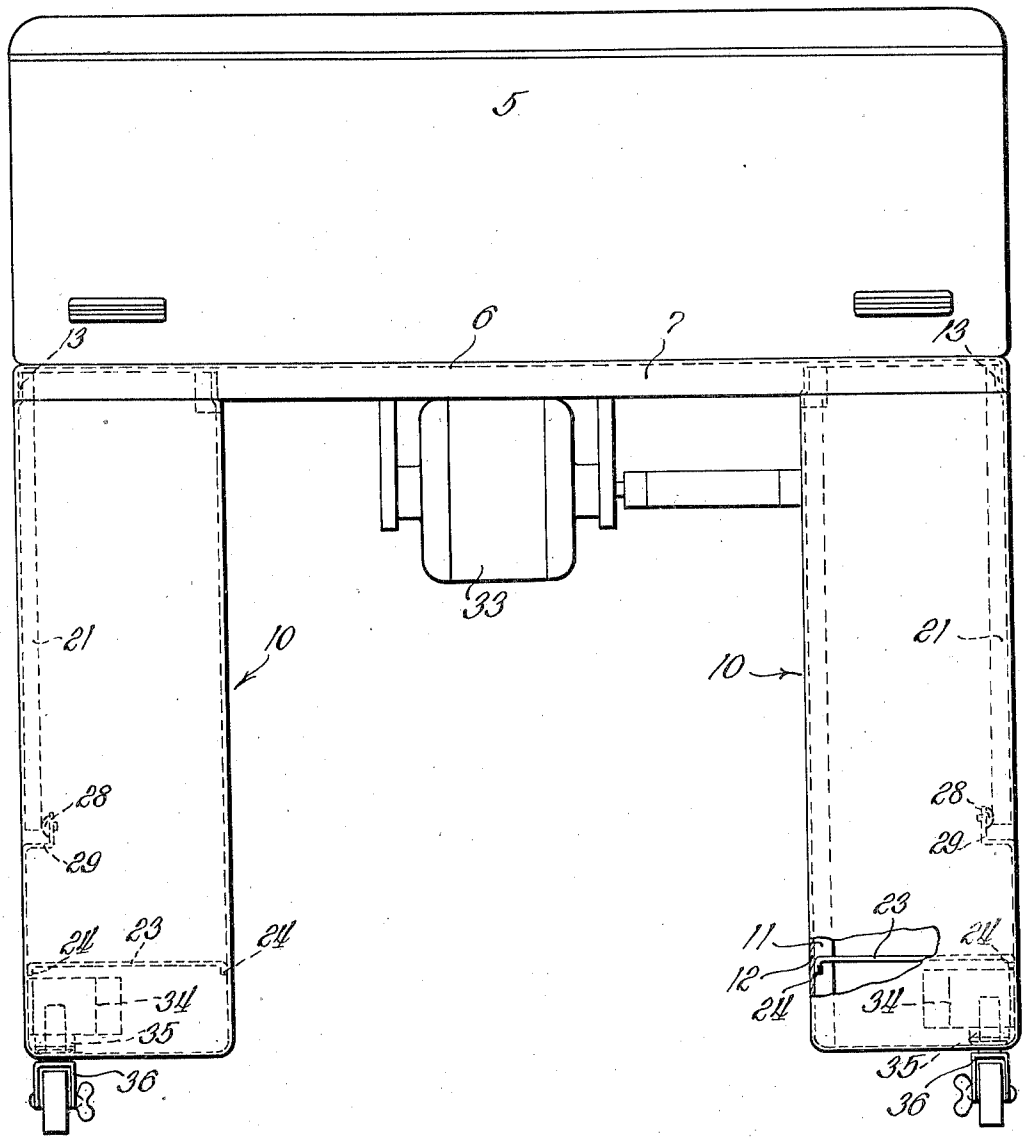
Jan. 21, 1941. E. B. CARSON 2,229,046

IRONING MACHINE STAND

Filed July 8, 1939 2 Sheets-Sheet 1

Fig. 1.



