May 24, 1955

W. McMULLAN

2,708,781

FORM SUPPORTED INSERT

Original Filed Aug. 6, 1947

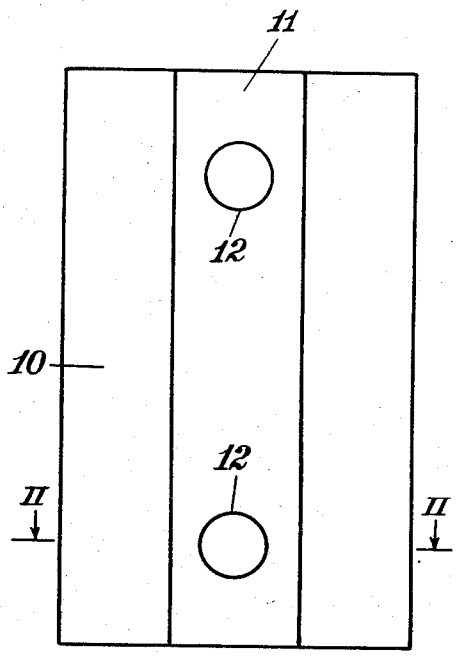


FIG : 1.

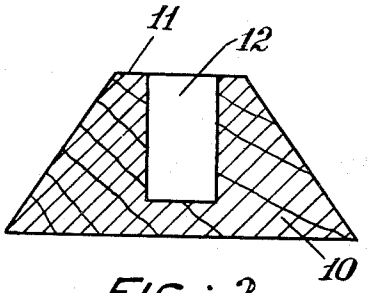


FIG : 2.

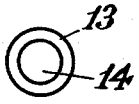


FIG : 3.



FIG : 4.

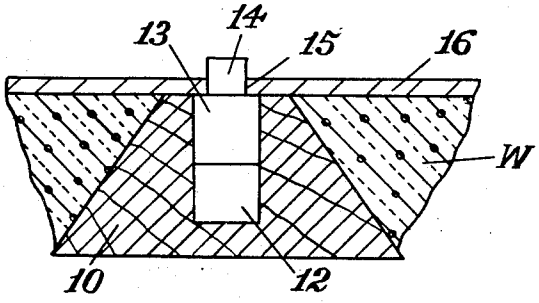


FIG : 5.

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2,708,781

FORM SUPPORTED INSERT

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Original application August 6, 1947, Serial No. 766,547. Divided and this application June 16, 1950, Serial No. 168,432. In Great Britain January 5, 1946

Section 1, Public Law 690, August 8, 1946
Patent expires January 5, 1966

2 Claims. (Cl. 25—131)

This application is a divisional application, divided out of applicant's co-pending application, Serial Number 766,547, filed August 6, 1947, now Patent No. 2,574,274, dated November 6, 1951.

This invention relates to the construction of cast walls or like structures formed by means of shuttering which includes panels that are adapted for a sliding or lifting movement with respect to the structure face.

An object of the invention is to enable the ready incorporation in the structure during its formation of inserts or grounds for the subsequent fixing to the structure of architraves, picture rails, skirtings and so on.

Other objects and advantages will be apparent in the course of the following description.

In order that the invention may be clearly understood, the following more specific embodiment will now be described, by way of example, with reference to the accompanying drawing, in which:

Fig. 1 is a view of an insert or ground to be embedded in a concrete wall;

Fig. 2 is a sectional view on the line II—II of Fig. 1;

Fig. 3 is an end view of a dowel;

Fig. 4 is a side view of the dowel; and

Fig. 5 is a fragmentary sectional view showing the assembled insert, dowel, shutter panel and wall.

Referring to the drawing, the insert consists of a strip **10** of wood or the like of suitable length and of a cross-section suitable for retaining it securely in the wall, for instance, of dovetail cross section as shown in Fig. 2. On the narrower face **11** of the strip **10** are formed two or other suitable number of spaced cylindrical recesses **12** of substantial depth. These recesses **12** are adapted to receive dowel pins of wood (Figs. 3 and 4) or other suitable material which consist of a body portion **13** adapted to fit into the corresponding recess **12** and of a head portion **14** of lesser diameter adapted to fit through an aperture formed as a circular hole **15** in the shuttering or shutter panel **16**. The overall length of the dowel pin does not exceed and is preferably less than the depth of the recess **12**.

In use, the head portions **14** of the dowel pins are inserted from the inside face into the holes **15** in the shuttering **16**. Then the insert strip **10** is forced on to the dowel pins with its recesses **12** engaged by the body portions **13** of the dowels. Thus the strip **10** is secured to the inside of the shuttering **16**, this operation being

conducted entirely from the one side which is an important advantage with shuttering which includes panels that are adapted for a sliding or lifting movement with respect to the wall or like structure. When the wall W has been cast to a level corresponding to the top of the shuttering and the shuttering **16** has to be raised for the next casting operation, the dowel pins are driven further into the recesses **12** so that they clear the holes **15** in the shuttering **16** and thus enable the latter to be lifted.

I claim:

1. In a structure for the formation of walls or like building structures by casting, the combination with a shutter panel having an aperture therethrough and a dowel pin having a head portion removably positioned in the aperture of the shutter and a body portion of greater thickness than the head portion and forming a shoulder between said portions for limiting the movement of the head portion inwardly of the aperture to position the pin transversely with respect to the shutter panel, and an insert releasably supported on said pin by engagement of the body portion thereof with the wall of a recess in the said insert, the length of the said recess being at least equal to the length of the pin to permit the pin to be driven wholly into the said recess to disengage the head portion of the pin from the shutter panel.

2. In a structure for the formation of walls or like building structures by casting, the combination with a shutter panel having a plurality of spaced apart apertures extending therethrough of a plurality of like, substantially cylindrical dowel pins equal in number to the number of said apertures each of said pins having a head portion removably insertable in one of said apertures and a body portion of larger diameter than the head portion and forming an annular shoulder between said portions for limiting movement of the head portion inwardly of the aperture to position the pin transversely of the shutter panel, and an insert having a plurality of spaced apart recesses of like number and equal interspacing as said apertures and releasably supported on said pins in engagement with the shutter panel by engagement of the respective body portions of the several pins with the walls of the recesses, the length of each recess being at least equal to the length of one of said pins to permit the pins to be driven wholly into the recesses to disengage the head portions of the pins from the shutter panel.

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