

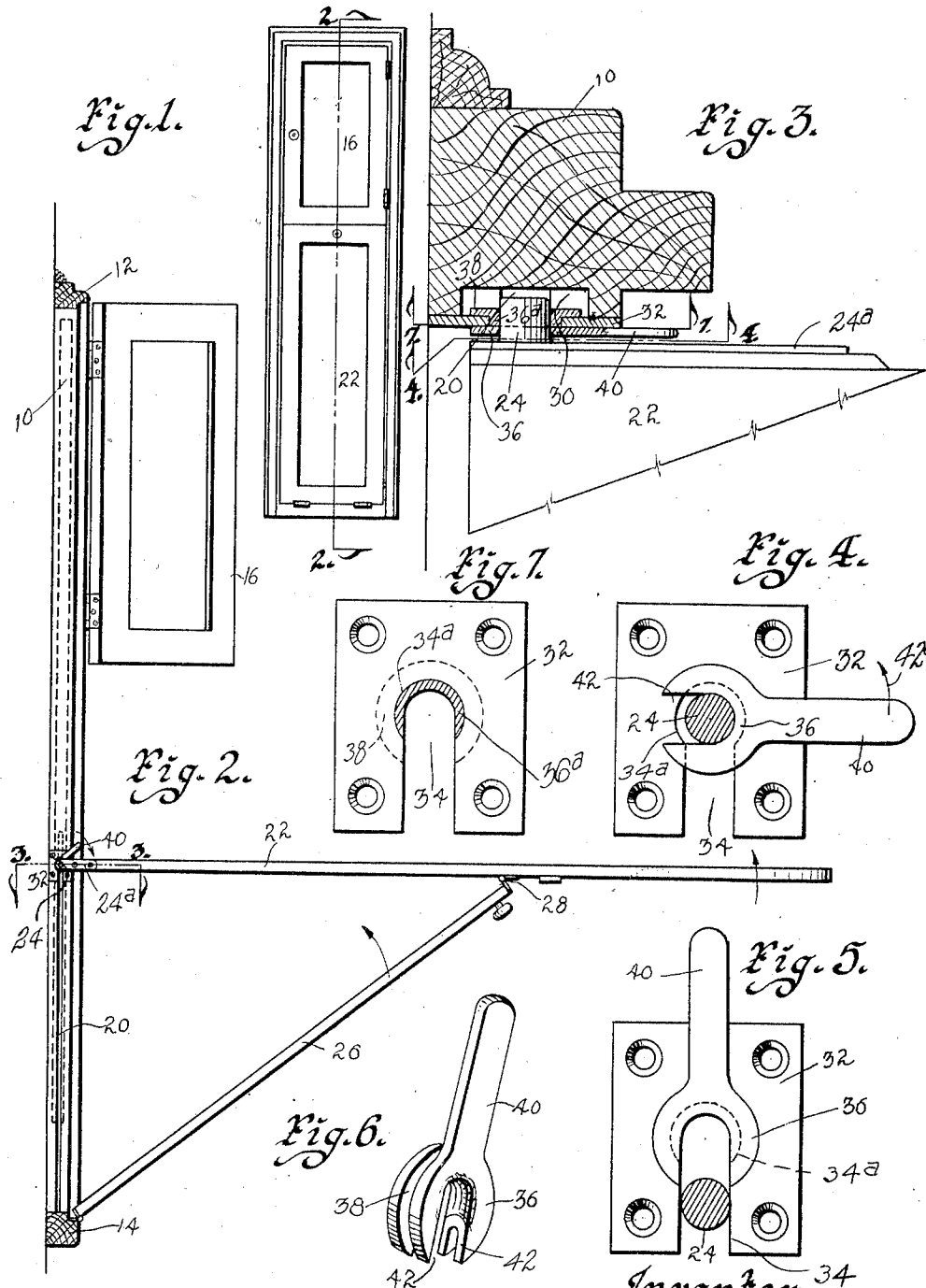
May 14, 1929.

