

No. 859,704.

PATENTED JULY 9, 1907.

G. W. STEVENS.
MOLD.

APPLICATION FILED MAR. 22, 1906.

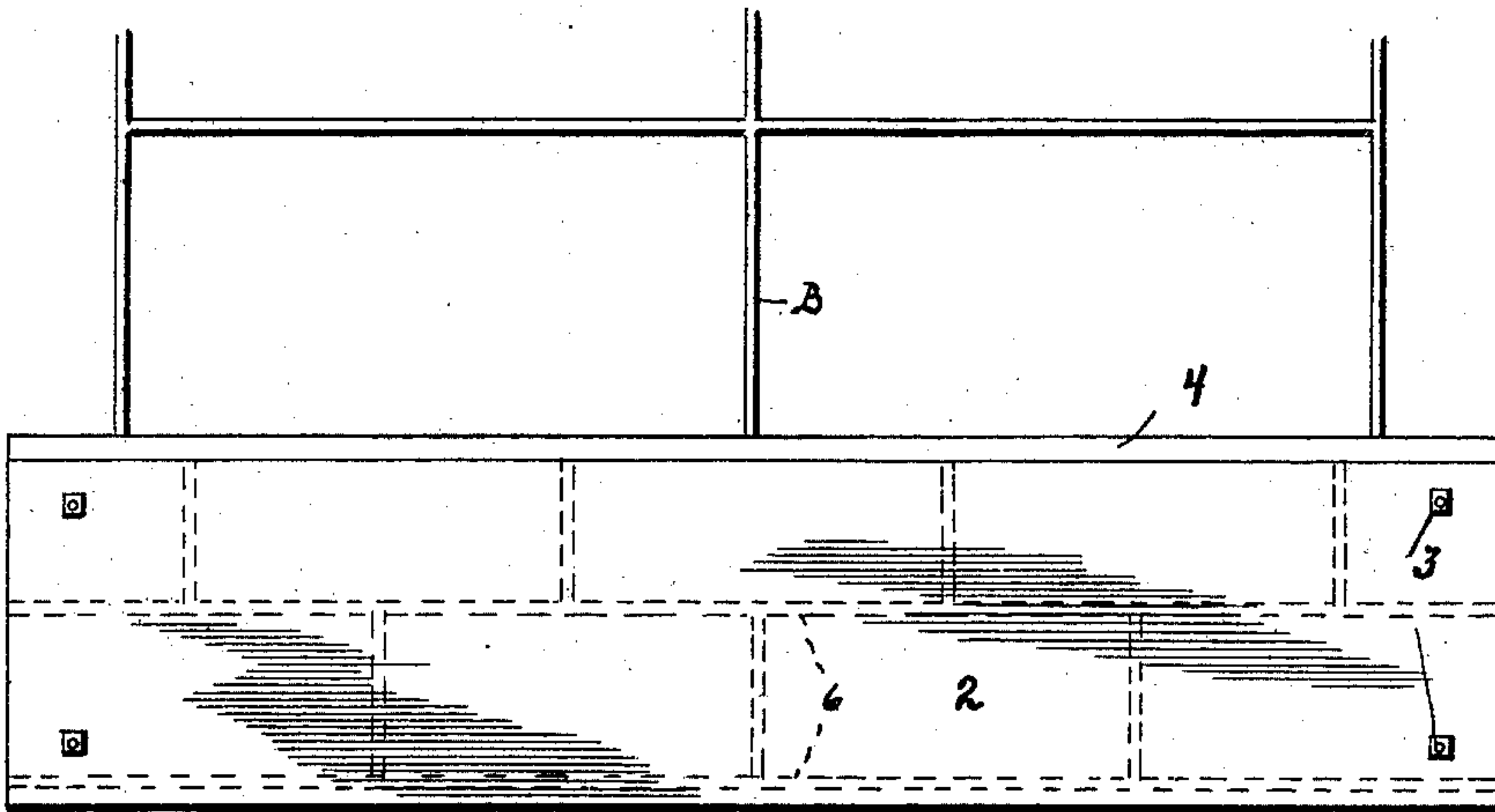


Fig. 1.

