J. R. HALDEMAN.

MOLD.

APPLICATION FILED MAY 7, 1908.

929,938.

Patented Aug. 3, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

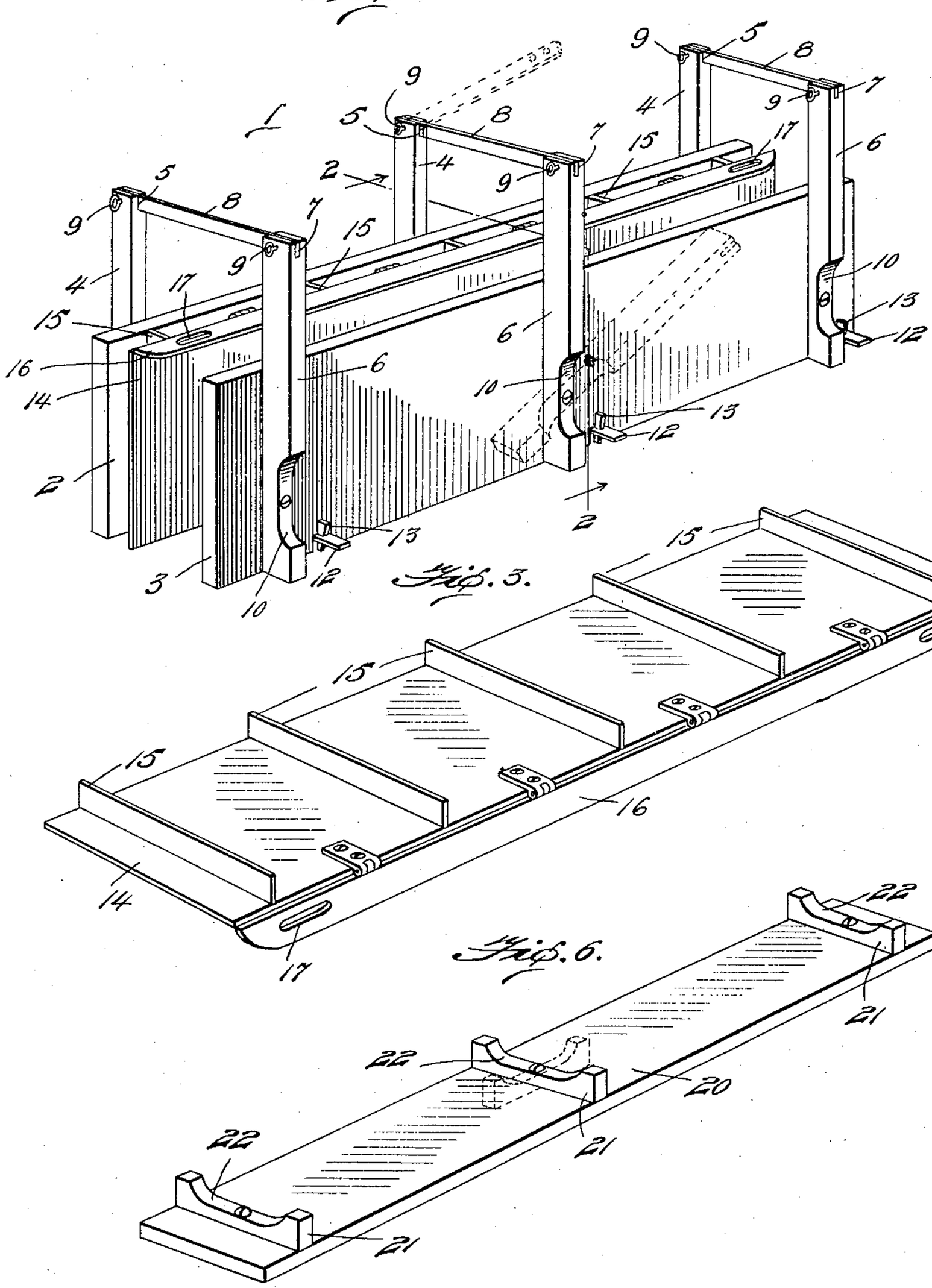


Fig. 3.

