

Aug. 12, 1924.

1,504,478

G. W. HYSER

PANEL BOARD SUPPORT

Filed April 12, 1921

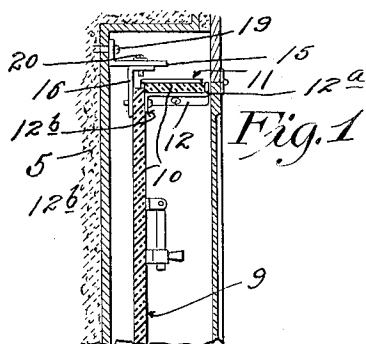


Fig. 1

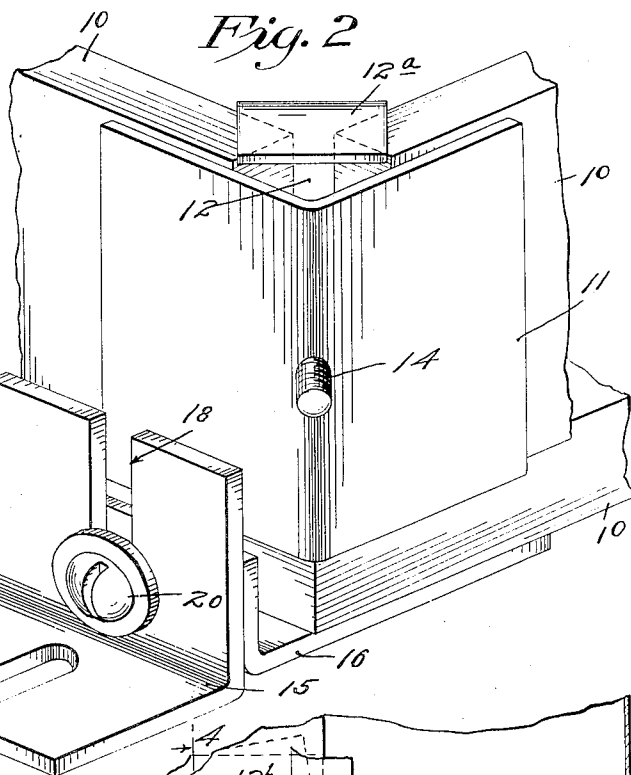


Fig. 2

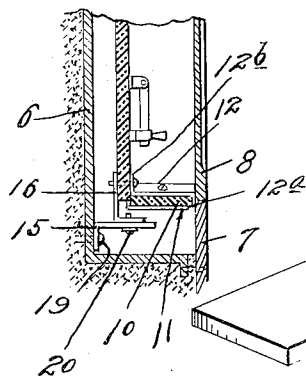
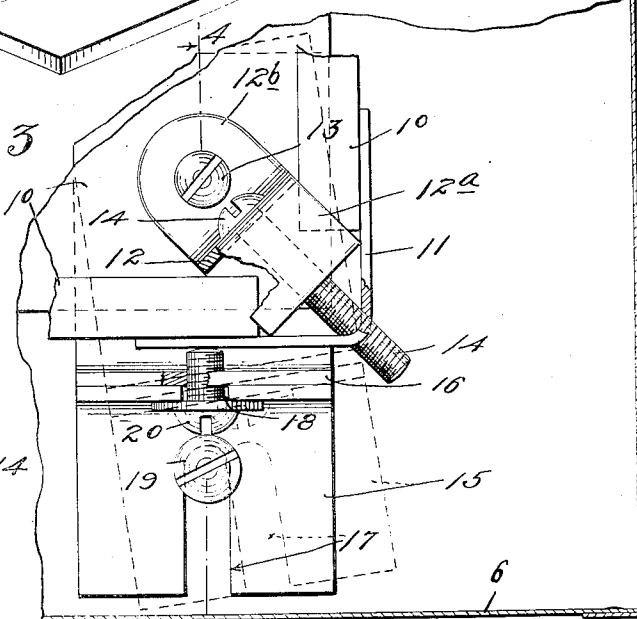
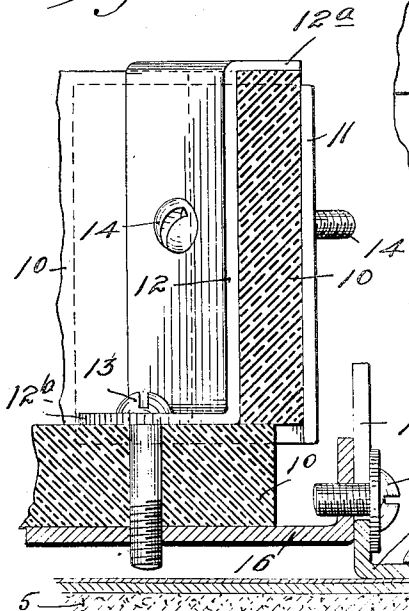