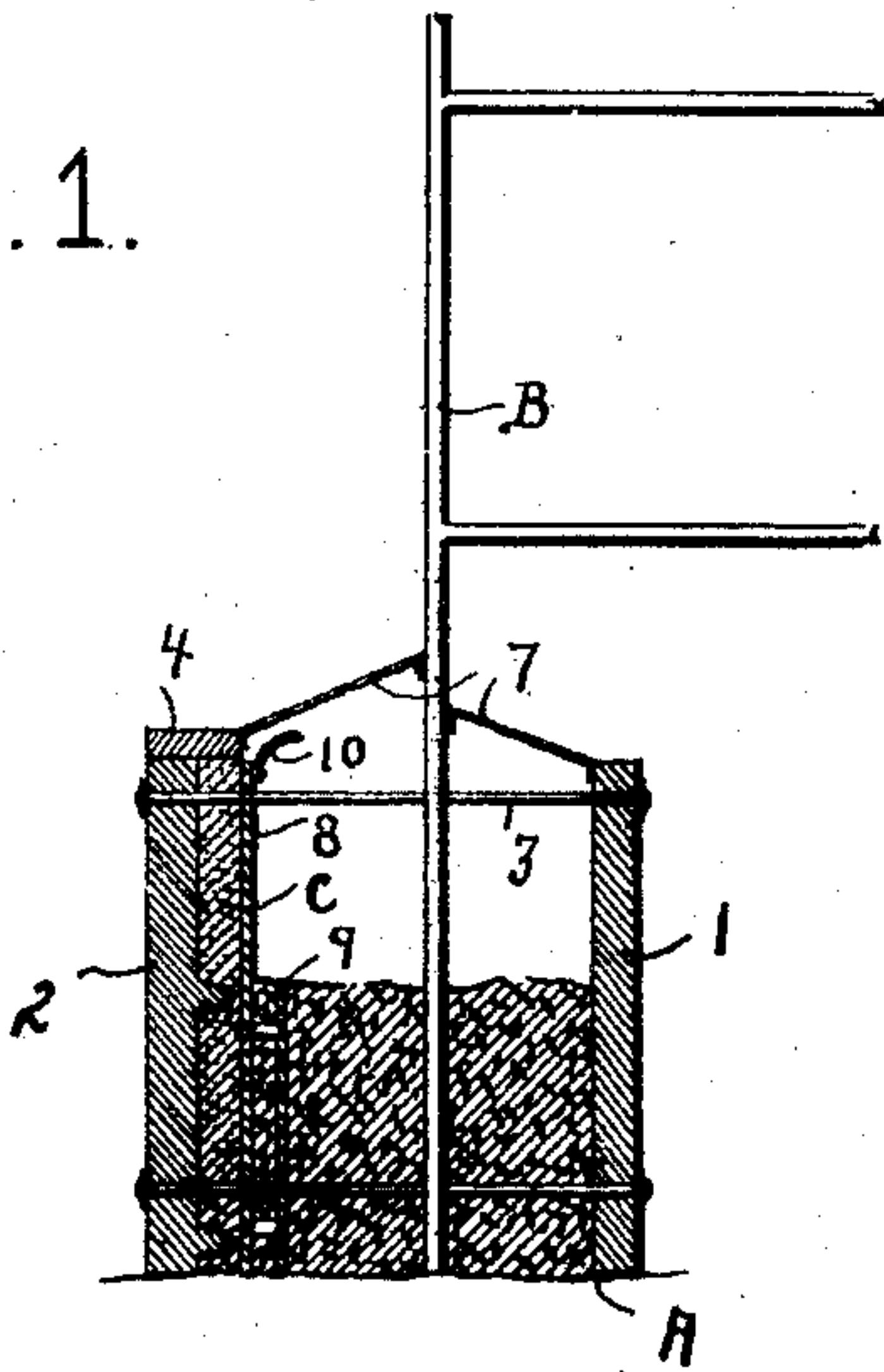


Fig. 2.

