No. 884,166. PATENTED APR. 7, 1908.

E. G. KEMPER.

MOLD PLATE FOR CONCRETE CONSTRUCTIONS.

APPLICATION FILED FEB. 14, 1907.

Fig. 1.

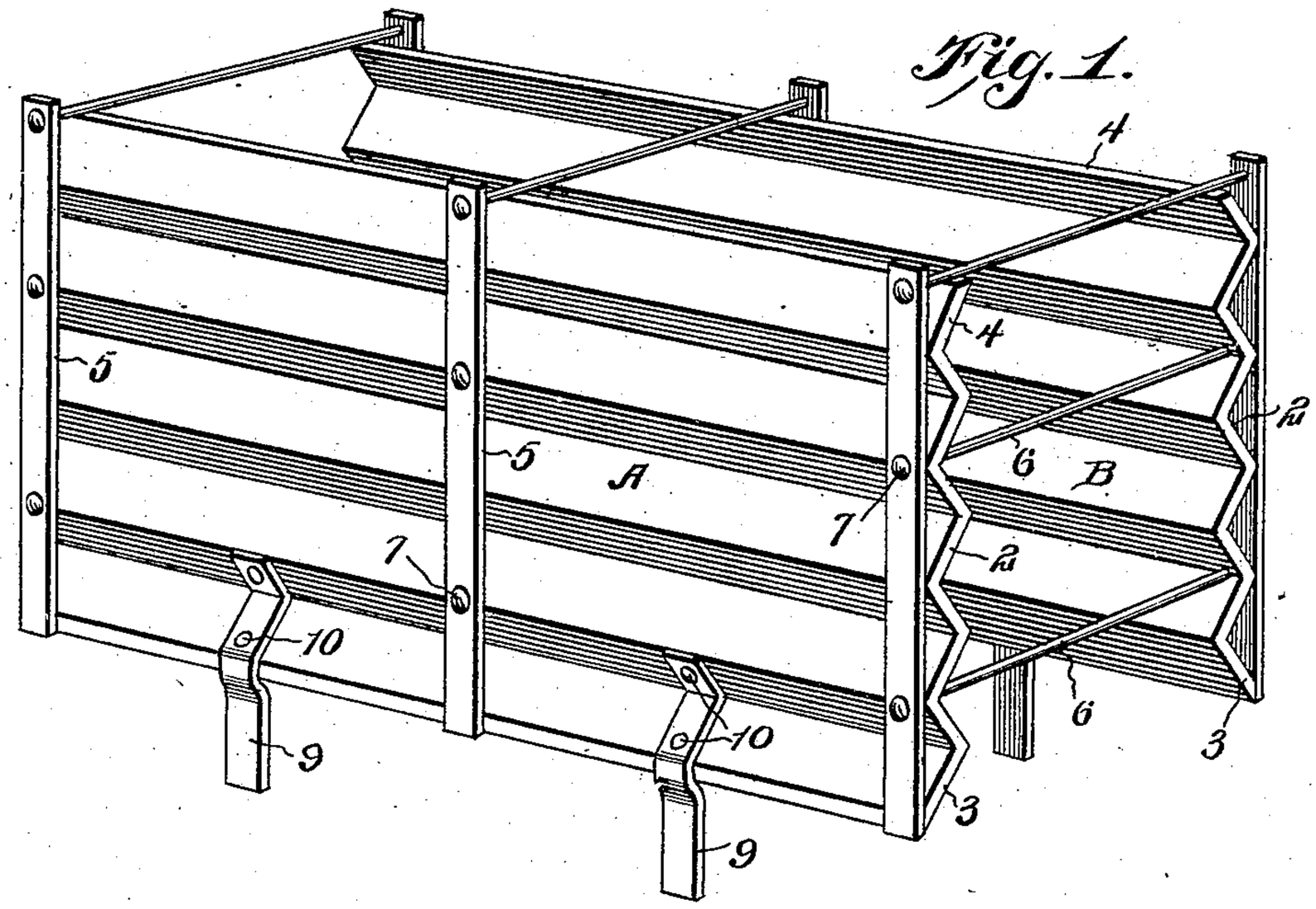
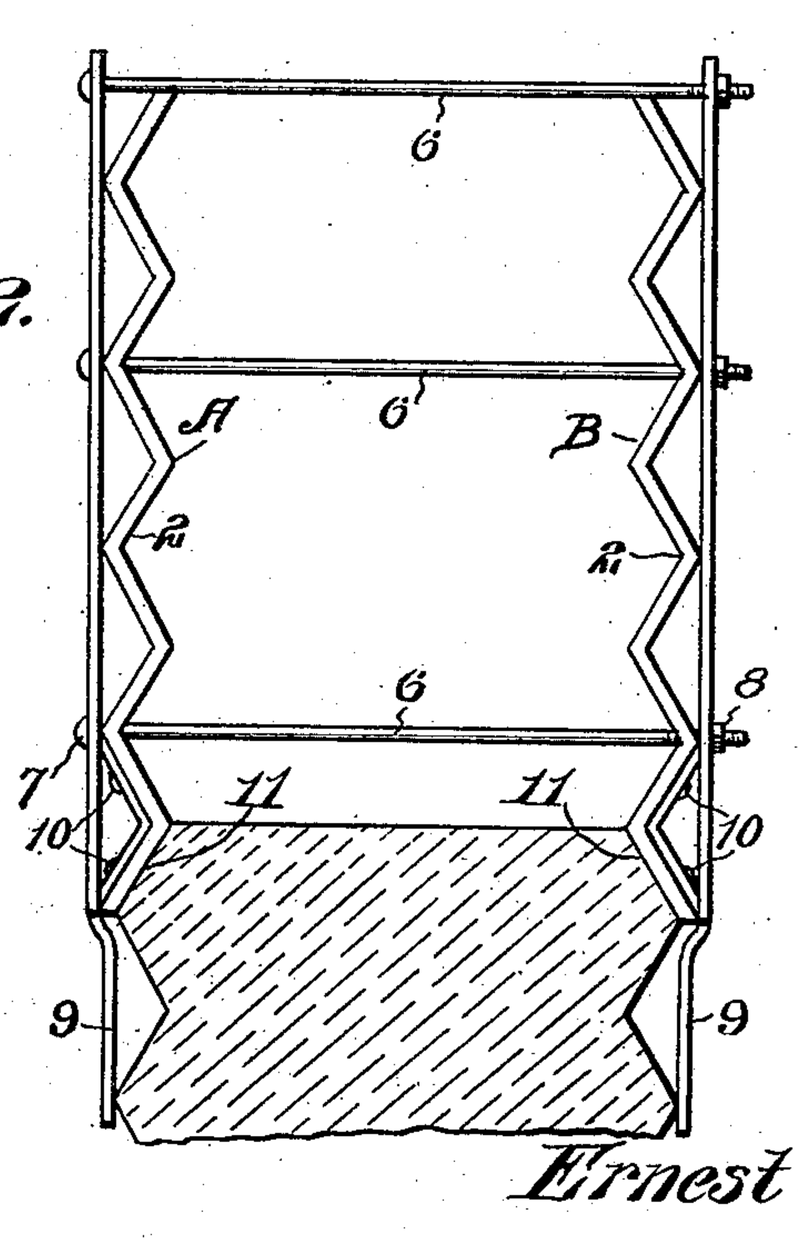