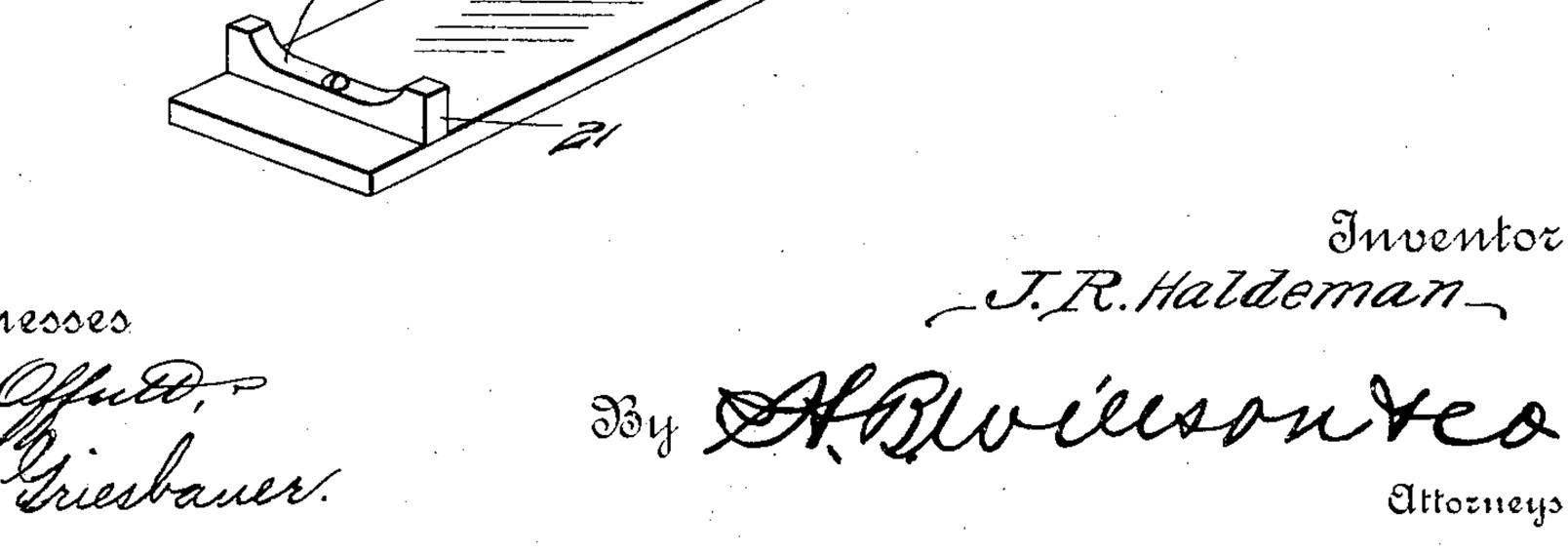
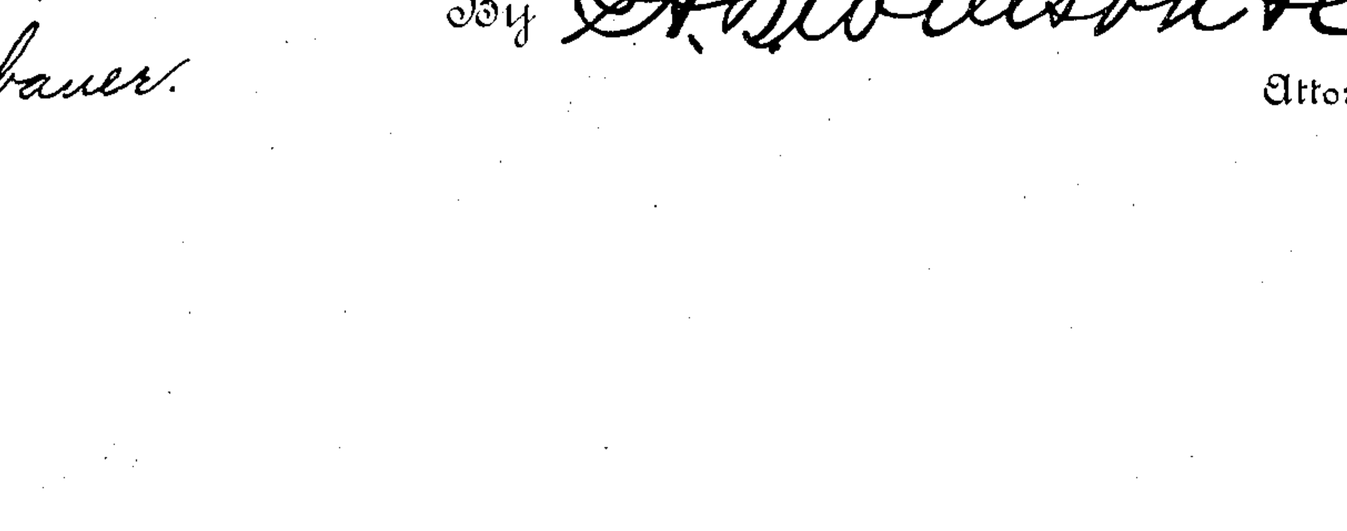


Fig. 6.