C. A. BEIL

1,712,867

IRONING BOARD AND LOCKING DEVICE THEREFOR

Filed Oct. 17, 1927



Witness
Vinton
Reed

Inventor
Clarence A. Beil
by Bair & Freeman Attorneys

UNITED STATES PATENT OFFICE.

CLARENCE ALVIN BEIL, OF CLINTON, IOWA, ASSIGNOR TO CURTIS COMPANIES, INCORPORATED, OF CLINTON, IOWA.

IRONING BOARD AND LOCKING DEVICE THEREFOR.

Application filed October 17, 1927. Serial No. 226,686.

The object of my invention is to provide in connection with an ironing board of the type adapted to swing from horizontal position to vertical position, received in a cabinet, a locking device comprising a plate having a slot extending inwardly from one edge and formed with an enlarged extension at the inner end, combined with a locking member journaled on the material around the enlarged portion and formed with a slot, which in one position registers with the slot in the plate and in another closes that slot for locking in the upper end of the first slot the pintle on the ironing board.

With this and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of my ironing board and locking device therefor, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which:

Figure 1 is a front elevation of an ironing board cabinet structure in which my improved locking device is used.

Figure 2 is a vertical, sectional view taken on the line 2—2 of Figure 1, the ironing board being extended to position for use.

Figure 3 is a detail, sectional view taken on the line 3—3 of Figure 2.

Figure 4 is an elevation of the locking device the pintle of the ironing board being shown in section, taken on the line 4—4 of Figure 3.

Figure 5 is a similar view with the parts in different positions.

Figure 6 is a perspective view of one of the parts of the locking device; and

Figure 7 is a sectional view taken on the line 7—7 of Figure 3.

My invention consists primarily of a locking device as a hardware item and in its combination with the particular kind of ironing board shown.

The ironing board is of the type designed to fit in a cabinet or between the studding of a room, and is provided with a front door member and with a brace, serving both as a closure element and a brace, which door member and closure member are paneled or otherwise decorated to give the appearance of a part of the wall.

In the accompanying drawings, I have used

the reference numeral 10 to indicate generally either the studding between which the ironing board is mounted or the side walls of a cabinet, which receive the ironing board.

If the ironing board is mounted in a cabinet, the cabinet is provided with a top and bottom member.

Where the ironing board is mounted between the studding of a wall, there is likewise provided a top member 12 and a bottom member 14 extending between the side members 10.

For convenience, I will refer to the members 10, 12 and 14 as forming a cabinet.

At the upper part of the cabinet thus formed, a door member 16 is hinged at one side as at 18 to one of the side walls 10, and is designed when in closed position to close the upper part of the cabinet, and preferably to form a part of the wall.

The lower parts of the side walls 10 are provided with vertical grooves 20.

I use an ordinary ironing board 22, having at what may be called its inner end opposite, laterally projecting pintles 24, slidably received in the grooves 20 at the opposite sides of the cabinet.

Hinged to the lower cabinet member 14 is a brace or support 26, which is also hinged to the metal of the under side of the ironing board 22 as at 28.

The parts are so arranged that the ironing board may be arranged in horizontal position as shown in Figure 2, in which position the pintles 24 are at the upper ends of the slots 20, and the ironing board may be folded into the cabinet by sliding the pintles 24 downwardly and swinging the ironing board toward the cabinet.

When the ironing board is received in the cabinet, the member 26 closes the portion of the cabinet below the door 16, as shown in Figure 1.

In ironing boards of this kind, it is desirable to provide some means for holding the inner end of the ironing board rigidly in its position when extended for use.

For such purpose, I have provided the following means:

At the upper part of each groove 20, the material around the upper end of the groove is cut away to form a recess 30.

I provide a locking device, comprising a plate 32 substantially rectangular in outline

secured to the face of the side member 10 around the recess 30 and overlying that recess, as shown in Figure 3.

