March 16, 1965 S. M. PONTIERE 3,173,187

COMBINED MOLD FORM AND INSULATOR PANEL SUPPORT

Filed Oct. 10, 1963

FIG-1

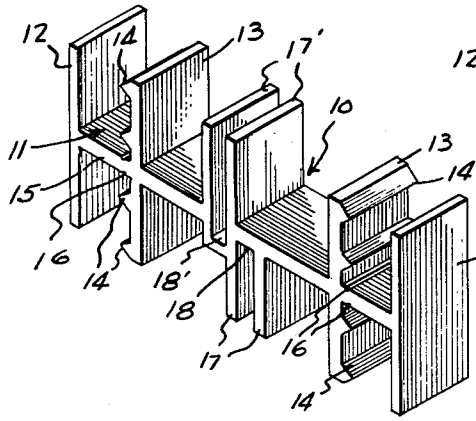


FIG-2

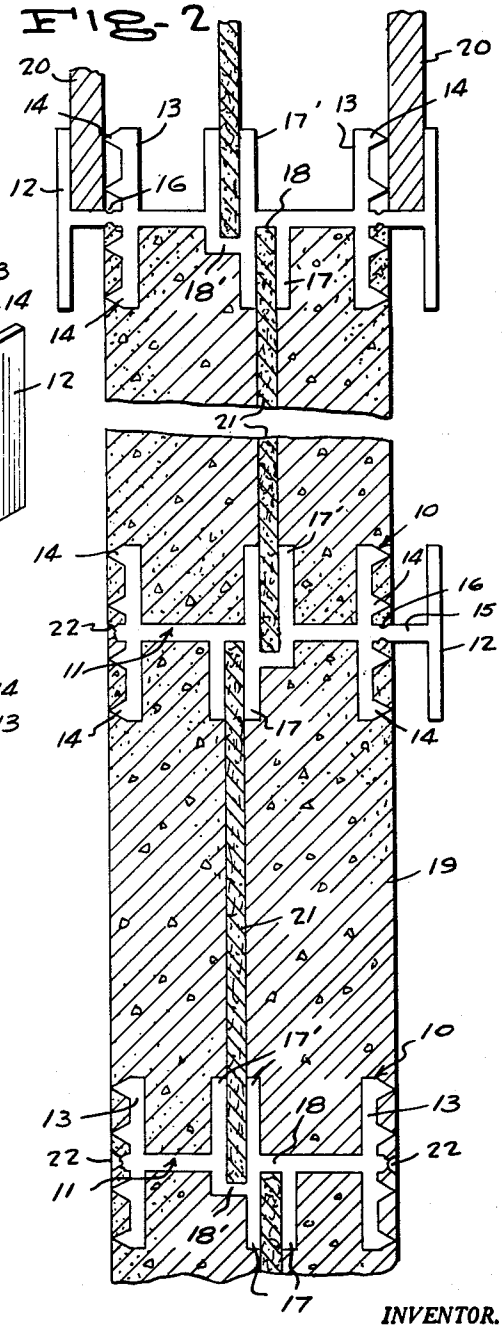
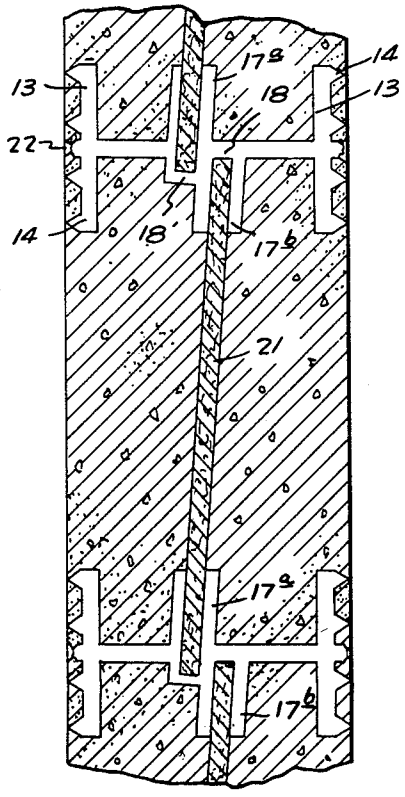


FIG-3



INVENTOR.

STANLEY M. PONTIERE

BY

Sherwin Levy ATTORNEY

United States Patent Office 3,173,187
Patented Mar. 16, 1965

3,173,187

COMBINED MOLD FORM AND INSULATOR PANEL SUPPORT

Stanley M. Pontiere, Ocean City, N.J., assignor of one-half to Harry P. Pontiere, Ocean City, N.J.

Filed Oct. 10, 1963, Ser. No. 315,216
3 Claims. (Cl. 25—131)

This invention relates to a means for use in construction of molds for concrete walls or the like and more particularly to a means for supporting insulating panels for incorporation within the cast wall and it consists in the construction, arrangement and combinations herein described and claimed.

It is the cardinal object of the invention to provide a structural member for support of mold boards in the formation of a wall, the structural member having intermediate oppositely disposed spaced plates for support of insulating panels which in the final form of the wall will occupy a position substantially medially of the concrete wall.

More specifically, it is an important object of the invention to provide a combined mold board supporting means and intermediate support means for insulating panels, the combined support comprising a structural member adapted to be set transversely of a wall under construction, the structural member having a pair of spaced plates at respective ends thereof for support of mold boards, the innermost plate of each pair being provided with pointed teeth or projections adapted to engage one side of the mold board when positioned between the plates, the intermediate portion of the structural member having a pair of oppositely disposed parallel plates for reception and support of an insulating panel, the bight portion defined by the pairs of plates being offset upwardly and downwardly with respect to the horizontal axis of the structural member, whereby the insulating panel seated between the pair of plates will be maintained in overlapped relation in the finished wall.

