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(54) Shuttering tray

(57) Of the type whose structure is based on a panel (1) composed of a series of dovetailed tongue-and-grooved planks, whose edges intended to move on the press guides are reinforced by means of metal, channelled sections (4), focuses its characteristics on the said sections being overdimensioned in length, in such a way that at each of their ends their middle branch (9) is bent orthogonally towards the concave area of the section, by means of a bend (5), at the same time that their lateral branches do so simultaneously and on the previous bend, forming in their turn coplanar bends (6-6') that make contact with one another via their free edge (7) and which form for each end of the metal section perfectly flat faces, rounded vertices and edges (8) and a multilayer structure that considerably increases their mechanical strength.

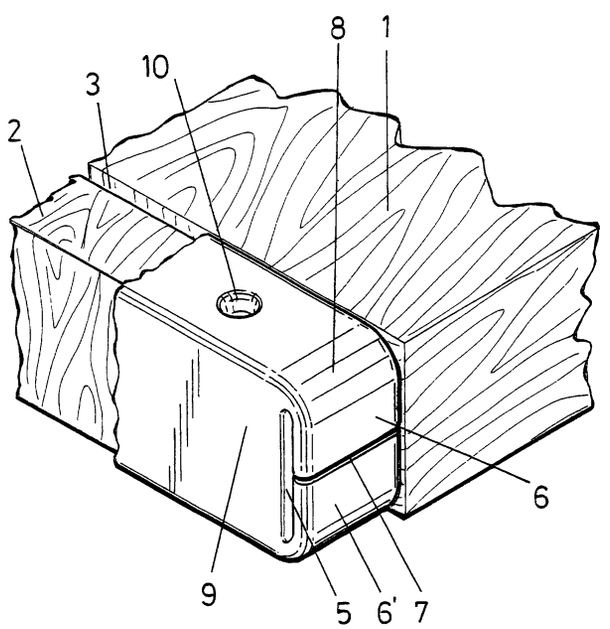

FIG.5

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Description

SUBJECT OF THE INVENTION

[0001] The present invention refers to a shuttering tray or panel, of the kind intended to move on the guides of concrete precasting fixed presses, a tray that has been considerably improved in order to enhance its functional performances, specifically ensuring greater solidity between the two components of the tray (wood and metal section) so that they are solidly capable of withstanding the enormous pressures and vibrations to which they are subjected in the aforesaid presses for compacting the concrete, avoiding the usual jamming in the aforesaid guides.

BACKGROUND OF THE INVENTION

[0002] As is known, the trays for precastings of the type referred to in the previous paragraph are structured on the basis of a plurality of boards or strips fitted parallel to one another, in a coplanar arrangement, generally by means of multiple joints in dovetail fashion, in order to obtain a rectangular panel, of suitable dimensions, which will usually be from 900 x 500 x 30 mm to 1,500 x 1,500 x 50 mm, the opposing edges of the panel thus obtained, which have to slide on the guides of the concrete presses being reinforced with the aid of channelled sections, generally of galvanized plate, with a thickness in the region of 2 mm, which with a "U" section with a slightly narrowed mouth, previously cut and grooved on the corresponding marginal areas of the panel, are suitably attached to the latter.

[0003] More specifically, these channelled sections have their ends open with a simple flattening, or closed, by means of a detachable cover or by means of extending and bending its middle branch and fastening these closures with welding beads.

[0004] In any case, these welds having to be peripheral, resulting in many imperfect cases, offer little and insufficient mechanical strength, and produce projections that cause the trays to jam in the concrete press guides fairly often, which obviously has a negative effect on the plant's productivity.

DESCRIPTION OF THE INVENTION

[0005] The shuttering tray for concrete precasting presses that the invention proposes, based on a conventional basic structure, i.e. a panel with its edges for sliding on the concrete press guides reinforced by means of metal sections, focuses its characteristics on a special finishing piece or end closure for such metal sections, which solve the problems described previously in a completely satisfactory manner for the various aspects discussed.

[0006] Accordingly, and more concretely, the aforementioned channelled metal sections have been designed to be closed at their ends by means of bending, specifically by means of an orthogonal bend in the middle branch of the section simultaneously with the bending of the lateral branches, which overlap outside the bend of its middle branch and which come directly into contact with one another at their edges.

[0007] A multiple effect is achieved in this way, ranging from an absence of welds in the parts that directly affect the press guides to a significant stiffening of the ends of the section, the participation of superimposed "triple layers" of plate at each of the said ends, and including a marked rounding of the lateral edges of each end of the section, which ensures a complete absence of risk of jamming of the trays on the concrete press guides.

DESCRIPTION OF THE DRAWINGS

[0008] To complete the current description and in order to aid better understanding of the characteristics of the invention, according to a preferred example of its practical implementation, a set of drawings is attached as an integral part of this description, in which the following have been shown illustratively and non-restrictively:

[0009] Figure 1.- Shows a side elevation view of one of the ends of the channelled metal section that forms part of the precasting tray forming the subject of the present invention.