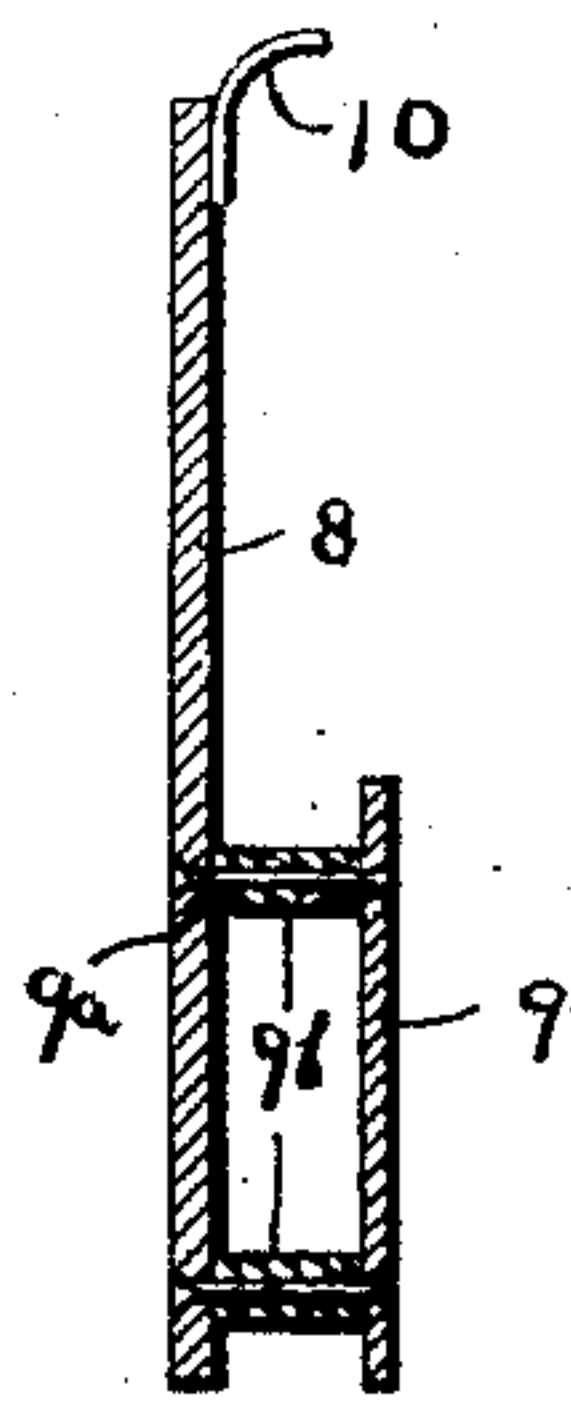


Fig. 3.