Fig. 3

Fig. 4



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UNITED STATES PATENT OFFICE.

GEORGE W. HYSER, OF MINNEAPOLIS, MINNESOTA.

PANEL-BOARD SUPPORT.

Application filed April 12, 1921. Serial No. 460,792.

To all whom it may concern:

Be it known that I, GEORGE W. HYSER, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Panel-Board Supports; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention provides an improved panel board support and to such ends, generally stated, it consists of the novel construction and relative arrangement of parts hereinafter described and defined in the claims.

In the accompanying drawings, which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings:

Fig. 1 is a vertical section with some parts broken away, showing a panel board mounted in a wall in accordance with my invention;

Fig. 2 is a fragmentary perspective illustrating the panel board support;

Fig. 3 is a front elevation of the parts shown in Fig. 2, but showing also the panel board box or cabinet in section, some parts being broken away; and

Fig. 4 is a section taken approximately on the line 4—4 of Fig. 3.

In Fig. 1, the numeral 5 indicates the wall of a building, in which the panel board box or cabinet 6, of usual construction, is imbedded and anchored in the customary way. The numeral 7 indicates a panel box casing, to which a panel box door 8 is hinged or otherwise applied.

As the panel box will be imbedded in concrete or other wall in process of erection of the same and before the wall is plastered, it follows that there may be, in different instances, considerable and varying space between the outer end of the box 6 and the casing 7, and, inasmuch as the panel board should be set with its frame flush with the inner surface of the casing 7, it follows that, for this and other reasons, the panel board supports should be adjustable, as hereinafter described.

The panel board 9, as usual, is preferably of slate or marble and its marginal frame 10 will preferably be made up of the four customary slate or marble strips. At the four corners of the panel board, the adjacent ends

of the panel board frame bars 10 are secured but frictionally clamped together by co-operating outside and inside corner clamps 11 and 12, respectively. The outside clamps 11 are preferably flat steel plates bent into L-shaped or rectangular form, while the inside clamps 12 are upright obliquely set sheet metal pieces bent at their upper ends to form projecting retaining flanges 12^a and at their other ends to form foot flanges 12^b. The foot flanges 12^b bear against the panel board and are secured thereto by screws 13, while the retaining flanges 12^a overlap the outer edges of the frame bars 10 at their adjacent corners. The angular outer clamps 11 bear against the outer surfaces of the end portions of the bars 10. Clamping screws 14 are passed through perforations in the inside clamps 12 and have threaded engagement with perforations in the corners or angles of said outside clamps 11. When the screws 14 are tightened, the edges of the inside clamps 12 will be forced against the inner surfaces of the frame bars 10 and the ends of the outside clamps 11 will be quite tightly pressed against the outer surfaces of said bars 10. Thus, the four bars 10 are securely held in rectangular arrangement with their inner edges against or adjacent to the marginal edges of the panel board 9. However, the outer clamp 11 will spring and yield so that there is no danger of breaking said bars 10. As the inside corner clamps 12 are anchored to the panel board 9 and as the flange 12^a overlaps the ends of the panel board frame bars 10, the latter are caged and positively held against the panel board and, hence, must partake of all of the adjustments of the panel board.

There is an adjustable panel board anchor at each of the four corners of the panel board and each such anchor, as preferably constructed, comprises two adjustable connected sections or anchor brackets, one of which is adjustably secured to the fixed bearing afforded by the back of the box 6 and the other of which is adjustably or pivotally secured to the panel board.