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2 SHEETS—SHEET 2.

Fig. 2.

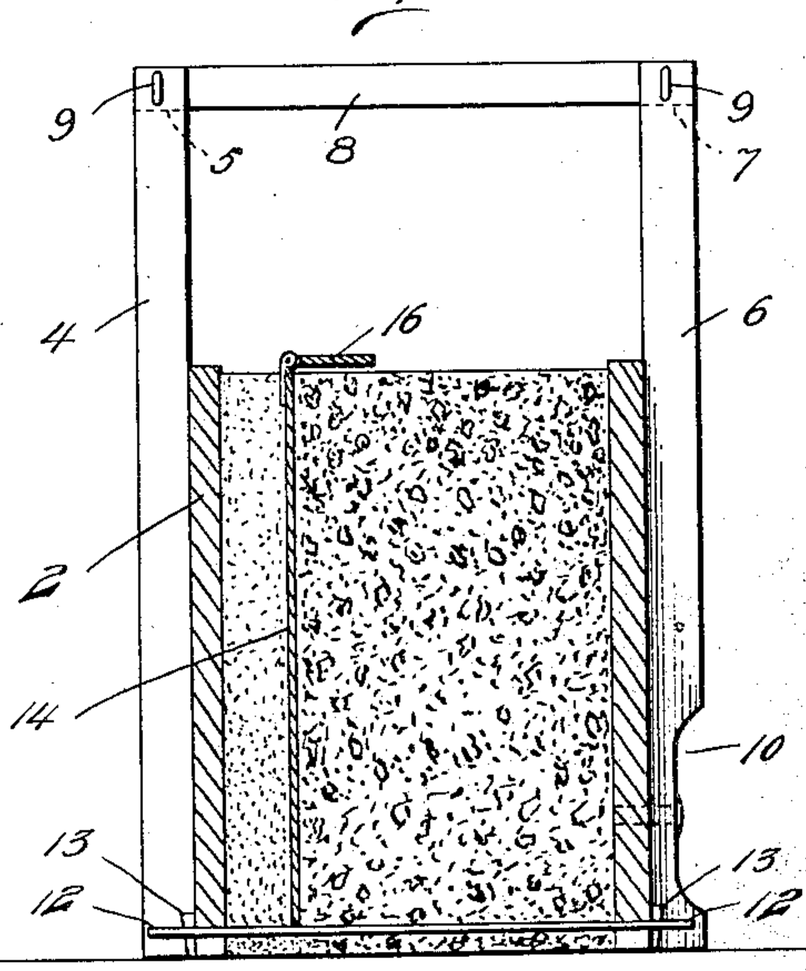


Fig. 5.