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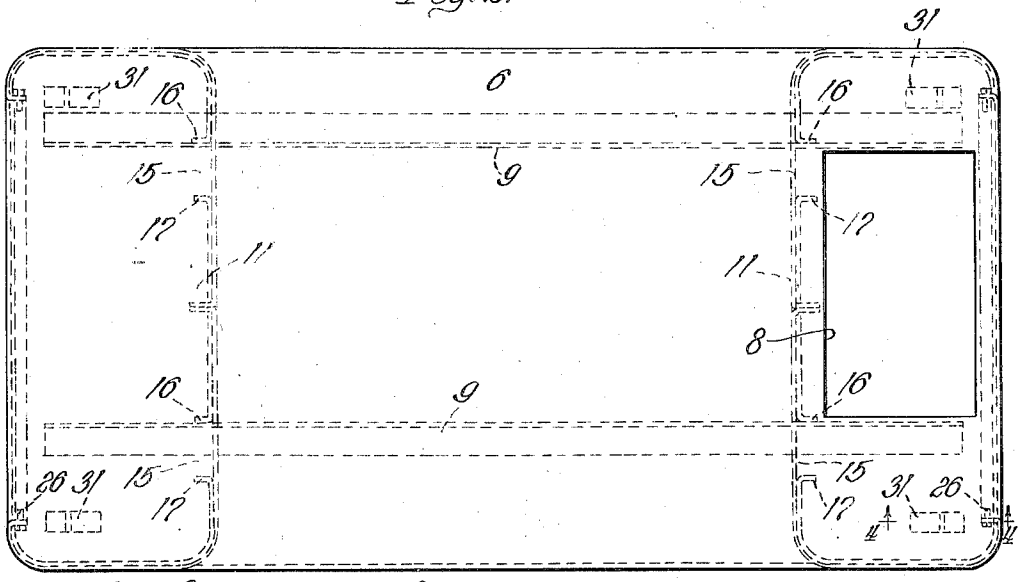
By Brown, Jackson, Boettcher & Dienner
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IRONING MACHINE STAND

Filed July 8, 1939 2 Sheets-Sheet 2

Fig. 2.



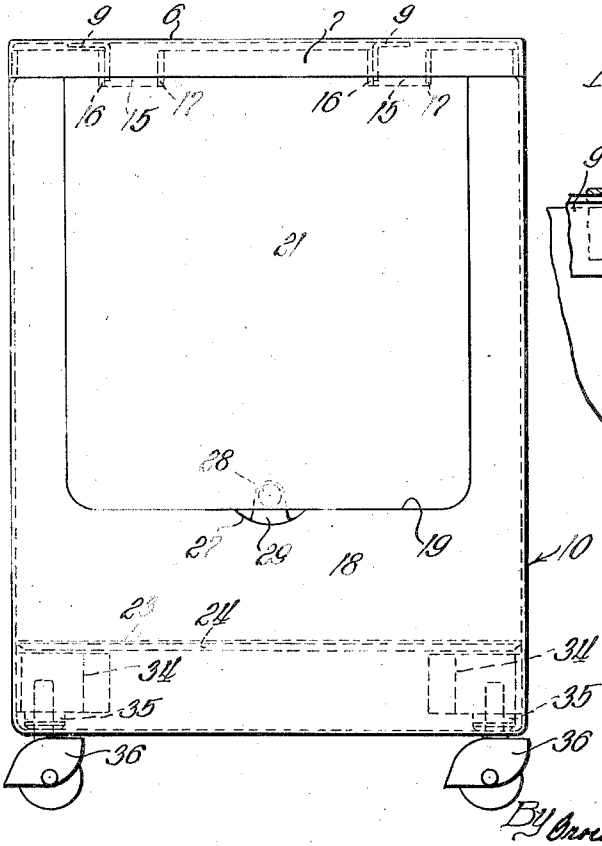


Fig. 3.

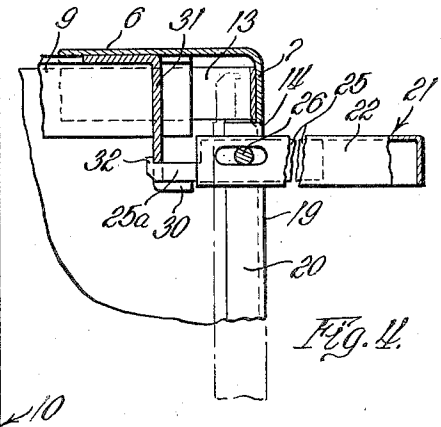


Fig. 4.