[0010] Figure 2.- Shows an axial view of the section represented in the previous figure.

[0011] Figure 3.- Shows a detail in section along the line of section A - B of figure 2.

[0012] Figure 4.- Shows another side elevation view of the section represented in figure 1, but on its inside face or opposite that shown in the said figure.

[0013] Figure 5.- Finally, shows a detail in perspective of one of the corners of a precasting tray fitted with the metal section of the previous figures.

PREFERRED EMBODIMENT OF THE INVENTION

[0014] Looking at these figures, especially figure 5, it can be observed how the concrete precasting shuttering tray proposed by the invention is formed, like any conventional tray of this type, by means of a panel (1) composed of a plurality of boards or planks, suitably fixed together by means of tongue-and-grooved joints in multiple dovetails, a panel presenting two opposing edges (2) rebated on both sides, forming steps provided with a groove (3) on its edge, for connecting a metal, channelled "U" section (4) with its narrow mouth, a mouth that is fitted into the aforesaid groove (3), these metal sections (4) forming the means of stiffening of the tray and especially the means of sliding on the guides of the concrete press for which the tray is intended.

[0015] Thus, based on this basic and conventional structure, the invention is focused on the fact that the

traditional closure at each of the ends of the metal, channelled sections (4), is achieved, after their suitable overdimensioning, by means of simple bending, specifically by means of a bend (5) in its middle branch towards the concave area of the section, parallel to a bend (6 - 6') in its lateral branches until these contact at their free edges (7), thus achieving, as observed especially in figure 5, that the marginal areas of the tray intended to slide on the guides of the press present rounded edges (8) on their reinforcing sections, ensuring perfect sliding on the said guides, a perfectly flat external face (9) and finally a multilayer structure at each end of the metal sections (4), as observed especially in the section in figure 3, which considerably increases their mechanical strength.

[0016] Accordingly, these metal, channelled sections (4) will be fixed to the panel (1), not only via the narrowing of its mouth that fits into the aforesaid grooves (3), but also by means of the traditional punchings (10) in its lateral branches, preferably cylindrical, which in their own shaping and due to the tearing of material generate insertion and fastening tabs in the wood.

Claims

1. Shuttering tray for precastings, of the type intended to be used in fixed concrete presses, in the form of a panel (1) based on dovetailed tongue-and-grooved planks, with its edges intended to move on the press guides reinforced by means of metal, channelled sections (4), preferably of galvanized plate, with their narrow mouth and closed at both ends, characterized in that the said metal sections (4) incorporate at each of their ends a closure in the form of a bend (5-6-6') in the plate composing them, which simultaneously affects its middle branch and its lateral branches, in such a way that its middle branch is bent orthogonally towards the concave area of the section whilst its lateral branches are also bent orthogonally and overlap outside the said middle branch until they make contact with one another via their free edge (7), forming for the section a perfectly flat middle branch, rounded lateral edges (8) and an end wall that is also noticeably flat, with a middle level line of closure where a single weld can be accommodated that does not affect the press guides.