Extending upwardly from the lower edge 5 of the plate 32 is a slot 34, which is slightly enlarged as at 34^a at its upper end to form the larger part of a circle.

A locking member is pivoted to coact with the plate 32, comprising a disc-shaped portion 36, having in its edge an annular groove 38 for receiving the material around the enlarged portion 34^a at the upper end of the slot 34, so that the disc 36 may rotate.

Projecting from one side of the disc 36, as 15 clearly shown in Figure 6, is a handle 40.

The ironing board 22 is folded into the cabinet. The handle 40 is extended upwardly. The disc 36 is provided with a slot, which when the disc is in the position just mentioned 20 extends from its lower edge upwardly as at 42 and registers with the upper end of the slot 20 and the lower part of the slot 34, as shown for instance in Figure 5.

When the ironing board is then moved to 25 its horizontal position illustrated in Figure 2, the pintles 24 travel upwardly in the slot 20 and enter the registering slots 34 and 42 (see Figure 5).

The locking devices are, of course, arranged in duplicate on opposite sides of the 30 cabinet.

The handle 40 is then swung for rotating the disc 36 toward position where the handle projects rearwardly for instance at right angles to the slots 20 and 34. 35

The disc 36 will then lock the pintle in the portion 34^a of the slot 34.

When it is desired to again fold the ironing board into the cabinet, the handle 40 is 40 swung in the direction indicated by the arrow 42 in Figure 4, until it stands upright, when the pintles will be released.

It will be understood that the locking device may be made out of a great variety of 45 materials and may be made in different ways. Castings may be used or stampings may be employed if desired.

It is my purpose to cover by my claims any variations in the forms and arrangements of 50 the parts of my improved device, which may be reasonably included within the scope of such claims.

I claim as my invention:

1. In a structure of the class described, 55 the combination of a pair of spaced members having opposite vertical guide means, plates supported on said members at the upper ends of said guide means having slots aligned with the guide means, a rotary member mounted on each plate having a slot 60 adapted to register with the slot in the plate

when the rotary member is in one position, and means for rotating said member, with an ironing board having at its sides at one end members for coacting with said guide 65 means, adapted to enter said slots and to be held therein by said rotary members.

2. In a structure of the class described, a pair of spaced members having vertical guide grooves therein, a member mounted for rotation in the upper end of each groove having a slot adapted in one position of the member to register with the groove throughout its length and in another position of the rotation of said member to register with the groove 75 only at its closed end, and an ironing board having pintles adapted to slide in said grooves and to be received in said slots, whereby the pintles may be locked in the upper ends of the grooves. 80

3. In a structure of the class described, the combination of a means for supporting an ironing board, comprising a cabinet having a pair of spaced side members having opposed vertical grooves, with an ironing board having pintles for traveling in said grooves, locking means for securing said pintles at the upper ends of said grooves, comprising rotatably mounted members having therein open slots adapted in one position of the rotation of said members to register throughout their lengths with said respective grooves and in another position to register only at their closed ends with said grooves, and a brace pivoted to the lower part of the cabinet and 95 to the ironing board.

4. In a structure of the class described, a plate having a slot projecting inwardly from one of its edges formed with an enlargement at its inner end concentric with a point in the axis of said slot, a locking member having a channel-shaped portion receiving the edge of the material around the enlarged portion of the slot in the plate for affording a rotary mounting for the locking member, said locking member having projecting from one edge inwardly a slot adapted in one position of the locking member to register with said first slot throughout its length and in another position to register with said first slot only at its closed end, a supporting frame having grooves, one of said plates being mounted at an end of each groove with the slot in the plate in alinement with the groove, and an ironing board having at one end laterally projecting pintles adapted to travel in said grooves and to enter said slots to permit the pintles to be locked in the upper ends of the slots. 115

Des Moines, Iowa, September 26, 1927.

CLARENCE ALVIN BEIL.