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2,229,046

UNITED STATES PATENT OFFICE

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IRONING MACHINE STAND

Edward B. Carson, Oak Park, Ill.

Application July 8, 1939, Serial No. 283,423

2 Claims. (Cl. 312—161)

This invention relates to supporting means, and has to do with a stand or like structure particularly suitable for supporting the cooperating ironing members and associated mechanisms of a domestic ironing machine.

My invention is directed to the provision of a stand of the character stated which is of light weight, possesses adequate rigidity and mechanical strength, provides suitable space for the operator in the use of the associated ironing mechanisms and is also capable of providing extensions or shelves at the ends of the stand properly disposed for supporting articles being ironed as well as articles which have been or are to be ironed. More specifically, I provide a top or bed plate and associated end supporting structures so related that the stand as a whole is rigid and of adequate mechanical strength, the end supporting structures being provided with doors which may be positioned to provide shelves extending from the ends of the stand, the end supporting structures being further provided with interior reinforcing members available as shelves for supporting therein various articles which it may be desired to use in connection with the ironing machine. Further objects and advantages will appear from the detail description.

In the drawings—

Figure 1 is a front view of an ironing machine stand embodying my invention, showing a box-like cover, for enclosing the cooperating ironing members and associated parts, positioned upon the stand;

Figure 2 is a plan view of the stand with the cover removed, the cooperating ironing members and associated mechanisms of the ironing machine being omitted for clearness of illustration;

Figure 3 is an end view of the stand; and

Figure 4 is a fragmentary sectional view, on an enlarged scale, taken substantially on line 4—4 of Figure 2, certain parts being shown in elevation and partly broken away and in section.

The stand of the instant invention is intended for use in an ironing machine, such as that disclosed in Patent No. 2,026,345, issued December 31, 1935, to Rudolph W. Janda, for Ironing machine. The ironing machine of that patent is provided with a box-like cover suitably mounted upon a stand for movement into position to enclose the cooperating ironing members and associated parts, and into a second position to expose the cooperating ironing members in the use of the machine. Also, in the ironing machine of the patent referred to, the top or bed plate of the stand is provided, adjacent one end thereof, with an opening through which a gear housing extends, such gear housing having associated therewith suitable means for supporting the roll of the machine and suitable means for supporting and operating the shoe which cooperates with the roll. The stand of the instant invention is likewise provided with a top or bed plate adapted for reception of a gear housing and associated parts for supporting an ironing roll and a cooperating shoe and operating means for the latter.

In Figure 1 I have shown a box-like cover 5, which may be of any suitable construction, for enclosing the cooperating ironing members and associated parts of an ironing machine of which the stand is intended to form a part. The cover 5 may be mounted upon the stand in any suitable manner so as to be positionable to expose the cooperating ironing members and associated parts or enclose them, as required.

The stand comprises a top plate 6 of rectangular shape in plan, provided with a depending peripheral flange 7. The plate 6 may be formed of sheet metal of suitable gauge and, being of channel section both lengthwise and transversely, possesses adequate mechanical strength. Plate 6 is provided adjacent the right hand end thereof, as viewed in Figure 2, with a rectangular opening 8 through which may extend a portion of a gear housing, previously referred to. Two reinforcing angle strips 9 are secured to the under face of plate 6, conveniently by spot welding, adjacent the front and the back of opening 8 and extend substantially the full length of plate 6 parallel with the front and the back thereof. The angle strips 9 impart desirable increased rigidity and mechanical strength to plate 6.

