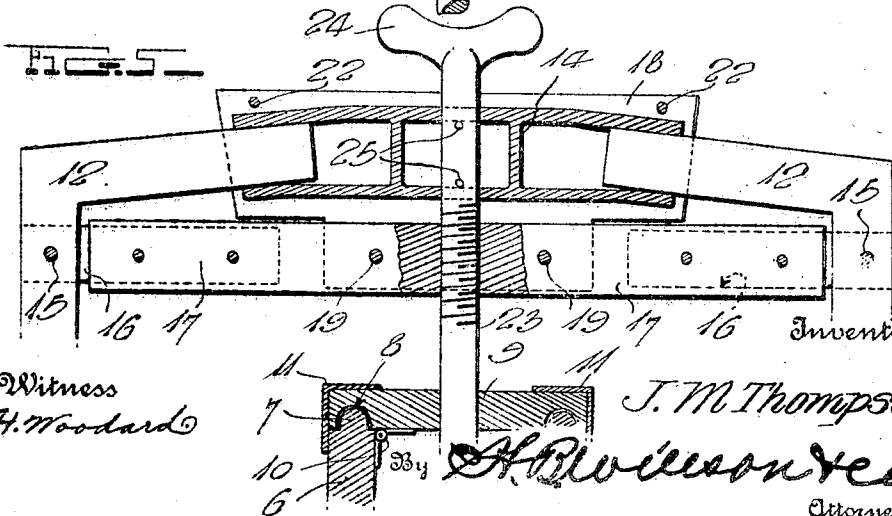
J. M. THOMPSON.
CONCRETE MOLD.

APPLICATION FILED JULY 29, 1920.

1,379,490.

Patented May 24, 1921.