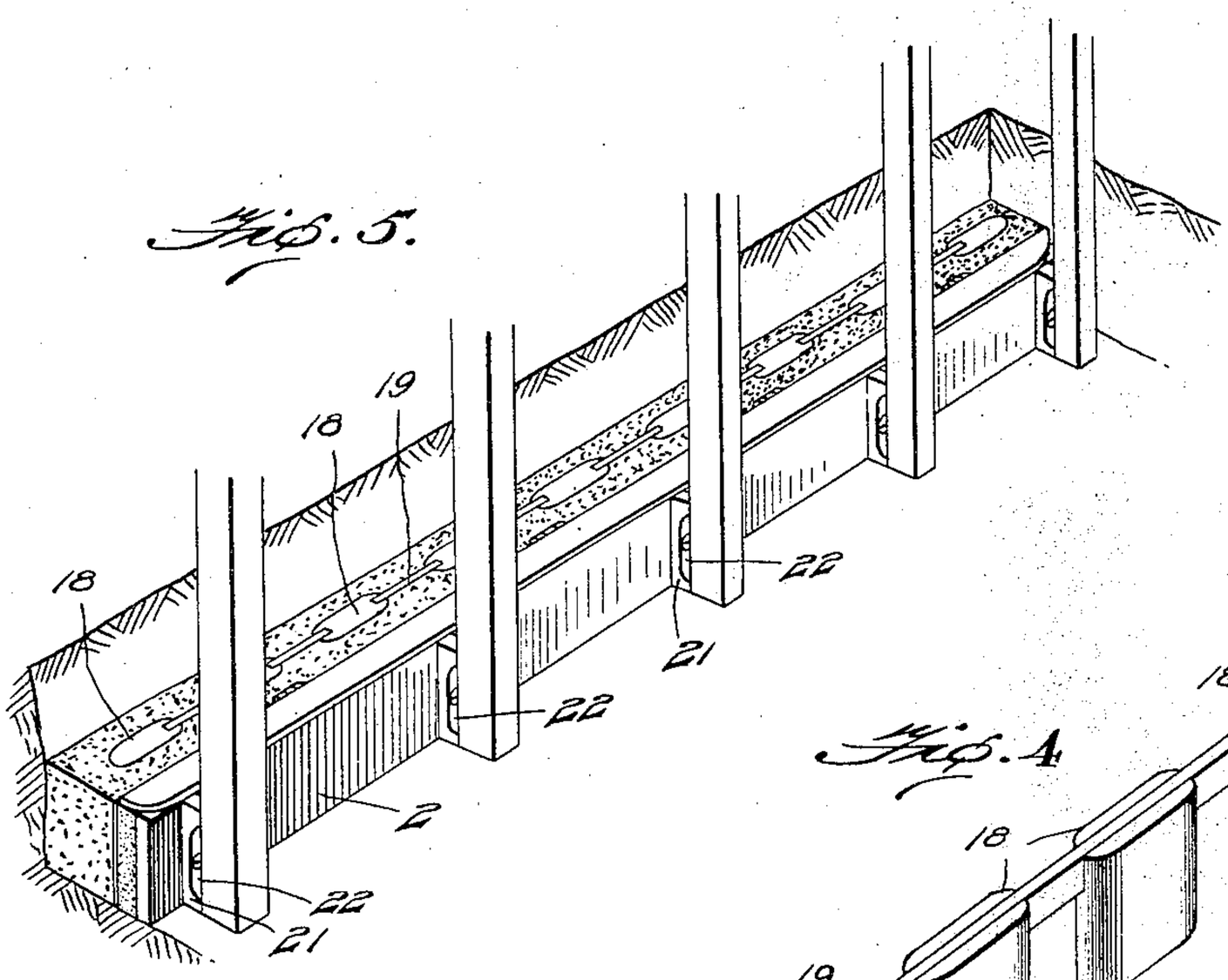
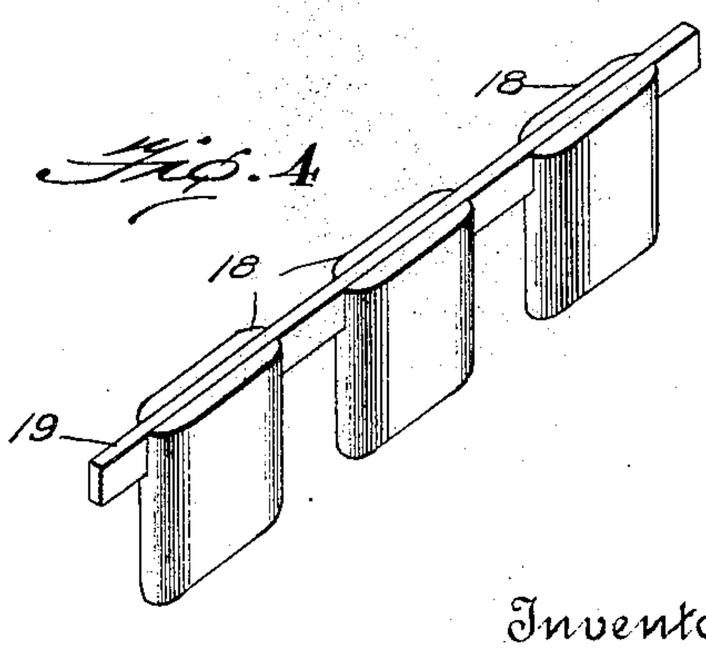


Fig. 4.



