

(No Model.)

T. W. CARRICO.

MOLD AND MOLD HOISTING APPARATUS FOR BUILDING CONCRETE WALLS.

No. 301,671.

Patented July 8, 1884.

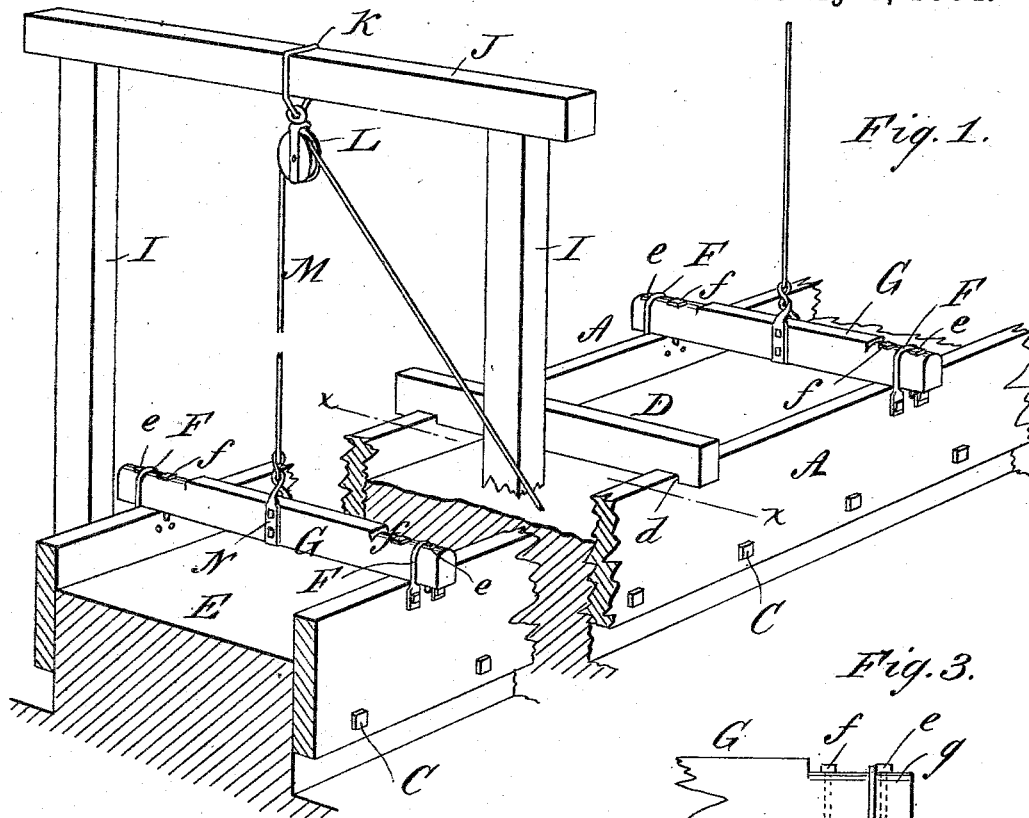


Fig. 1.

Fig. 2.

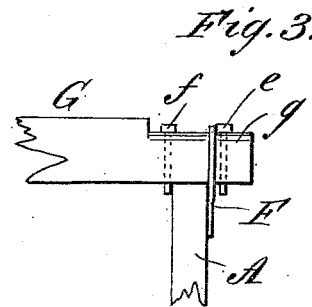
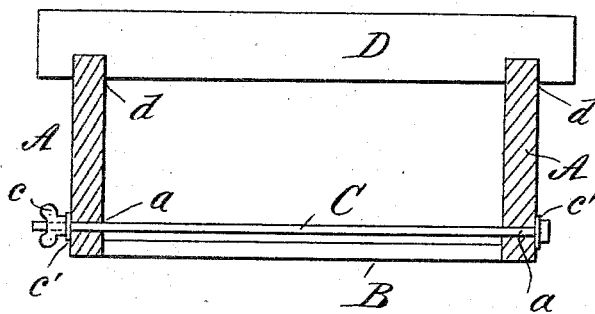
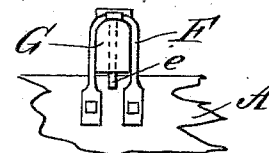


Fig. 3.

Fig. 4.



WITNESSES:

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MOLD AND MOLD-HOISTING APPARATUS FOR BUILDING CONCRETE WALLS.