Additional objects, advantages and features of invention will be apparent from the following description, considered in conjunction with the accompanying drawing, wherein:

FIGURE 1 is a perspective view of the combined wall board and intermediate panel support means.

FIGURE 2 is a vertical section of a wall, illustrating various stages of the support means in the construction of a wall; and

FIGURE 3 is a similar view embodying a modification of the means for support of the insulating panel.

Attention is first invited to FIGURE 1 of the drawings for an understanding of the construction of the support means generally indicated by the reference character **10**, and as shown comprises a unit of generally elongated form constructed preferably from cast iron, the main body **11** having terminal ends **12** which are in the form of a plate disposed at right angles to the main body, the juncture between the main body and the plates being medially of the plates **12** so that the plate portions are equally extended at opposite sides of the main body.

Similarly formed integral with the main body there are plate members **13** arranged in opposed and spaced relation to the plates **12**, the faces next adjacent the end terminal plates **12** being provided with at least two transversely extended teeth or projections **14**. The web portion **15** of the main body **11** is formed with a transverse cut **16** spaced slightly outward from the plate **13**, enabling ready severance of terminal ends **12** for a purpose presently to be explained.

The main body **11** intermediate the length between the plates **13** is formed with oppositely directed opposed

plates, the lower plates, as seen in FIGURE 1, being designated as **17**, while the upper plates are identified as **17'**. It will be noted that the bight portion **18** of the plates occupy a plane corresponding to the main body, but the bight portions **18'** defined by the plates **17'** is at a lower level so that the insulating panels will be in overlapped relation.

In use, when erecting a wall, a footing is employed as is customary, upon which the wall **19** is to be erected. The support **10** and a required number of additional ones are set upon the foundation as shown in FIGURE 2, the other being suitably spaced along the foundation, all of which are accurately aligned, so that when the mold boards **20** are set between the plates **12** and **13** of two or more of the supports, the inner faces of the mold boards will be in aligned relation with the propoesd wall. The insulating panel **21** is next positioned between opposed plates **17** and **17'** of spaced supports, it being noted that one panel is in overlapped relation with the next adjacent panel. Due to the sturdy construction of the supports employed, the mold boards will be accurately positioned and held in vertical alignment and retained against pressures developed in the pouring of concrete mixture thereinto.

Preferably, a rather dry concrete mixture is employed which is poured into the form and tamped to force the concrete into close contact with the supports **10** and the insulating panels **21**. It will be noted that the spaced teeth or projections **14** afford spaced contacting engagement upon one side of the mold boards, the spaces between which, will be filled with concrete and this portion of the wall will be rigidly supported against fracture, or cracking during a final step of the operation, as will be described.

After a course has been laid around a foundation, or a short time thereafter, the first course laid will have set to permit removal of the form boards which may be readily accomplished by lifting them from engagement with the plates **12** and **13**, or the plate **12** which is outermost of the mold boards **20**, may be broken along the weakened line **16**. It will be noted that the weakened line **16** lies within the wall and when broken, a slight cavity **22** will be exposed which may be closed or sealed by an application of cement or finishing material which may be applied to the wall as desired.

The form of the invention shown in FIGURE 3 is identical to the first form described, except that the plates 17^a and 17^b are arranged at an angle to the vertical line of the support and the insulation panel **21** will be supported at an inclination.

While I have shown and described a preferred form of the invention, this is by way of illustration only, and I consider as my own all such modifications in construction as fairly fall within the scope of the appended claims.

I claim:

1. In a combined mold form and insulator support, a main body having terminal ends providing plates that are disposed at right angles to said main body, the juncture between said main body and said plates being medially of the plates so that the plates are equally extended at opposite sides of the main body, plate members arranged in opposed and spaced relation inwardly of the first named plates and said plate members coacting therewith to receive mold boards and wherein the inner faces of the mold boards will be in aligned relation with the wall being constructed, the outer surfaces only of said plate members adjacent to and facing said first named plates having a plurality of projections thereon defining teeth, the inner surfaces of said plate members being free of teeth, said teeth affording contacting engagement upon one side of the mold boards, and the spaces between the

teeth being filled with concrete to hide the teeth, said main body further including a web portion that has transverse cuts spaced slightly outwardly from said plate members enabling ready severance of the terminal ends, said cuts being arranged inwardly of the outer surface of the wall, said main body being provided with oppositely directed opposed lower plates and upper plates for receiving insulating panels therebetween, the bight portion of the lower plates being coplanar with and corresponding to the main body, the bight portion defined by the upper plates being at a lower level than said main body so that the insulating panels engaging the upper and lower plates will be in overlapping relation to each other.

2. The structure as defined in claim 1 wherein the bight portion defined by the intermediately positioned upper and lower plates are offset vertically with respect to each other.

3. The structure as defined in claim 1 wherein the bight portion defined by the intermediately positioned upper and lower plates are offset vertically with respect to each other and said last named plates being inclined with respect to the horizontal axis of the main body.

References Cited by the Examiner

UNITED STATES PATENTS

Re. 16,793	11/27	Smith	25—131
1,137,851	5/51	Fahnestock	25—131
1,592,671	7/26	Nichols	25—118
1,725,827	8/29	Pontiere	25—131
2,750,647	6/56	Kreig	25—131
2,791,117	5/57	Bailey	50—348
2,832,212	4/58	Olsen	50—348

MICHAEL V. BRINDISI, *Primary Examiner.*

ROBERT F. WHITE, *Examiner.*