The top or bed plate 6 is supported at its ends by supporting structures 10 of cubiform or box-like formation, each preferably formed from a single piece of sheet metal having end flanges 11 which are secured together in abutting relation, conveniently by spot welding, the flanges extending inward of structure 10 and the seam or joint being at the transverse center of the inner side wall 12 of structure 10. The corners of the supporting structure preferably are of rounded and smooth contour, as shown, and the upper end portion 13 of this supporting structure is offset inward to a slight extent, providing a shoulder 14 extending about the lower end of reduced portion or neck 13, this shoulder corresponding in width to the thickness of flange 7 of plate 6. Neck 13 is of such size as to fit snugly between the front and the back portions of flange 7, with the outer side wall of this neck seating

against the inner face of the end portion of flange 7. The neck 13 is secured to flange 7, conveniently by spot welding, with the flange seating upon shoulder 14 and the front and back and outer side walls of supporting structure 10 flush with the outer face of flange 7 at the front and back and end thereof. The inner side wall 12 of supporting structure 10 is provided with two notches 15 extending from its upper edge, and with two inwardly extending vertical flanges 16 and 17 at the back and the front, respectively, of each notch. The notches 15 accommodate the vertical arms of the angle strips 9, and the flanges 16 seat against the vertical arms of angle strips 9 to which they are suitably secured, conveniently by spot welding. In that manner, the end supporting structures 10 are secured to the bed plate 6 and to the reinforcing angle strips 9 so as to provide effective support for the latter, at points spaced from the ends of plate 6, thereby imparting to the latter increased rigidity and mechanical strength while also serving to support the bed plate at the end portions thereof.

Outer side wall 18 of each of the end supporting structures 10 is provided with a rectangular opening 19, extending the major portion of the height thereof from flange 7 and of but slightly less width than the top or bed plate 6. The metal of wall 18 is bent inward about the sides and bottom of opening 19 to provide reinforcing flanges 20 which impart desirable rigidity to wall 18 for resisting deformation thereof.

A door 21, conforming to opening 19, is provided for closing the opening. This door is provided with a peripheral flange 22 which serves as an effective reinforcement therefor, this flange fitting snugly within flange 20, when the door is closed. In the latter position of the door, the flanges 20 and 22 cooperate to reinforce the outer side wall 18 of structure 10 and effectively resist deformation thereof. Supporting structure 10 is further provided with an interior reinforcing member 23, the latter member being provided with depending flanges 24 which seat against and are suitably secured to the inner and outer side walls 12 and 18 of structure 10, conveniently by spot welding. The member 23 effectively reinforces supporting structure 10 so as to resist deformation thereof, while also providing a shelf for supporting articles within structure 10, the latter then serving as a closet or storage space. Each of the end supporting structures 10 is thus constructed in such manner as to be of comparatively light weight, while possessing adequate rigidity and mechanical strength, and is so related to the top or bed plate 6 as to impart maximum rigidity and mechanical strength thereto while effectively supporting the bed plate and any mechanism mounted thereon.

A finger 25 is suitably secured, conveniently by spot welding, to the inner face of flange 22 of door 21, at opposite sides of the latter, and extends beyond the top or upper edge of the door, in the closed position of the latter. Finger 25 and flange 22 are provided with lengthwise slots through which extend pins 26 suitably secured in flange 20 extending about the opening 19. Door 21 is thus pivoted adjacent its upper end for movement about a horizontal axis extending from front to back of the stand. In its closed position door 21 fits snugly within flange 20 of opening 19, extending downward from the lower edge of flange 7 of plate 6, as will be clear from Figures 3 and 4. In order to permit of the door being moved into that position, the upper or inner portion of the respective fingers 25 is reduced in width at 25a so as to extend, in the fully closed position of door 21, upward within neck 13 of structure 10 adjacent the inner face thereof. In order to facilitate opening of door 21, wall 18 is provided with an arcuate recess 27 at the mid-portion of the bottom of opening 19. Recess 27 is of sufficient extent to permit of the tips of a person's fingers being inserted therein beneath the flange at the lower end of door 21, for moving the latter into open position. Inward movement of the lower end of door 21, in closing of the latter, is limited by a suitably disposed rubber bumper 28 mounted in a bracket 29 conveniently formed integrally with wall 18 and extending inward and upward therefrom. When in fully closed position door 21 has its outer face flush with the outer face of flange 7 and the outer face of wall 18, presenting a neat and attractive appearance.

