Nov. 25, 1941. H. C. BULLARD 2,263,609

IRONING BOARD AND CABINET THEREFOR

Filed June 17, 1939 2 Sheets-Sheet 1

Fig. 1

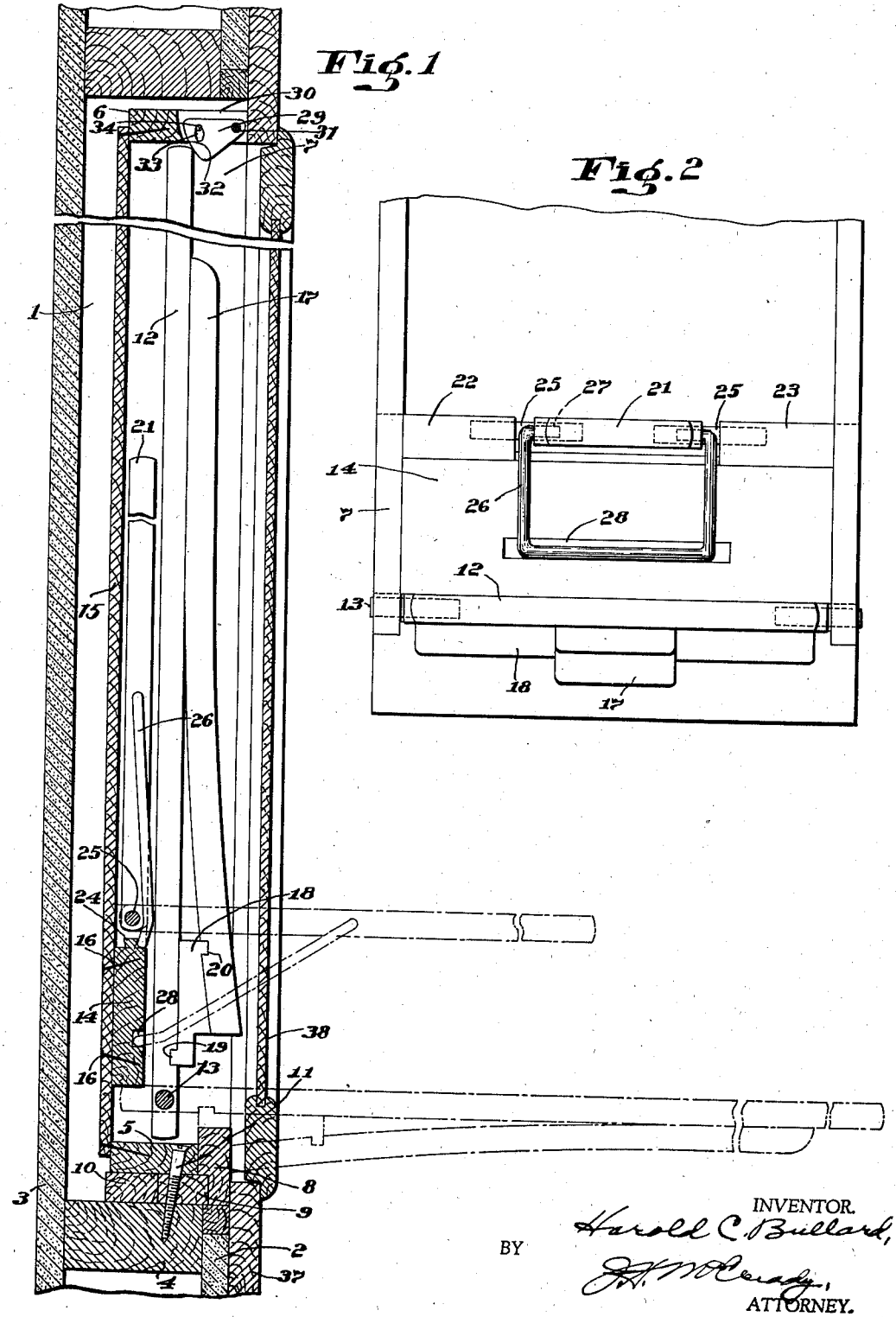


Fig. 2

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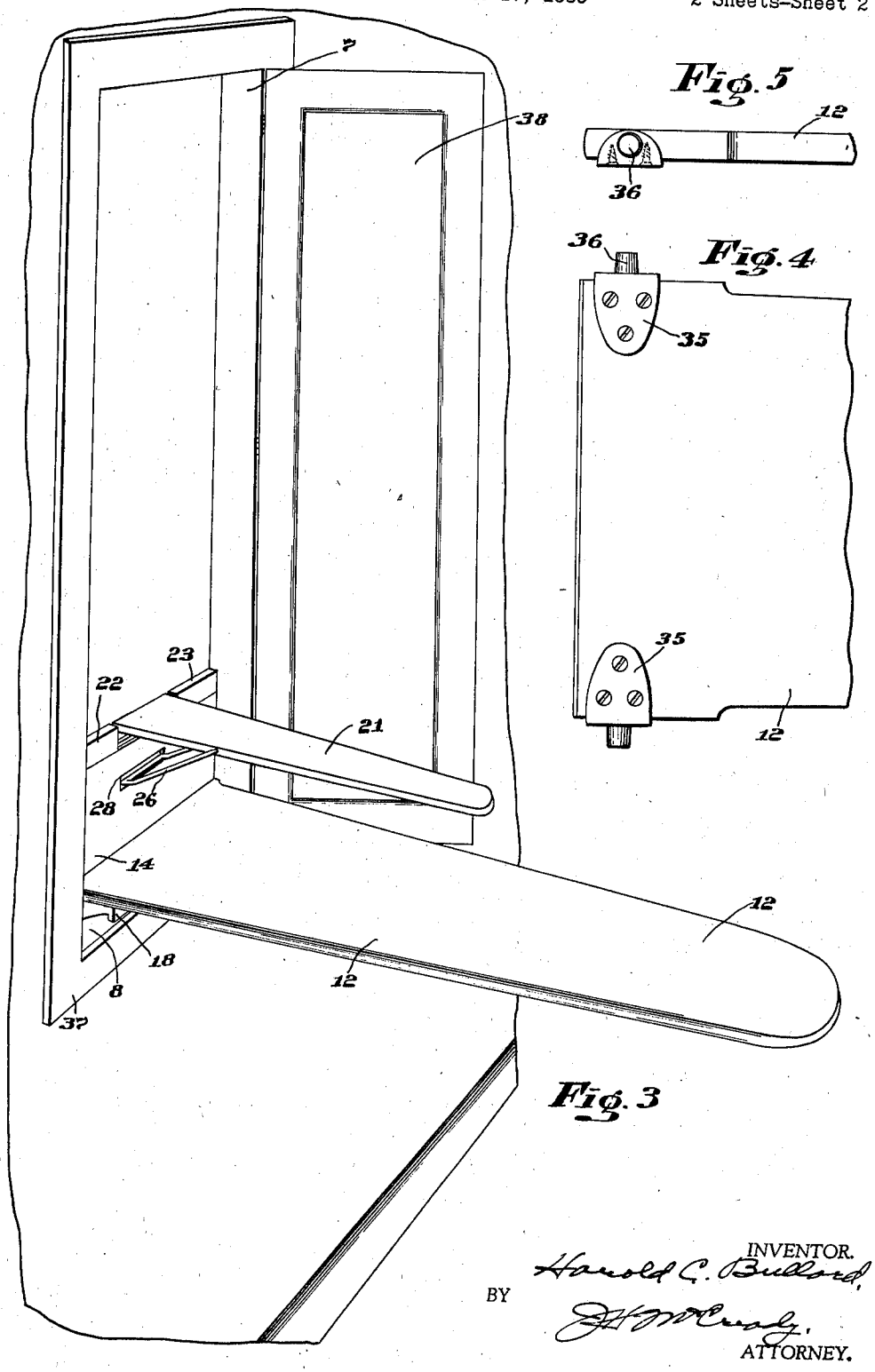


Fig. 3

Fig. 5

Fig. 4

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2,263,609

IRONING BOARD AND CABINET THEREFOR

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Application June 17, 1939, Serial No. 279,722

3 Claims. (Cl. 38—129)

This invention relates to ironing boards and to combination ironing board and supporting cabinet structures.

