L. BARG.

MOLD FOR CONCRETE WALLS.

APPLICATION FILED JAN. 21, 1908.

913,090. Patented Feb. 23, 1909.

Fig: 1.

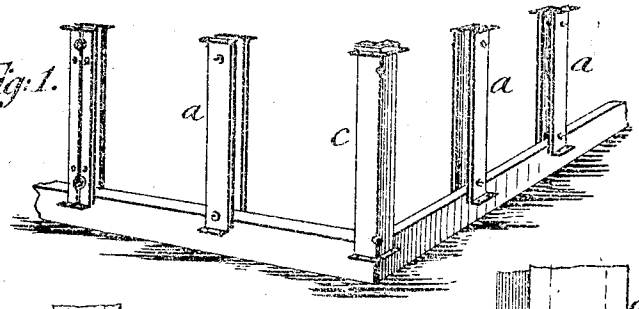


Fig: 2.

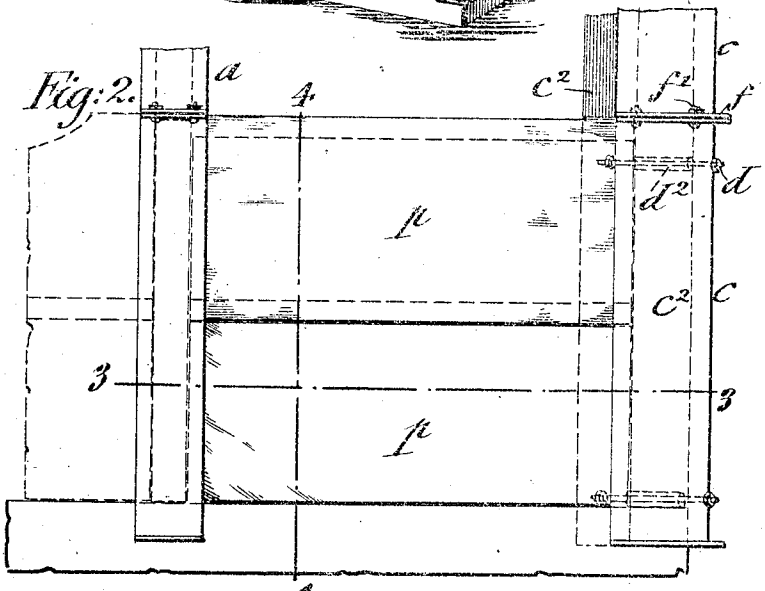


Fig: 5.

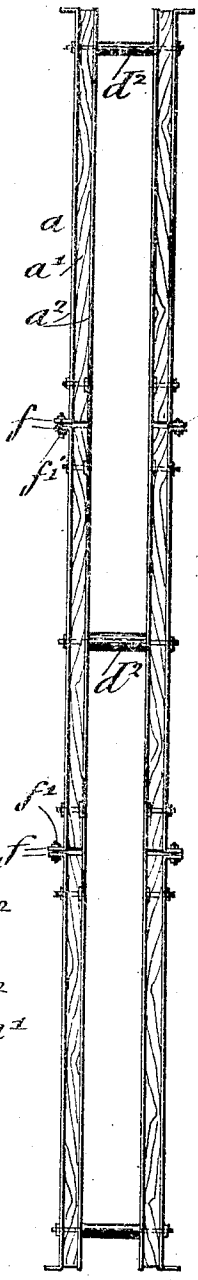


Fig: 3.

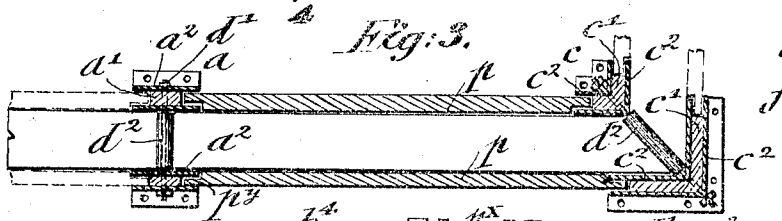


Fig: 6.

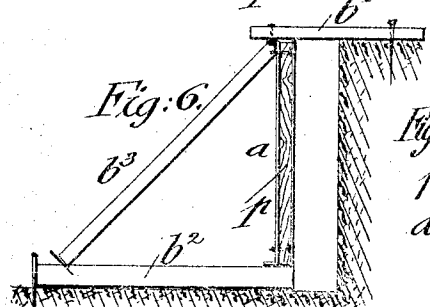


Fig: 4.

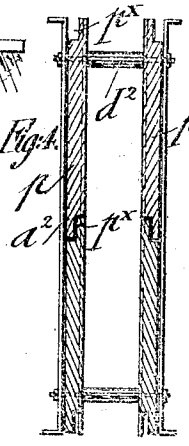
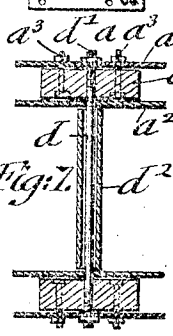


Fig: 7.



Witnesses:

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MOLD FOR CONCRETE WALLS.

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Application filed January 21, 1908. Serial No. 411,928.

To all whom it may concern:

Be it known that I, LEON BARG, a citizen of the United States, residing in New York, in the borough of Manhattan, county and State of New York, have invented certain new and useful Improvements in Molds for Concrete Walls, of which the following is a specification.