2 SHEETS—SHEET 1.



Witness
H. Woodard

J. M. Thompson

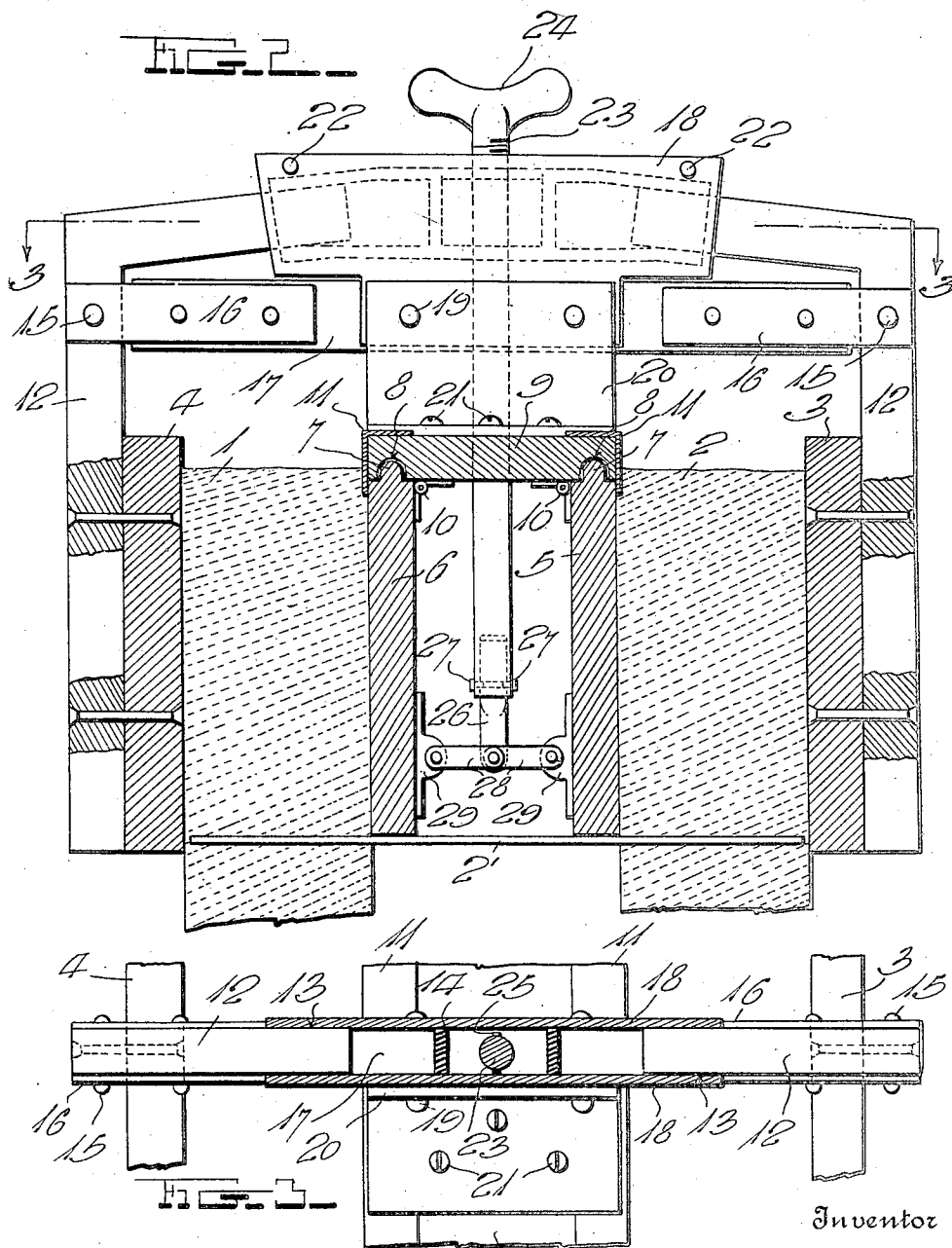
A. B. Wilson & Co.
Attorneys

J. M. THOMPSON.
CONCRETE MOLD.
APPLICATION FILED JULY 29, 1920.

1,379,490.

Patented May 24, 1921.

2 SHEETS—SHEET 2.



Witness
H. Woodard

J. M. Thompson
By *H. Woodard*
Attorneys

UNITED STATES PATENT OFFICE.

JACOB M. THOMPSON, OF FOND DU LAC, WISCONSIN.

CONCRETE-MOLD.

1,379,490.

Specification of Letters Patent.

Patented May 24, 1921.

Application filed July 29, 1920. Serial No. 399,675.

To all whom it may concern:

Be it known that I, JACOB M. THOMPSON, a citizen of the United States, residing at Fond du Lac, in the county of Fond du Lac and State of Wisconsin, have invented certain new and useful Improvements in Concrete-Molds; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improved mold for use in forming concrete walls, and one object of the invention is to provide a mold so constructed that the sections thereof may be moved transversely of the wall and thus brought into and out of an operative position. This arrangement permits the wall to be formed and after the concrete has set, the sections of the mold will be swung out of engagement with the wall to permit of easy removal of the mold.

Another object of the invention is to provide a mold of the character described which will be simple in construction and easy to operate.

Another object of the invention is to provide a mold for this purpose which will be very strong and durable and consist of a comparatively few number of parts.

This invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a top plan view of the improved mold.

Fig. 2 is a vertical transverse sectional view through the mold taken along the line 2—2 of Fig. 1.

Fig. 3 is a fragmentary sectional view taken along the line 3—3 of Fig. 2.

Fig. 4 is a sectional view taken along the line 4—4 of Fig. 1.

Fig. 5 is a sectional view taken along the line 5—5 of Fig. 1.

This improved mold is used for constructing a wall having spaced sections 1 and 2 thus providing a hollow wall having inner and outer sections and an air space between the sections. The wall is molded in layers formed one upon the other and reinforcing or strengthening bars 2' are provided between the layers and extend transversely of the wall across the air space and into the sections 1 and 2. It will thus be seen that the bars 2' will be securely anchored in the wall sections 1 and 2 and will brace these sections so that they will not have tendency

to move out of the vertical position. These bars 2' further provide supporting means for the mold as shown in Fig. 2 thus making it unnecessary to provide additional supporting means for the mold.

The mold is provided with outer and inner side walls 3 and 4 and with intermediate walls 5 and 6 which walls form a portion of a core fitting between the two sections 1 and 2 of the mold. The walls 5 and 6 have their upper edges provided with tongues 7 which fit into pockets 8 formed in a head strip 9 and these walls 5 and 6 are hingedly connected with the head strip 9 by hinges 10 so that the walls may move transversely into and out of a normal position. Reinforcing strips or plates 11 are provided at the side edges of the head strip 9 and extend to engage the walls 5 and 6 thus forming guards which will prevent the cement from working into the joints between the walls and head strips and preventing the walls from readily moving to the inoperative position when it is desired to remove the mold.