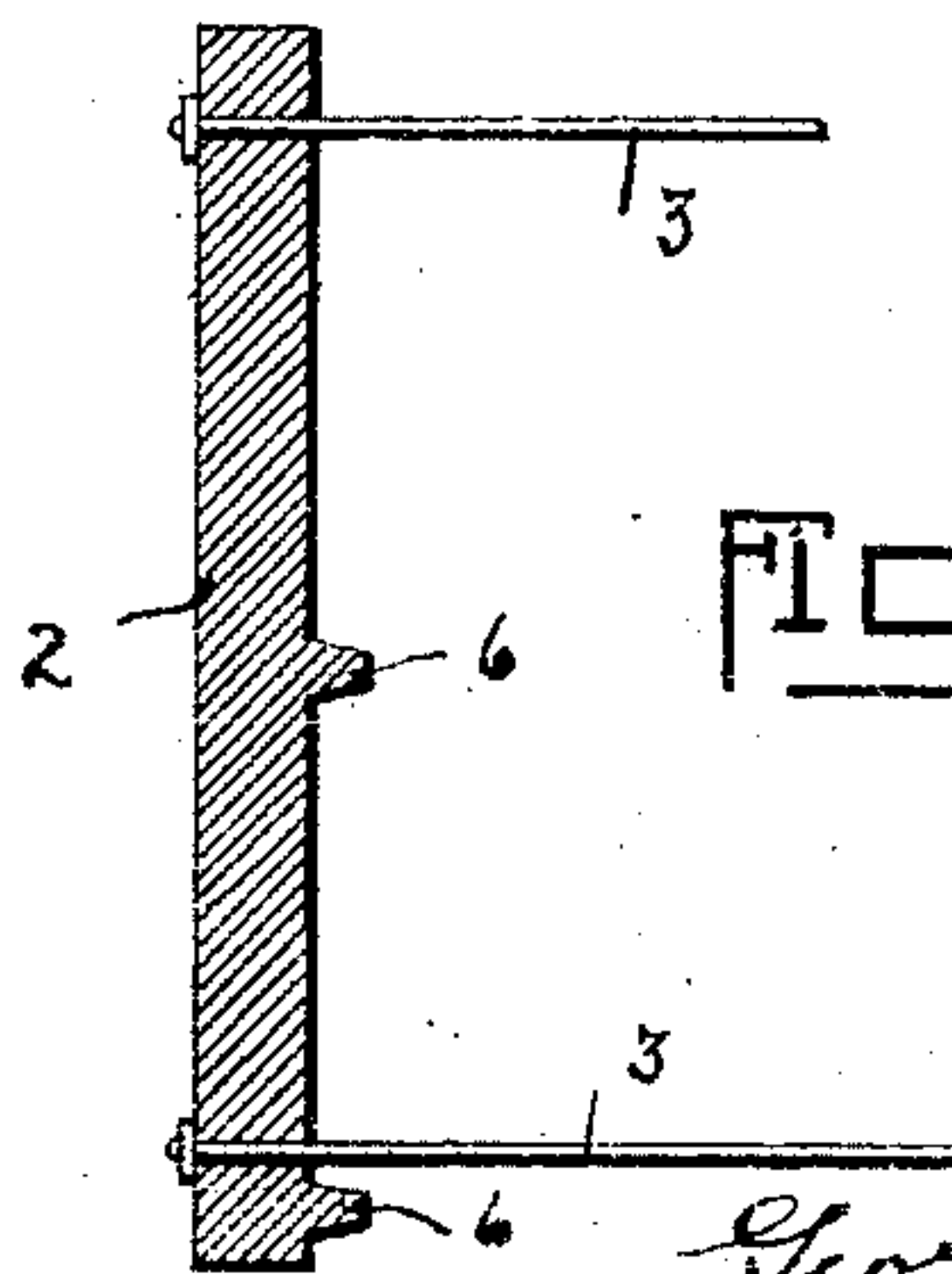


Fig. 4.

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UNITED STATES PATENT OFFICE.

GEORGE W. STEVENS, OF BOSTON, MASSACHUSETTS.

MOLD.

No. 859,704.

Specification of Letters Patent.

Patented July 9, 1907.

Application filed March 22, 1905. Serial No. 251,376.

To all whom it may concern:

Be it known that I, GEORGE W. STEVENS, a citizen of the United States, residing at No. 1 Lawrence street, Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Molds, of which the following is a specification.

My present invention relates to improvements in molds, and the main object of my invention, is the provision of a mold, by the use of which a strong and ornamental cement concrete wall may be built, the mold being provided with a removable means whereby the coarser material of the wall can be simultaneously faced with a finer material of any desired color or thickness, either to represent various kinds of stone in blocks, or an entirely smooth faced wall, as may be desired.