SPECIFICATION forming part of Letters Patent No. 301,671, dated July 8, 1884.

Application filed April 12, 1884. (No model.)

To all whom it may concern:

Be it known that I, THOMAS WILLSON CARRICO, of San Antonio, in the county of Bexar and State of Texas, have invented a new and Improved Mold and Mold-Hoisting Apparatus for Building Concrete Walls, of which the following is a full, clear, and exact description.

The object of this invention is to provide devices for use in the construction of concrete walls, by means of which such walls can be quickly and easily built up.

The invention consists in a mold in which a course of the wall can be formed, and in devices for raising the mold for the formation of another course.

The invention also consists in details of construction and in combinations of parts, as will be hereinafter more particularly set forth.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a mold for the construction of concrete walls and the hoisting devices, in part made according to my invention, parts being broken out and others shown in section. Fig. 2 is a cross-section of the same on the line *xx* in Fig. 1. Figs. 3 and 4 are details of the hoisting devices.

I take pieces of plank A for the sides of the mold, of suitable width and thickness and of a convenient length. Between these sides A, at their bottom edges, I place gage-pieces B, of a length equal to the desired thickness of the wall to be built. Through corresponding holes, *a*, in the side plank, A, I then pass bolts C, the said bolts having winged nuts *c* upon one end, and washers *c'* being placed beneath the nuts and heads of the bolts to bear against the sides A. Across the upper edges of the plank or sides A, I place gage-sticks D, having notches *d* to fit over the edges of the plank A. I then tighten up the nuts *c*, whereby the mold is firmly clamped together. These gage-pieces, bolts, and gage-sticks I place about three feet apart. The mold is then ready to be filled with concrete, E, of broken stone and grouting well mixed and solidly packed into the mold. Having filled the molds, as above, and thereby formed one course of the wall, the next step is to raise the molds

for another course. For this purpose I provide upon the outer upper edges of the plank A clevises F, bolted firmly thereto. These clevises are to be at a suitable distance apart. Through these clevises I pass beams G, having a portion at their outer ends rounded upon the upper surface at *g*, to fit into the clevises F. Two holes are bored in each end of these beams, so that the ends of bolts *e*, passed through the holes nearest the ends, will be a little distance from the outer sides of the plank A, and so that bolts *f*, passed through the inner holes, will be close to the inner sides of the plank A.

At points in the length of the wall corresponding to the positions of the clevises F, I erect frames, consisting of posts I and cross-pieces J, the posts I being set far enough from the wall for convenience in working, and these frames being enough higher than the proposed wall to allow raising the molds to the requisite height. At the center of the cross-piece J, I suspend, by a strap, K, a pulley or other tackle, L, through which a rope, M, having one end attached to a strap, N, at the center of the beam G, passes.

To raise the mold, the bolts C are removed, the beams G are put in place and secured in the clevises F, and the ropes M rove. Then by drawing upon the said ropes the first effect is to swing the plank A clear of the finished portion of the wall; then by further drawing upon the ropes the planks are to be raised until the bolts C can be passed through the holes *a*, so as to be above the finished course of the wall. The pieces B and gage-sticks G are then put in place and the nuts *c* tightened, up as at first. Another course of the wall can then be made.

It will be understood that these molds will extend the length of the wall, or around the walls of the building.

With these molds concrete walls can be quickly and easily built.

After a sufficient quantity of concrete has been packed in the molds to prevent the side pieces, A, from moving inward, the gage-pieces B can be removed and the spaces left filled with concrete, whereby one set of gage-pieces will answer for the whole wall, and there will be no wood left in the wall.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. In a mold for building concrete walls, the sides A, having the series of holes *a* near their lower edges, in combination with the gage-pieces B, the gage-sticks D, provided with notches *d* on their under sides for fitting over the top edges of the sides A, and the bolts C, substantially as shown and described.
2. The combination, with the mold A B C D, and the clevises F, attached to the sides A, of

the beam G, having bolt-holes at the ends and provided with a strap, N, at the center, the bolts *e f*, the frame I J, the block L, suspended from the frame I J, and the rope M, substantially as shown and described, and for the purposes set forth.

THOMAS WILLSON CARRICO.

Witnesses:

JULIUS TEUGG,
THOMAS E. STEVENS.