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MOLDS



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## 3,124,858 MOLDS

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The present invention has for its object a mold or shuttering of metal, wood or plastic material, reinforced or 10 otherwise, for the execution of structures made of concrete or the like material adapted to be molded.

My improved mold or shuttering is constituted by panels of a generally flat and rectangular shape, including a peripheral frame having a U-shaped cross-section, so 15 as to form outwardly directed flanges, while the web is perforated. In an auxiliary manner, there are provided corner panels, incurved panels and expansible panels, so as to allow molding structures of any shape or size.

According to the present invention, the panels are inter-20 connected without the use of keys, bolts or screws, by means of assembling members, in the shape of a cross, of a T or of an L. The cross-section of said assembling members is such that they may be inserted along the peripheries of the panels and ensure, in addition to the 25 desired rigid connection, a perfect alignment of such panels. Furthermore, one half of the arms of said connecting members is provided with stationary pins which, at the moment of the assembly, are fitted in the perforations provided exclusively at the periphery of the cooperation gava from moving away from each other in a direction perpendicular to the axis of such pins.

The arms of said members which are not provided with such pins, are provided with open perforations adapted 35 to carry removable studs. The studs serve for holding the panels rigidly together along two orthogonal directions of the surface formed by them; thus, large assemblies of panels may be shifted as a unit, without any disassembling of the component panels. 40

Lastly, the various panels and connecting members of the mold have size ratios such that it is possible to assemble panels positioned in a vertical direction with panels arranged horizontally. The assembling system allows also removing one or more panels from the inside of a panel 45 assembly, without detrimentally affecting the rigid cohence of the remaining assembly.

The accompanying drawings illustrate, by way of example, a preferred embodiment of a mold according to the invention. In said drawings:

FIG. 1 is a perspective view of a mold panel.

FIG. 2 shows an assembling member in the shape of a cross, adapted to serve for the connection of four panels.

FIG. 3 is a **T**-shaped assembling member serving for the interconnection of two adjacent panels. 55

FIG. 4 is an L-shaped member to be used along the free corner of a single panel.

FIG. 5 shows four assembled panels with the reinforcing elements omitted.

FIG. 6 illustrates diagrammatically a few manners of 60 assembling the panels.

Turning to FIG. 1, 1 designates the periphery of the panel provided with a U-shaped cross-section, while 1adesignates perforations or openings formed at the bottom of the groove thus divided and adapted to be engaged by stationary or removable studs. In FIG. 2, 2 designates a cross-shaped connecting member, while 2a designates perforations or openings formed in one arm of said member, 2b studs rigid with the other arm of said member and 2c perforations or openings provided for the insertion of transverse stavs.

The T-shaped member illustrated in FIG. 3 is provided similarly with perforations or openings 3a, with studs 3band with further perforations 3c for the insertion of lateral stays, while the L-shaped member illustrated in FIG. 4 is provided with perforations at 4a, a stationary stud at 4b and a further perforation or opening at 4c for the insertion of a transverse stay.

It is readily apparent from inspection of FIG. 5 illustrating an assembly of four panels, that the studs rigid with the assembling members prevent the panels from shifting away from each other in a horizontal direction and as soon as removable studs are inserted inside the open perforations in the vertical sections of the panels and assembling members, the panels can no longer be shifted away from each other in a vertical direction.

FIG. 6 illustrates the assembly of any number of panels and some inner portions of the assembly are devoid of panels, so as to serve, for instance, for the insertion of doors or windows, in the case of the molding of walls.

Obviously, the invention is not strictly limited to the examples illustrated and it covers all the arrangements falling within the scope of the accompanying claims.

What I claim is:

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1. A mold comprising a rigid system of coplanar rectangular panels of which each side includes an outer outwardly facing channel-shaped member, the channelshaped members on the cooperating sides of any two adjacent panels registering with each other to form a passage between said sides, and a plurality of assembling, aligning and locking members fitted throughout the breadth of the pasages formed by the channel-shaped members of the cooperating panels having a common apex and including two sections extenting longitudinally in said passages respectively in two directions perpendicular to each other along fractions of the corresponding panel sides which meet at said apex, and means rigidly interconnecting said assembling members with the cooperating panels.

2. A mold comprising a rigid system of coplanar rectangular panels of which each side includes an outer outwardly facing channel-shaped member provided with spaced holes formed in the bottom of said channel-shaped member, the channel-shaped members on the cooperating sides of any two adjacent panels registering with each other to form a passage between said sides, and a plurality of assembling, aligning and locking members fitted throughout the breadth of the passages formed by the channelshaped members of the cooperating panels having a common corner and including two sections extending longitudinally in said passages respectively in two directions perpendicular to each other along fractions of the corresponding panel sides which meet at said corner, the sections extending in one direction being provided with perforations registering with the perforations provided in the cooperating channel-shaped members, pins rigid with the sections extending in the other direction and engaging the perforations in the cooperating channel-shaped members, and removable pins engageable through the perforations in the first-mentioned sections and the perforations in the associated channel-shaped members.

3. A mold comprising a rigid system of coplanar rectangular panels of which each side includes an outer outwardly facing channel shaped member, the channelshaped members on the cooperating sides of any two adjacent panels registering with each other to form a passage between said sides, and a plurality of assembling, aligning and locking members fitted throughout the breadth of the passages formed by the channel-shaped members of the cooperating panels having a common apex and including two sections extending longitudinally in said passages respectively in two directions perpendicular to each 3 other along fractions of the corresponding panel sides which meet at said apex, means rigidly interconnecting said assembling members with the cooperating panels and means on said locking members for securing transverse stays to maintain parallel panels in fixed spaced position. 5

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