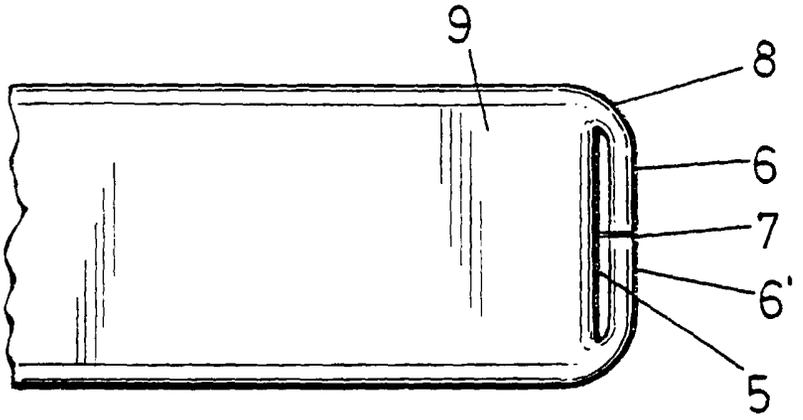

FIG.1

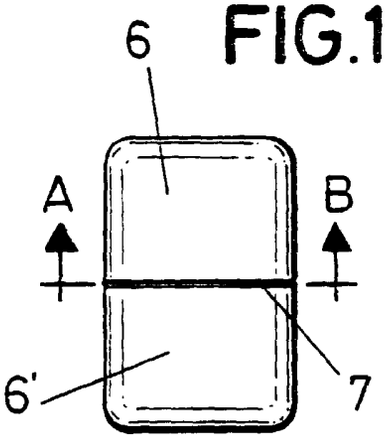

FIG.2

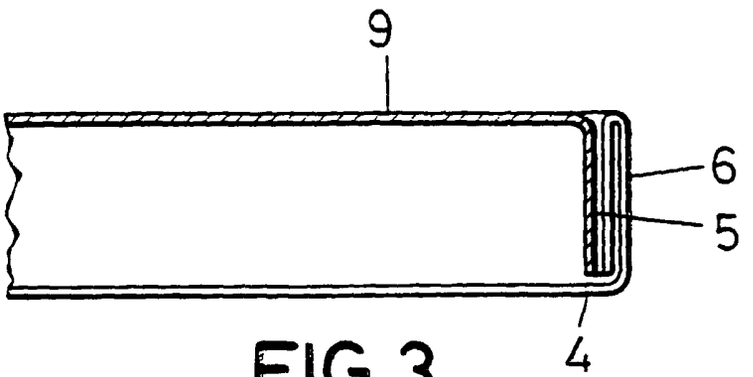

FIG.3
A-B

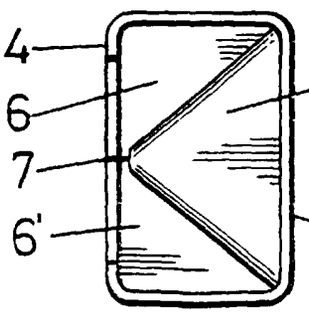

FIG.4

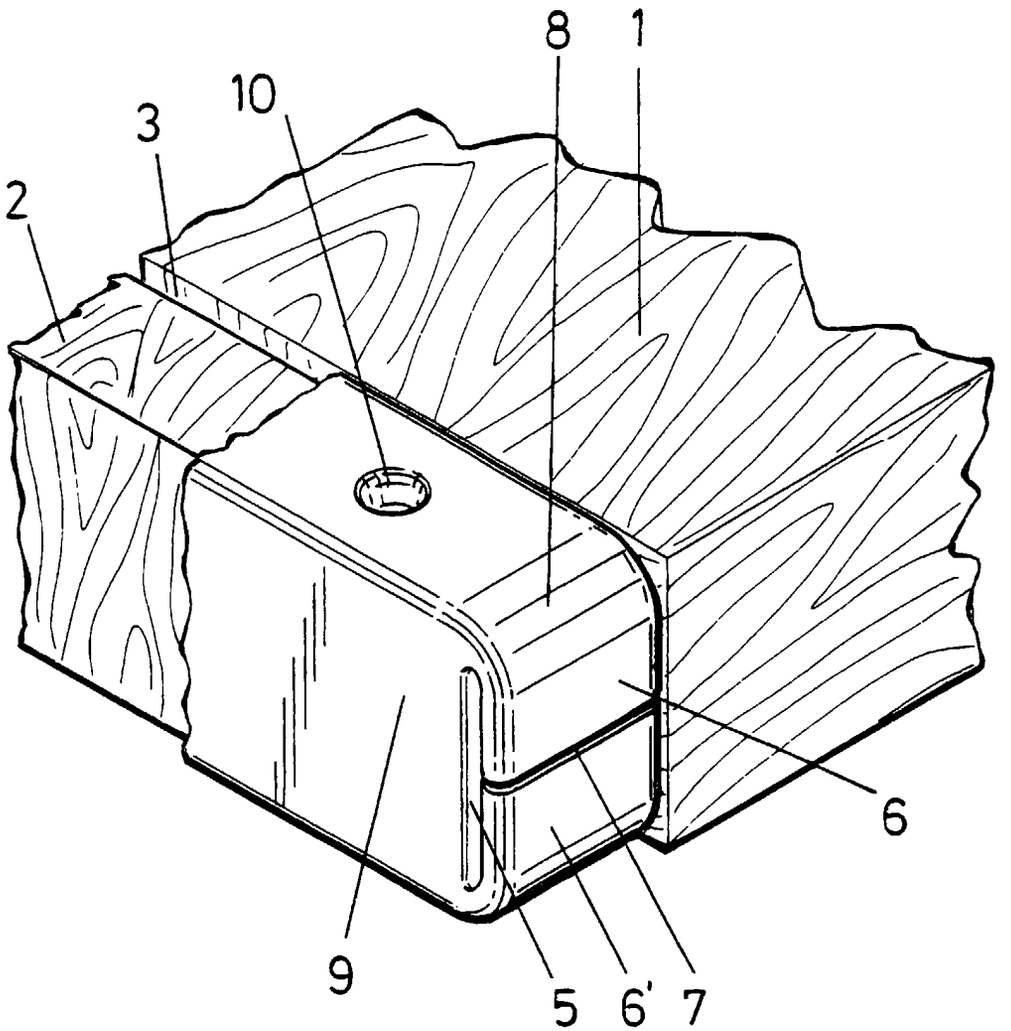

FIG.5