In the construction of ironing board units, it is customary to provide a cabinet or box which is set in between studs in a wall opening and which extends from the floor line to the height of a room door. The upper part of the box is utilized to receive the ironing board in a closed or collapsed position. The lower portion of the box, below the point at which the board assumes an operating position, serves to hold brace members and to support the braces against the board when the latter is used. This type of construction is open to several objections. A cabinet extending to the floor line is unsightly and occupies an unnecessarily large amount of wall space. Supporting members for the board, such as the braces referred to, constitute an encumbrance at the under side of the board which may interfere with, or cause injury to, the person using the board or to delicate fabrics handled on the board. For manufacturing purposes the construction described is also bulky, inefficient, and not easily assembled.

It is the chief object of this invention to provide an improved ironing board and cabinet combination in which are embodied compactness, ease of assembly, and increased supporting strength, and in which the use of projecting brace members is eliminated.

The nature of my invention will be readily understood from the following description when read in connection with the accompanying drawings, and the novel features will be particularly pointed out in the appended claims.

In the drawings:

Figure 1 is a vertical cross section illustrating my built-in ironing board assembly located in a wall opening with the board members having been shown in elevation in a closed position and further indicated by broken lines in an operating position.

Fig. 2 is a view in front elevation illustrating the cabinet with its door open and indicating two board members in an operating position.

Fig. 3 is a perspective view further illustrating the unit in an operating position.

Fig. 4 is a fragmentary plan view of a board member illustrating a replaceable dowel construction for supporting the board; and

Fig. 5 is a detail view further illustrating the dowel construction shown in Fig. 4.

Referring in detail to the drawings, Figs. 1 to 3 inclusive illustrate a preferred embodiment of my invention comprising a wooden cabinet and ironing board unit supported in a wall opening.

While it is intended that varying cabinet sizes may be resorted to and that the cabinet may be supported in any suitable manner, in my preferred embodiment I provide a cabinet size adapted to be spaced in an opening between building studding as for example those placed on sixteen inch center lines.

In Fig. 1, numeral 1 indicates such a wall opening which has been formed by cutting away an outer plaster section 2. The lower edge of opening 1 is located in the wall 2 at a distance above the floor line substantially corresponding to the height at which an ironing board is normally desired to be positioned when in use. The width of the opening will preferably be such as to expose two conventional studs supporting the plaster sections 2 and 3.

Transversely located in the opening 1 is a supporting member 4 which may, for example, comprise a timber 2 inches by 4 inches in cross section, and which may be nailed at its ends to the studs already described or firmly supported in some other desirable manner. Within opening 1 and on supporting member 4, I locate my cabinet and ironing board unit.

In making up the unit I first provide a wooden frame comprising a bottom piece 5, a top piece 6 and side pieces 7 secured together in some suitable manner as with conventional dovetailed corners. On its front side, the frame is recessed at its two lower corners to receive a supporting cleat 8. Preferably the side pieces 7 will be formed with grooves or dado cuts and the top edge of the cleat 8 will be tenoned to fit between the sides 7 in the dado cuts and thus prevent side slip of the cleat when assembling. Cleat 8 is constructed to project above the level of bottom frame piece 5 and thereby present an edge which is utilized to act as a bearing surface as will later appear. The cleat 8 also extends below frame piece 5. To permit this cleat to bear on the transverse support 4, the cleat has been recessed at its rear side to receive a block member 9, which is solidly secured thereto by some suitable means as gluing. The block 9 is of a thickness suitable for supporting the lower edge of cleat 8 out of contact with the lower edge of opening 1, and extends inwardly of the frame a sufficient distance to allow the cleat 8 to indirectly bear on support 4 over a substantial area thereof. Block 9 also extends under and contacts frame piece 5 thereby further allowing the frame piece to bear on the support 4,

In positioning the frame in opening 1, one desirable location may be effected by disposing the front edge of the frame flush with the plaster line so that a casing can be applied to the box or frame edge and thus close any space between the box side and the wall opening. To assist in effecting proper location of the frame, I employ a backing strip 10, one edge of which is located on support 4 by measuring in from the plaster line a distance equal to the combined thickness of cleat 8 and block 9. In this position the strip 10 is solidly nailed to support 4 and the frame may then be firmly backed against the cleat to fall into a position flush with the plaster line as described. Strip 10 is of a thickness equal to block 9 and therefore further serves to complete a bearing of bottom frame piece 5 on support 4. The frame is finally fixed to support 4 by means of fastenings 11 which pass through bottom frame piece 5 and block 9, and then engage support 4. Fastenings 11 may also be employed in the box, through the sides 7 to engage with the adjacent stud members.