The outer side walls 3 and 4 of this mold carry arms 12 which extend upwardly from the walls and have their upper end portions bent to extend inwardly. These inwardly extending upper end portions of the arms 12 extend into the end sockets 13 of the housing 14 and it will thus be seen that when the housing 14 is moved vertically, the arms 12 may be swung upon the pivot pins 15 and thus the walls 3 and 4 caused to swing horizontally into and out of a normal position. The pivot pins 15 are carried by plates or strips 16 secured to a cross bar 17 and this cross bar 17 in addition to carrying the strips 16 also provides means for supporting the guiding plates 18 for the housing as shown clearly in Figs. 4 and 5. These guiding plates 18 are secured to the cross bar 17 by the fasteners 19 which in addition to connecting the plates 18 with the cross bar, also serve as means for connecting the cross bar with the upper end portion of a bracket 20 which bracket is connected with the head strip 9 by fasteners 21. Abutment pins 22 are carried by the side plates 18 and extend above the housing 14 so that the housing will be limited in its outward movement and thus prevented from moving upwardly beyond the desired amount. In order to impart movement to the walls 3, 4, 5 and 6, there has been provided an adjusting screw or threaded rod 23 which extends through the

housing 14 and through a threaded opening formed in the cross beam 17 and also extends through an opening formed in the head strip 9. A turning head 24 is provided for this set screw or adjusting rod and abutment pins 25 are provided for engaging the upper and lower walls of the housing as shown in Fig. 4 thus causing the housing to be moved vertically when the rod is rotated. The lower end of this adjusting rod 23 is cut out to provide a pocket into which extends a stem 26 held therein by pins 27 so that the adjusting rod 23 may rotate upon the stem and move the stem vertically with the adjusting rod. This stem 26 has its lower end connected with links 28 which extend transversely of the rod 23 and have their ends connected with bracket plates 29 attached to the inner walls 5 and 6 of the mold. Therefore when the rod 23 is rotated and moved downwardly, the links 28 will be moved to draw the walls 5 and 6 toward each other and at the same time, the housing 14 will be moved downwardly and the hanger bars 12 will be swung upon their pivots 15 thus swinging the walls 3 away from each other. It will thus be seen that the inner and outer walls of the mold will be moved out of engagement with the wall sections 1 and 2 and the mold can be very easily removed.

When this device is in use, it is set up as shown in Fig. 2 with the walls 3, 4, 5 and 6 extending vertically, and the inner walls 5 and 6 resting upon the bracing bars 2'. The cement from which the wall is to be formed will be poured into the mold and allowed to set until the cement has hardened. The adjusting rods will then be turned so that they will be moved longitudinally and this will cause the walls 5 and 6 of the mold to be swung toward each other and the walls 3 and 4 to be swung away from each other. The mold will thus be moved out of engagement with the wall section which has just been formed and can be easily removed and raised, additional strip 2' being placed upon the top of the layer wall which has just been formed and a new section of wall then molded.

I claim:

1. A mold having side walls, a core having a head strip and walls hingedly connected with the head strip for swinging movement transversely in the mold, brackets carried by the head strip, cross bars carried by the brackets, side plates extending above the cross bars, a housing positioned above each cross bar, bearing strips carried by the cross bars, hanger arms for the side walls of the mold pivotally connected with the bearing strips and having their upper end portions extending inwardly and fitting into pockets formed in the housing, bracket plates carried by the walls of the core, ad-

justing rods threaded through openings in the cross bars and extending through the head strip and housing, links connected with the bracket plates, stems connected with the inner ends of the links and rotatably connected with the adjusting rods, and abutments carried by the rods and engaging the housing.

2. A mold comprising side walls, a core within the mold between the side walls thereof having pivotally mounted side walls, a supporting structure above the mold carried by the core, a housing carried by the supporting structure for vertical movement, hanger arms pivotally connected with the supporting structure and having their lower end portions connected with the side walls of the mold and their upper end portions extending inwardly and having connection with the housing whereby vertical movement of the housing will impart transverse swinging movement to the side walls of the mold, a threaded adjusting rod extending through a threaded opening in the supporting structure and extending through the housing, abutment means carried by the rods for engaging the housing to move the same vertically with the rods, links connected with the side walls of the core, and a stem having loose connection with the links and having connection with the lower end portions of the rods.

3. A mold comprising outer walls, hanger rods carried by the walls and having inwardly turned upper end portions, cross bars having bearing strips pivotally mounting the hanger bars, side plates carried by the cross bars, housings mounted between the side plates for vertical movement and having the inner end portions of the hanger arms connected with the housing, a core having a head beam connected with the cross bars and walls hingedly connected with the head beam, and adjusting rods carried by the cross bars for vertical adjustment and having connection with the housing and walls of the core.

4. A mold comprising side walls having hanger arms pivotally mounted, a core having walls pivotally mounted, housings mounted for vertical movement and having the hanger arms connected therewith, and vertically adjustable rods having engagement with the housings and having connection with the walls of the core whereby vertical adjustment of the rods will impart transverse swinging movement to the walls of the core and mold.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JACOB M. THOMPSON.

Witnesses:

FRANK J. WOLFE,
ISABEL GAVIN.