As shown and preferred, these two anchor brackets 12 and 16 are each formed from flat sheet steel or other metal bent into L-shaped angular form. The anchor brackets 15 are provided in their flanges with slots 17 and 18. By means of screws 19 passed through the slots 17 and screwed into the box 6, said brackets 15 are adapted to be rigidly secured

to said box but are made pivotally and slidably adjustable. By means of screws 20 passed through the slots 18 and screwed into the flanges of the anchor brackets 16, said brackets 16 are adapted to be rigidly secured to said brackets 15 but are arranged for sliding adjustments toward and from the back of the box 6. Here it will be noted that the screws 13, that connect the inside corner brackets 12 to the panel board, are passed through and have threaded engagement with the anchor brackets 16, thereby rigidly securing said brackets 16 to the panel board but adapting them to be pivotally adjusted on said screws as an axis of rotation or oscillation.

It has already been noted that the panel board and its frame 10 must necessarily partake of common adjustments. By adjusting the screws 20 in the slots 18 of the anchor brackets 15, the anchor brackets 16 and panel board may be moved either toward or from the back of the box 6 so as to set the panel board just in the right position in respect to the outer face of the wall and its casing 7. The slots 17 in the anchor brackets 15 permit the panel board to be raised or lowered and then secured by tightening the screws 19. By oscillations of the anchors made of the brackets 15 and 16, on the screws 13 and 19, the panel board may be shifted horizontally endwise or otherwise oscillated in a vertical plane. In fact, the several adjustments just described permit universal adjustments of the panel board in or parallel to the plane of its face and adjustments of the brackets 16 on the brackets 15 permit the panel board to be set the proper distance from the back of the box or from the outer face of the wall. These brackets, therefore, provide for quickly giving the panel board all of the various adjustments that may be required to properly locate it in the panel board box or cabinet that has been already set into the wall. Moreover, the panel board supports are capable of being very cheaply made and easily assembled.

Broadly, the panel board box or cabinet affords a fixed base support for the panel board and, hence, it will be understood that the improved panel board supports described may be used in connection not only with box structures but in connection with any other suitable fixed support or base of anchorage.

What I claim is:

1. The combination with a panel board, of a fixed base, and anchors pivotally con-

nected to said board and to said base by pivots, the axes of which are perpendicular to the plane of the face of said board, said pivots permitting said board to be adjusted in the plane of its face, said anchors being provided with means for permitting relative adjustment in a direction perpendicular to the plane of said board and so permitting said board to be set different distances from said fixed base.

2. The combination with a panel board, of a fixed base, and anchors connected to said board and to said base by pivots, the axes of which are perpendicular to the plane of the face of said board, said anchors comprising bracket-like sections including slidable means permitting the adjustment of one on the other in a direction toward and from said base, to set said board at different distances from said base.

3. The combination with a panel board, of a fixed base, and anchors connected to said board and to said base by pivots, the axes of which are perpendicular to the plane of the face of said board, and permitting said board to be adjusted in the plane of its face, said anchors being slidably adjustable on said fixed base and the said anchors being provided with means for permitting relative adjustment in a direction perpendicular to said base, to set said board at different distances from said base.

4. The combination with a panel board, a panel board frame made up of four bars in rectangular arrangement, and a relatively fixed base support, of angular outside corner-clamping plates applied to the exterior end portions of said four bars, inside corner clamps engageable with the interiors of the four bars and having foot flanges resting on said panel board, bolts clamping the co-operating inside and outside corner clamps onto said bars, and an anchor device for each corner of said panel board, each anchor device comprising two brackets having flanges in contact, slot and screw connections securing the said contacting flanges but permitting adjustments of the panel board toward and from said base support, screws passed through the base flanges of said inside corner clamps, through said panel board and through the relatively adjustable anchor brackets, the other anchor brackets being connected to said support by slot and screw connections permitting sliding and pivotal adjustments of said anchors.

In testimony whereof I affix my signature.

GEORGE W. HYSER.