In the frame I have mounted a main ironing board member 12 loosely supported in the cabinet in an upright position by dowels 13 fixed in the sides of the board 12 and extending through oversize openings in the sides 7 of the frame. The board, in an operating position, has one end supported at two opposite points to comprise a cantilever type of support. The under side of board 12, at a slight distance from the end, is adapted to be supported by the cleat 8 already described. The upper side of the board at its end is adapted to be received against another rear cleat 14 supported between the box sides 7. Cleat 14 may be fastened in some suitable manner as by being secured with tenons fitted into dado cuts in the back edges of the box sides. The cleat may also, if desired, be recessed in the sides 7 at the rear thereof so as to occur flush with the rear edges of the frame. The under edge of cleat 14 will be positioned slightly above the top edge of the cleat 8 so that the board 12, when its top side is in contact with the cleat 14, will be supported in a substantially horizontal position. It is pointed out that by supporting the dowels 13 in oversize openings in the manner described above, no bearing effect is carried by them when the board is in an open position.

15 denotes a back wall for the cabinet member and may for example be comprised by a piece of plywood. This member preferably is secured to the back of frame and to the cleat 14 by fastenings 16. Applying fastenings through the back 15 and cleat 14 permits the sides 7 of frame to take the upward thrust of this cleat when downward pressure is applied to the board 12. The board may be made of four narrow sections which are tenoned, grooved and glued together to present less springiness and greater resistance to shear.

To further convey downward thrust of the board to the box frame, and also to permit lighter stock in the board, I have provided a hardwood reinforcing rib 17 secured to the under side of the board. I also provide a hardwood bearing block 18 fixed by tenons 19 and 20 at the under side of board 12 at a point such that it may bear against the cleat 8, this block extending transversely across the board for the greater part of the width thereof, as shown in Fig. 2. The reinforcing rib 17 is secured at its outer end to the under side of the board and at its inner end to the bearing block 18. Preferably this is effected with glue under pressure in such a manner that the rib takes the form of a shallow arch. It is pointed out that the hardwood block 18 is recessed to engage cleat 8 on both its top and front sides when the board is in an open position. In addition, the inner extremity of rib 17 is shaped to engage against the cleat 8 and likewise transmit a bearing from the board 12 thereagainst.

It will be observed that with my improved cabinet and board construction now described, a much more compact cabinet is effected and a more efficient ironing board is made available. Projecting braces heretofore used have been eliminated together with excess cabinet space for receiving such members.

In addition to the main board 12 I may desire to provide a second board 21 which may also be referred to as a sleeve board. This board may be formed with some suitable shape for facilitating insertion in a sleeve or other inaccessible portion of a garment.

To support the board 21 I have provided two end blocks 22 and 23 which are grooved to fit over tenon 24 formed along the top edge of cleat 14. The two blocks are of a size such that when located in dado cuts in the sides 7 at either side of cleat 14, they may receive dowels 25 fixed in opposite sides of board 21 and pivotally maintain the board 21 in a spaced relationship between them.

To support the board in an operating position, a bail 26 is employed which is formed with bent over ends 27 adapted to pivotally engage in holes in board 21 preferably formed at a point approximately one-third of the distance from one end of the board to the other. Cleat 14 is formed with a slot 28 which is adapted to receive the top of bail 26 for holding the board in an operating position as has been illustrated in Fig. 2.

In Fig. 1 it will be observed that the top of bail 26 is slightly bent so that it is adapted to engage in the dovetail tenon on the edge of cleat 14 and thereby maintain the board in an upended position and out of the way when not desired to be used. Also the bail is sufficiently recessed in the tenon to be out of the way of the main board when the latter is in an upright position.