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JOHN RILEY HALDEMAN, OF SPRINGFIELD, MISSOURI.

MOLD.

No. 929,938. Specification of Letters Patent. Patented Aug. 3, 1909.

Application filed May 7, 1908. Serial No. 431,381.

To all whom it may concern:

Be it known that I, JOHN RILEY HALDEMAN, a citizen of the United States, residing at Springfield, in the county of Greene and State of Missouri, have invented certain new and useful Improvements in 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 improvements in molds for forming concrete walls, blocks, and the like.

The object of the invention is to provide a mold of this character having means whereby a veneering of finer or different kind of material may be formed on one or both sides of the wall or block.

A further object is to provide a mold having means whereby the sides thereof may be removed without disturbing the frame-work or guide studding.

With these and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of the mold showing the parts arranged in position for use, and illustrating the manner in which one of the sides of the same is released and permitted to be moved away from the wall; Fig. 2 is a cross sectional view of the mold shown in Fig. 1, with the concrete veneering and the concrete block arranged therein; Fig. 3 is a detail perspective view of the partition for forming the veneering; Fig. 4 is a similar view of one of the sections of core blocks; Fig. 5 is a perspective view of a slightly modified form of mold for constructing cellar walls and the like; and Fig. 6 is a detail perspective view of the inner side of one of the side boards of the mold shown in Fig. 5.

Referring more particularly to Figs. 1 to 4 of the drawings, 1 denotes the mold, which consists of the side boards, 2 and 3. To the outer side of the side boards, 2, is connected a series of upwardly projecting supporting bars, 4, the upper ends of which are preferably notched as shown at 5. To the outer side of the side board, 3, is pivotally connected a series of supporting bars, 6, the upper ends of which are also notched or recessed as shown at 7. The upper ends of the supporting bars, 4 and 6, are connected together by removable cross bars, 8, the ends of which are adapted to be engaged with the notched upper ends of the bars, 4 and 6, as shown. Through the notched upper ends of the bars and the ends of the cross bars, 8, are formed alined apertures, through which are inserted fastening pins, 9, by means of which the cross bars, 8, are held in place and the upper ends of the supporting bars secured together. The outer sides of the bars, 6, adjacent to their lower ends are formed with recesses, 10, the purpose of which will hereinafter appear.

In the lower edges of the side boards, 2 and 3, adjacent to the supporting bars, are formed notches or recesses, and in said notches are arranged transversely disposed supporting and clamping bars, 12, said bars extending across the lower side of the mold, and through said notches or recesses in the side boards. The ends of the bars, 12, project beyond the outer sides of the side boards, and are provided with a recess or aperture adapted to receive clamping pins, 13, whereby the lower portions of the side boards of the mold are held in position. The upper portions of the side boards are held in position by means of the cross bars, 8, which are secured to the upper ends of the supporting bars, 4 and 6, as hereinbefore described.

In order to provide means for forming a veneering on one or both sides of the wall or block formed by the mold, I provide one or more thin partitions, 14, which correspond in size and shape to the side boards, and are adapted to be arranged in the mold adjacent to the inner sides of one or both of said boards and are spaced a suitable distance from said inner side by means of flanges, 15. Hingedly connected to the upper edge of the partition, 14, is a cover strip, 16, which is adapted to be folded over to one side or the other of the partition so that the space between the partition and the adjacent side board may be closed while the concrete is being placed between the partition and the opposite side board, thus preventing any coarse material which forms the main wall from entering the space in which the veneering is formed. In using the mold, the larger space between the partition and the side board is first filled with coarse concrete to form the main body of the wall, after which the finer material which forms the veneer is placed between the partition and the opposite side board. After the veneering and the coarse

material have been suitably tamped, the partition, 14, is carefully drawn out, thus permitting the contiguous surfaces of the veneering and mold section of the wall to unite without mixing. The cover strip, 16, is provided with a series of hand-holes, 17, whereby the withdrawal of the partition from the wall is greatly facilitated.

In order to form suitable air spaces in the wall, I provide a series of core blocks, 18, which are preferably arranged in sections of three or more blocks, and secured together at their upper ends by a connecting strip, 19, said strip also serving to form connecting channels for connecting the upper portion of the core holes in the wall, thus providing for a perfect circulation of air through the wall.

In using the mold for forming the wall, a framework of perpendicular studding is preferably provided to guide and hold the mold sections in perpendicular alinement when raised to form the successive sections of the wall.