To this end, I first lay the concrete footers of the walls, and place a frame-work of pipes so as to be in the center of the concrete wall when finished, the first section of the mold being placed upon the footers with the "finish" separating plates the desired distance from the front or "forming" plate of the mold. To the rear of the "finish" plate, is filled in the coarser concrete to the desired height, while between the "finish" and the "forming" plate is filled in the "finish" concrete, which contains enough cement, so that when the "finish" plate is removed from the concrete the "finish" will adhere or coalesce to the coarser concrete, the two being properly tamped after the "finish" plates are removed. The "forming" plate and rear plate of the mold, are not removed until the section of the wall is "set," but during such setting, other molds may be placed above and the operation of forming the different layers continued.

To more clearly illustrate the operation and construction of my improved mold, I invite attention to the accompanying drawings, in which,—

Figure 1 is a front elevation of my mold, Fig. 2 is a cross section of the mold ready to be filled, and Figs. 3, and 4 are detail views of various parts.

In the said drawings,—A designates the concrete "footer" or foundation, which supports the frame B, of gas pipes or the like, which provide a net-work to assist in supporting the concrete wall to be built by my mold upon the "footer."

The mold, proper consists of the rear or inside plate 1, and the front or "forming" plate 2, the rear plate being constructed with a series of openings through which are adapted to pass the fastening bolts 3; the said bolts being threaded on both ends so that the "forming" and rear plates may be removed after the wall is "set," leaving the bolts in the wall.

The "forming" plate 2, has removably secured to the upper edge thereof, the guide strip 4, which when the two plates are secured in position, as shown in Fig. 1, is adapted to gage the amount of "finish" concrete to be filled into the mold, and when the concrete has reached the proper height, the strip 4 is removed, so that other sections of the mold may be placed upon the lower section, and the operation of forming another section of wall continued.

In order to hold the two plates parallel, I employ the braces 7, which are secured to the top of the plates and to the frame B, above the level of the concrete within the mold, so that after the mold is filled, these braces may be removed.

In order to separate the coarser concrete from the "finish," I employ the removable metal plate 8, provided with the steadying and strengthening strip 9, near the lower edge upon the rear face thereof, the said strip being removably secured to the plate 8, by means of bolts 9^a, carrying washers 9^b, the said plate 8, being further provided with handles 10, by means of which the same is removed after the "finish" concrete has been filled in between it, and the "forming" plate and the coarser concrete has been filled in between the plate 8, and the rear plate 1. The bolts 3, are so mounted as to lie between the ends of adjacent plates 8, so as not to interfere with the removal of said plates 8. The plates 8 and 9 are removed while the concrete is soft and just after the coarse concrete has been filled to about the height shown in Fig. 2, the plate 8 being held against the sand finish until the remainder of the coarse concrete has been filled to the top of the boards 1 and 2, after which the boards 8 and 9 are removed. The advantage of the strengthening plate 9, is in the withdrawing of the plate 8, a slight reciprocating movement has to be imparted to spread the material apart so that the plates can be removed; and it was during this operation that the lower portion of the plate 8 would either bend, if made of metal, or split and break, if made of wood. The plate 9 provides against this.

Upon the inner face of the "forming" plates may be provided any design to produce either a rough or a smooth "stone" finish; and should it be desired to produce grooves in the "finish" to represent division lines between "blocks," I secure to the inner face of the "forming" plates the vertical strips 6. I have found it more desirable to place the respective plates in position before filling in the concrete, but should it be desired, the "finish" concrete may be spread upon the inner face of the plate 2, before the same is secured in its relative position with the rear plate, this being especially advantageous, where a rough stone "finish" is desired.

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

5 In combination with a mold in which rough concrete and a sand finish cement is adapted to be molded, of a removable separator for holding the sand finish during the filling of the mold, consisting of a plate, a steadying and strengthening strip secured to and in the rear of said plate near the lower portion thereof, and separated from

the plate by a space, means holding the plate and strips separated, and handles connected to the plate, for the purpose set forth. 10

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

GEORGE W. STEVENS.

Witnesses:

C. G. FISHER,
M. J. KILLIAN.