In Fig. 1 I have also illustrated a holdup or latch for the main ironing board 12 which may be desired to be employed. This comprises a metal stamping 29 pivotally supported in a saw slot 30 on a pin 31 angularly fastened through the frame piece 6. The stamping is formed with a curved face 32 which allows the end of board 12 to press the stamping into the slot and pass thereby. However, the stamping will then immediately drop back to a point where the board becomes locked in position. This is effected by an elongated slot 33 in the stamping and a second pin 34 engaged through the frame member, which limits counter-clockwise movement of plate or stamping 29 as viewed in Fig. 1.

In Figs. 4 and 5 I have illustrated means for installing a new board comprising a special dowel construction. This comprises castings formed with ear portions 35 and dowels 36, the ear portions being formed with screw openings which occur on a side readily accessible, when the cabinet is installed in a wall opening. This dowel construction may be important in replacing burned or damaged boards. The old board may be removed by applying a handsaw to the wooden dowels 13. Thereafter the remaining portions of dowels 13 are removed to readily permit insertion of the special dowel construction. By the

dowel construction described, the need of purchasing an entire new board and box to replace a damaged board, as well as labor of installation, is avoided.

The box or cabinet after installation is cased in on two sides, top and bottom, with a casing **37** which closes up the opening between the box and plaster line and which may also serve to support a lipped door **38** thereby completely closing the cabinet when the boards are not in use. Preferably the casing and door will be assembled with suitable hinges and catch so that the whole casing and door unit may be quickly secured at the time of installation of the ironing board frame. It is further desirable to ship the case and door assembled together as the unit may be positioned to avoid damage in transit and to avoid faulty assembly by a customer.

It will be seen that I have provided a supporting cabinet structure of compact, light nature, taking up little wall space and presenting an attractive appearance. A main ironing board has been combined with the cabinet to offer a simple yet extremely strong ironing surface further characterized by absence of encumbrances at the under side thereof. Convenience in changing the position of the board is further increased by a simple positive holdup or latch means. In addition, a sleeve board has been provided which is of improved adjustability, thereby allowing the two boards to be used in conjunction with one another or separately without interference of one with the other. The entire unit is adapted to be merchandised in a fully assembled state and generally presents a simple, cheap and efficient device.

While I have shown and described a preferred embodiment of my invention, it will be evident that various modifications may be resorted to in keeping with the spirit of my invention as defined by the appended claims.

Having thus described my invention, what I desire to claim as new is:

1. The combination of an ironing board and a cabinet therefor adapted to be mounted in a wall opening, including a frame having front and rear cleat members adapted to support said ironing board in a horizontal position, a bearing member mounted at the under side of said ironing board, and a reinforcing rib secured rigidly to said board at the under side thereof and extending forwardly from said bearing member, said bearing member being recessed to engage against the top and front side of the said front cleat member, said reinforcing rib having its inner end disposed in substantially the same plane as said side engaging face of the recess in the bearing member and also adapted to engage against a side of the front cleat member.

2. The combination of an ironing board and cabinet adapted to be received in a wall opening, including a frame having front and rear cleat members adapted to support the said board in a horizontal position, a bearing member secured rigidly to the under side of the said board and extending transversely across the greater part of the width of the board, said bearing member being recessed to engage the said front cleat member at upper and outer sides thereof, a reinforcing rib element having an outer end secured at the outer portion of the said ironing board and an inner end engaged with said bearing member to hold said rib in an upwardly arched position, said rib being rigidly secured to said board and the inner end of said rib being positioned to bear against the front face of said front cleat member to brace said board when the latter is in its horizontal position.

3. The combination of an ironing board and cabinet therefor adapted to be received in a wall opening, including a frame, an ironing board pivotally mounted in the frame, said frame having front and rear cleat members adapted to support the said board in a horizontal position, a bearing member mounted at the under side of the said ironing board, said bearing member being recessed to engage a top and outer side of the said front cleat member, a reinforcing rib element secured at its inner end to the under side of the bearing block and at its outer end to the said board, the inner end of said rib being positioned to bear against the front face of said front cleat to brace the board when the latter is in its horizontal position, said reinforcing rib being secured in an upwardly bowed position where it stiffens said ironing board.

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