This invention relates to an improved mold for concrete construction by which concrete foundation, outside and partition walls can be cast with great facility and of any desired thickness for the construction of buildings of all kinds; and for this purpose the invention consists in the novel features of construction which will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a perspective view showing my improved upright mold-supports placed in position on the foundation-wall, Fig. 2 is a side-elevation of one section of the mold, Figs. 3 and 4 are respectively a horizontal section on line 3, 3, Fig. 2, and a vertical transverse section on line 4, 4, Fig. 2, Fig. 5 is a vertical transverse section showing the connection of the tier of lower supports with the next tier of supports above the same, Fig. 6 is a vertical transverse section through an outside upright showing it in position for making concrete foundation-walls, and Fig. 7 is a detail horizontal section through an upright support of modified form.

Similar characters of reference indicate corresponding parts throughout the several figures.

Referring to the drawings, *a* represents the upright supports of my improved mold for making concrete construction. Each upright support is formed of two separate supports—an inside and outside one, each support being made in approximately I-shaped cross-section and composed of intermediate wooden blocks a^1 and outer and inner plates a^2.

Wooden panels 3 are dropped into the recesses of the uprights at both ends, said wooden panels being formed of overlapping sections having rabbeted top and bottom edges, as shown clearly at p^x in Fig. 4, so as to form a smooth interior surface in line with the inner plates of each upright. The outer and inner sections of each upright are connected by transverse bolts *d*, which are threaded at both ends and applied to the exterior plates of the uprights by means of nuts d^1, as shown in Fig. 7. Between the inner plates of an outer and inner upright is interposed on each transverse connecting bolt a thimble d^2 by which the desired thickness of the concrete wall to be cast in the mold is obtained. The thimble d^2 may be made of sheet-metal, pasteboard, etc., and may either remain in the concrete wall after the same is cast in the mold-sections or be removed from the same, the transverse hole formed by the thimble being filled in with cement after the concrete wall has set and has dried sufficiently. When the thimbles are made of metal, it is preferable to surround the same by a thin shell of paper, pasteboard, or other material that can remain in the wall, but that will permit the convenient removal of the metallic thimbles. The panel-sections *p* are also rabbeted at their side-edges, as shown at p^y, so as to fit over the projecting portions of the plates a^2 so that the inner surface of the panel-sections is flush with the inner surface of the plates a^2, as shown in Fig. 3. The corner uprights *c* are made of rectangular shape, as shown in Fig. 3, but are constructed of an intermediate angular portion c^1 and angular outer and inner plates c^2. In this case the connecting bolts *d* extend diagonally from the angular inside support to the angular outside support, as shown in Fig. 3, the inclosing thimbles d^2 being made in the same manner as the thimbles of the upright support *a*. In some cases each outer and inner support may be made of separate sections, as shown in Fig 7. In this construction the outer plates a^2 are divided longitudinally and the bolts *d* pass through the space between their adjacent edges. The sections of the outer plates are connected with the blocks a^1 by means of bolts a^3 the heads of which are countersunk in said blocks, as shown, while the sections of the outer plates are held in position by means of nuts at the outer ends of said bolts. By this arrangement the panels may be removed, after first removing the outer plates by unfastening the nuts on the bolts a^3. Thus the panels may be readily removed without taking down the upright support as a whole.

The connecting bolts *d* for the outer and

inner uprights are preferably arranged near the lower and upper ends of the same, the lower bolts serving for the purpose of clamping the uprights to the foundation or other wall, as shown in Fig. 2. Both the outer and inside uprights are provided with outwardly-bent flanges f at their lower and upper ends which are provided with bolt-holes so as to permit the attaching of the next tier of uprights to the lower tier of uprights, so that the next section of the wall can be cast onto the lower wall-section. After the lower concrete-wall section has sufficiently dried, then the lower uprights are removed by withdrawing the bolts and thimbles, and then are applied by means of fastening bolts f^1 which pass through the flanges f to the third tier, and so on, until the wall is completed.

When foundation-walls are to be made only outer uprights are employed. The earth is dug out to the required thickness of the wall, as shown in Fig. 6, then the outer uprights are placed in position thereon, together with their wooden panels p. The uprights are then supported on bottom-pieces b^2 and supported in upright position by inclined braces b^3 and top-pieces b^4 which are secured in position by means of spikes, as shown in Fig. 6. When the foundation is completed to the proper height, it permits the attaching of the outer and inside uprights, as shown in Fig. 1, and after the lower concrete wall is completed then a second tier of uprights is attached to the lower tier of uprights and the next section of the wall completed, and so on, until the outer and partition walls of the building are completed.

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

1. In a mold for concrete constructions, the combination of outer and inner uprights, each of which comprises an inner plate, an intermediate block, and an outer plate composed of sections removably attached to said block, panels supported between said uprights, bolts connecting said outer and inner uprights and passing through the spaces between the sections of the outer plates, and thimbles surrounding said bolts between the inner plates.

2. In a mold for concrete construction, the combination of outer and inner uprights, each of which comprises an inner plate, an intermediate block, and an outer plate composed of sections removably attached to said block, a bolt connecting said outer and inner uprights and passing through the spaces between the sections of the outer plates, and a thimble surrounding said bolt and by which the inner plates are spaced from each other.

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

LEON BARG.

Witnesses:
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HENRY J. SUHRBIER.