Fig. 2.



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MOLD-PLATE FOR CONCRETE CONSTRUCTION.

No. 884,166. Specification of Letters Patent. Patented April 7, 1908.

Application filed February 14, 1907. Serial No. 357,311.

To all whom it may concern:

Be it known that I, ERNEST G. KEMPER, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented new and useful Improvements in Mold-Plates for Concrete Construction, of which the following is a specification.

This invention relates to the construction of walls of concrete, cement or analogous plastic material; and it has for its object to dispense with the cumbersome and expensive wooden cribbing which is usually employed, and to enable walls of this character to be constructed more simply, efficiently and inexpensively than by means heretofore employed.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the said invention consists in mold plates of a simple and improved construction; said mold plates adapted to be shifted or transferred as the construction of the wall progresses.

The invention further consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention; it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention may be resorted to when desired.

In the drawings, Figure 1 is a perspective view showing a pair of mold plates constructed in accordance with the principles of the invention, said mold plates being separably connected with each other by means of transverse binding rods. Fig. 2 is an end view showing the mold plates in position upon the principal edge of a wall in process of constuction, said wall being shown in section.

Corresponding parts in both figures are denoted by like characters of reference.

The mold plates A and B of the present invention are preferably constructed of sheet metal, such as steel; said plates being of any desired dimensions, and provided with longitudinal corrugations 2—2, said corrugations being formed by bending the plates to form alternately disposed ribs and grooves, adjacent to each other, throughout the said plates. It is preferred that said corrugations terminate at the lower edges of the plates in outward-projecting flanges 3—3 and at the upper edges of said plates in inward-projecting flanges 4—4.

The plates A and B are reinforced at intervals by means of vertically disposed strips or bars 5—5, which are secured exteriorly of the ribs formed by the corrugations of the plates, and are connected with each other at intervals by means of transverse binding rods 6—6 extending through the reinforcing strips 5 and provided at their respective ends with heads 7 and nuts 8. The plates A and B are provided at their lower edges with downward extending lugs 9—9 secured exteriorly upon said plates by rivets 10 or other suitable fastening means.

It will be seen that the legs 9—9 are permanently connected with the corrugated mold plates, while the reinforcing strips or bars 5—5 are detachably connected with said mold plates by means of the transverse binding rods 6. The bars or strips 5 will preserve the shape of the corrugated plates which latter, even when made of light material, will thus be enabled to support the weight of the plastic material which, in operation, is disposed between said plates, and the integrity of the corrugations of said plates will be accurately preserved; this is obviously important in order to insure neatness and proper finish.

In the practical employment of the improved mold plates, said plates are connected with each other by the binding rods 6, said plates being spaced apart a distance equal to the thickness of the wall that is desired to be built. A row or tier of the mold plates are supported upon the ground or upon the foundation, after which the concrete or other plastic material that is to be employed in the construction of the wall is deposited in the space between the plates. After permitting the material to set and harden for a suitable length of time, the binding rods are withdrawn, and the mold plates are removed, said plates being now transferred to the upper edge of the wall where they are again connected with each other by means of the binding rods 6, as will be clearly understood by reference to Fig. 2 of the drawings. It will be observed that the downward projecting lugs 9 will engage the sides of the wall, and will thus assist in preventing the lower ends of the plates from collapsing inwardly before

the intervening space is filled with plastic material; it will be further observed that the divergent flanges 3—3 at the lower edges of the plates will rest firmly upon the inclined surfaces 11—11 formed or molded at the upper end of the wall in the process of construction of the previous course.

As will be seen from the foregoing description, this invention possesses in a high degree the requisites of simplicity, inexpensiveness and adaptability to ordinary plastic wall constructions. The ordinary wooden cribbing is entirely dispensed with, and a set of the improved mold plates may be used indefinitely. Owing to the corrugated form of the plates, light material may be employed in the construction thereof; it being understood that the corrugations will be comparatively small, so as not to detract from the appearance of the wall. The mold plates are also considerably braced and reinforced by the strips or bars 5—5, it being understood that the latter may be permanently attached to said plates, if preferred; usually, however, said reinforcing strips will be made separate to the mold plates, thus permitting said plates to be nested together in convenient shape for shipment or storage.

Having thus fully described the invention, what I claim is:—

A pair of sheet metal mold plates for concrete construction provided throughout with longitudinal corrugations including divergent terminal flanges at the lower edges and convergent terminal flanges at the upper edges of said plates, and downward extending lugs at the lower edges of said plates, in combination with exteriorly disposed reinforcing strips, and binding rods extending transversely through the plates and the reinforcing strips.

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

ERNEST G. KEMPER.

Witnesses:
E. R. BRYAN.
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