As previously noted, the stand of my invention is particularly suitable for use in domestic ironing machines of the character disclosed in the patent above referred to, No. 2,026,345, of the open ended type. In the use of machines of this type it is frequently necessary or desirable that the articles being ironed extend outward beyond the ends of the roll and the shoe. It is desirable that, under such conditions, the articles be supported during the ironing operation and I provide means, to that end, whereby the door 21 of supporting structure 10 may serve as a support for articles being ironed and extending beyond the ends of the roll and shoe. The reduced inner end portions 25a of fingers 25 are, in the closed position of door 21, aligned with slots 30 in the lower end of two Z-shaped brackets 31 secured to the under face of bed plate 6, conveniently by spot welding, and depending therefrom. Each of the fingers 25 is further provided with a stud 32 located at the upper outer corner of the finger, in the closed position of door 21. By swinging the door upward about its pivot axis into a position inclined downward at a slight angle toward wall 18 of end structure 10, and then moving the door inward of the end structure a short distance, the reduced portions 25a of fingers 25 may be inserted through slots 30 of the brackets 31, and by then moving the door into horizontal position, studs 32 are moved into position at the inner faces of brackets 31, the door then occupying the position shown in Figure 3. In this latter position door 21 extends outward from supporting structure 10 in horizontal position, a short distance below bed plate 6, and provides a convenient shell for supporting articles being ironed or articles which have been or are to be ironed. In Figure 2, the lower edge of bed plate 6 may be considered as the front thereof, at which an operator is seated in the use of an ironing machine embodying the stand of my invention. When the door of the left hand supporting structure 10 is disposed in horizontal position, in the manner above stated, it provides a shelf for supporting articles which are being ironed and which extend outward beyond the open end of the roll and the shoe of the machine. When the door at the right hand end of the stand is supported in horizontal position, it provides a convenient shelf for supporting articles which have been ironed or articles which are to be ironed. In order to release the door 21 for closing, it may be raised slightly and moved outward sufficiently to position studs 32 of fingers 25 outward beyond the brackets 31, after which the door may be moved into closed position about its hinge axis.

The supporting structures 10 are spaced apart

lengthwise of bed plate 6, providing therebetween space for the operator and also space for an electric motor (Figure 1) 33, which motor may be supported from plate 6 in a suitable manner and may have suitable driving connection to the ironing machine mechanisms associated with the stand. Preferably brackets 34 are secured in the lower outer corners of the end structures 10, conveniently by spot welding, each of these brackets carrying a suitable socket member 35 in which is mounted the shank of a caster 36 of known type. The stand, and the parts carried thereby, may thus be moved with facility, when desired, and the supporting structures 10 and associated elements are effectively connected and reinforced in such manner as to support the ironing mechanisms while preventing objectionable deformation of the supporting structures, in the manner above described.

I claim:

1. In an ironing machine stand, a substantially rectangular sheet metal top plate having a depending peripheral flange, said plate being provided adjacent one end thereof with an opening having its front and back spaced from the front and back of said plate, reinforcing angle strips secured to the under face of said plate adjacent the front and back of said opening and extending substantially the full length of said plate, a supporting structure secured to said plate adjacent the other end thereof and extending downward therefrom, a box-like supporting structure secured to said plate adjacent said one end thereof and extending downward therefrom, said strips being secured to said first supporting structure and extending through and being secured to the inner side wall of said box-like supporting structure, the latter having an opening through its outer side wall, a door for closing said opening pivoted adjacent its upper end to said box-like structure and movable into substantially horizontal position extending outward from said structure, stop fingers secured to the sides of said door at the upper end thereof, and brackets secured to the under face of said plate between the front and the back thereof and said strips, said fingers and brackets cooperating for releasably holding said door in its latter position.

2. In an ironing machine stand, a substantially rectangular sheet metal top plate having a depending peripheral reinforcing flange, said plate being provided adjacent one end thereof with an opening having its front and back spaced from the front and back of said plate, reinforcing angle strips secured to the under face of said plate adjacent the front and back of said opening and extending substantially the full length of said plate, box-like supporting structures secured to said plate adjacent the ends thereof and extending downward therefrom, said strips extending through and being secured to the inner side walls of said structures, one of the latter having an opening through its outer side wall, a door for closing said opening pivoted adjacent its upper end to said structure adjacent said top plate and movable into open substantially horizontal position extending outward from said structure, and means for releasably holding said door in its open substantially horizontal position.

EDWARD B. CARSON.