When the parts of the mold have been assembled as shown in Fig. 1, and are in position for use, the outer edges of the supporting bar, 6, are placed against the vertical studding which holds the mold in position while being filled. After the wall has become sufficiently set or hardened, the upper cross bar, 8, is disengaged from the upper ends of the supports, 4 and 9, and the pins, 13, are removed from the apertures in the bars, 12. The supporting bars, 6, are now turned or swung on their pivots in position to bring the recessed portion 10 thereof across the studding, thereby providing space which will permit the side board, 3, to which the supports, 6, are pivoted, to be moved laterally or away from the side of the wall, after which the opposite side board is disengaged from the opposite side of the wall, and the parts of the mold are then ready to be raised to the position for forming the next layer or section of the wall.

In Figs. 5 and 6 of the drawings is shown a slightly modified construction and arrangement of the mold, the same being here shown as arranged for forming a cellar wall or similar walls wherein one side of the concrete wall engages or is built up against an earth wall or other formation. When constructing a wall of this character, it is only necessary to employ one side board, 20, said board being held in position by means of a framework of vertical studding as clearly shown in Fig. 5 of the drawing. The side board, 20, is spaced from the studding when arranged in position for use by means of pivoted spacing blocks, or bars, 21, said blocks being provided on their outer edges with longitudinally disposed recesses, 22. The blocks, 21, are pivotally connected to the outer side of the board 20, midway between their ends, and are adapted to be turned lengthwise of the board to bring the recessed portion thereof across the studding, thus providing spaces which will permit the side board 20 being drawn back away from the side of the wall to allow the board to be raised on the studding in the position for forming the next layer or section of the wall. In forming the wall in the manner just described, the same may be constructed with a veneering by the use of the partition, 14, and in the same manner as described in connection with the first form of mold, and this form of wall may be also provided with core holes or dead air spaces by the use of the core blocks, 18, and connecting strip, 19, as previously described.

When using the mold for forming blocks, the side boards will, of course, be of shorter length than when forming a wall, and suitable means may be provided for closing the ends of the space between the side boards. In other respects the use of the mold in forming blocks will be very similar to the use described in connection with the formation of a wall.

In constructing a wall, the connecting channels formed by the core connecting strips, 19, are covered by strips of tarred paper to prevent the channels from being filled up when the successive layers of the wall are formed.

From the foregoing description, taken in connection with the accompanying drawing, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined in the appended claims.

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

1. In a mold of the character described, the combination with the side boards of the mold, of means to support the same in operative position, removable partitions adapted to be arranged adjacent to the inner sides of the side boards to form a veneering on one or both sides of the molded structure, means to space said partitions from the side boards, and means on said partition to close said space, said means also serving to facilitate the removal of the partitions, substantially as described.

2. A mold for forming concrete walls, comprising side boards, guide studding to hold the mold in its adjusted positions for forming a perpendicular wall, supporting bars pivotally connected to one of said side boards to engage said studding, said bars having recesses formed therein whereby when turned out of engagement with said

studding, will permit the side board of the mold to be moved away from the molded sections of the wall, substantially as described.

3. In a mold of the character described, the combination with the side boards of the mold, of means to support the same in operative position, removable partitions adapted to be arranged adjacent to the inner sides of the side boards to form a veneering on one or both sides of the molded structure, and means to cover the space between said partition and the adjacent side boards when the main portion of the mold is being filled.

4. In a mold of the character described, the combination with the side boards of the mold, of means to support the same in an operative position, removable partitions adapted to be arranged adjacent to the inner sides of the side boards to form a veneering on one or both sides of the molded structure, and a cover strip hinged to the upper end of said partition and adapted to cover the space between the same and the adjacent side boards when the main portion of the mold is being filled.

5. In a mold of the character described, the combination with the side boards of the mold, of means to support the same in an operative position, removable partitions adapted to be arranged adjacent to the inner sides of the side boards to form a veneering on one or both sides of the molded structure, and a cover strip hinged to the upper end of said partition and adapted to cover the space between the same and the adjacent side boards when the main portion of the mold is being filled, said cover strips having formed therein hand-holes whereby said strip serves as a means for withdrawing said partitions.

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

JOHN RILEY HALDEMAN.

Witnesses:
J. L. HINE,
W. F. ESTES.