March 19, 1935. H. W. ALTORFER 1,994,742

INCLOSURE AND MECHANISM FOR IRONING MACHINES

Filed May 25, 1934 3 Sheets-Sheet 1

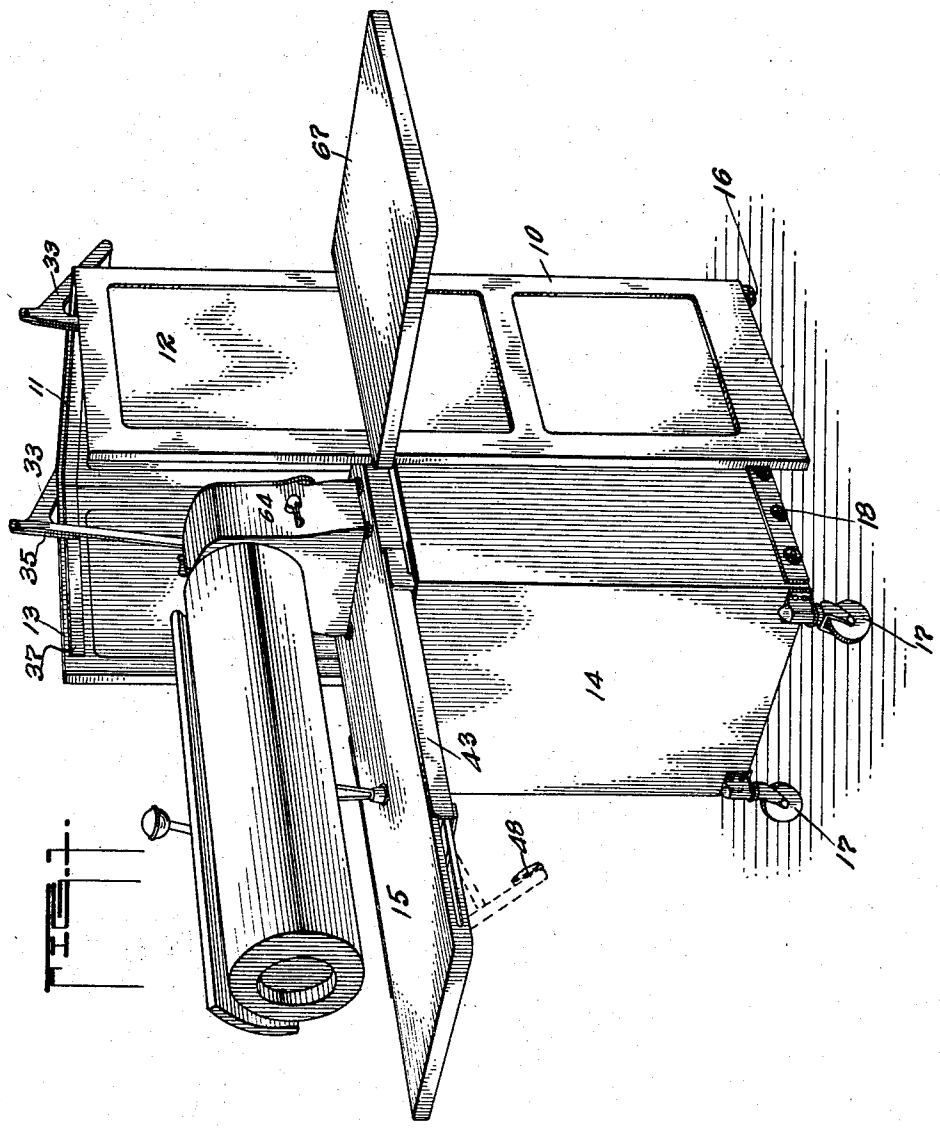


FIG. 1.

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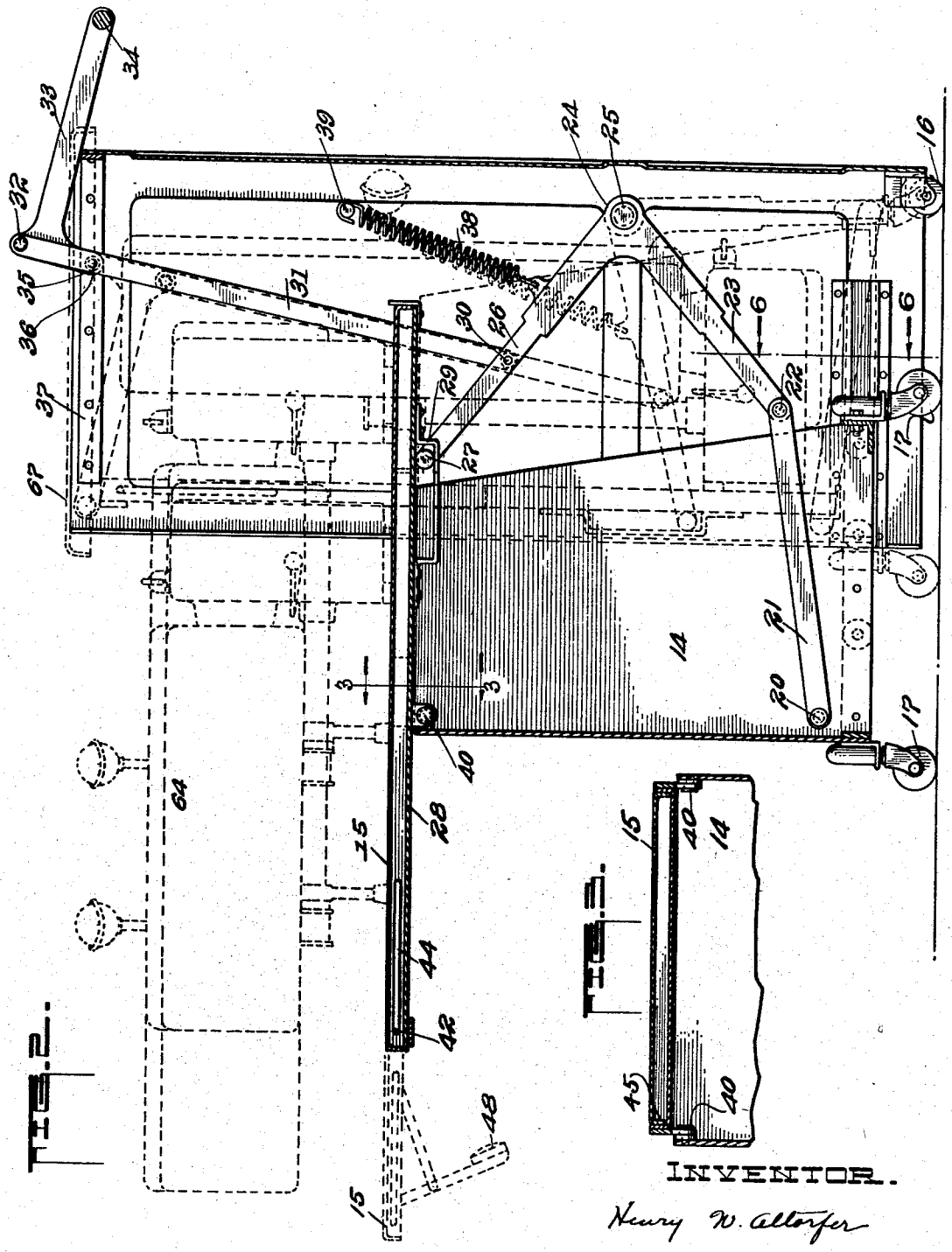


FIG. 2.

FIG. 3.

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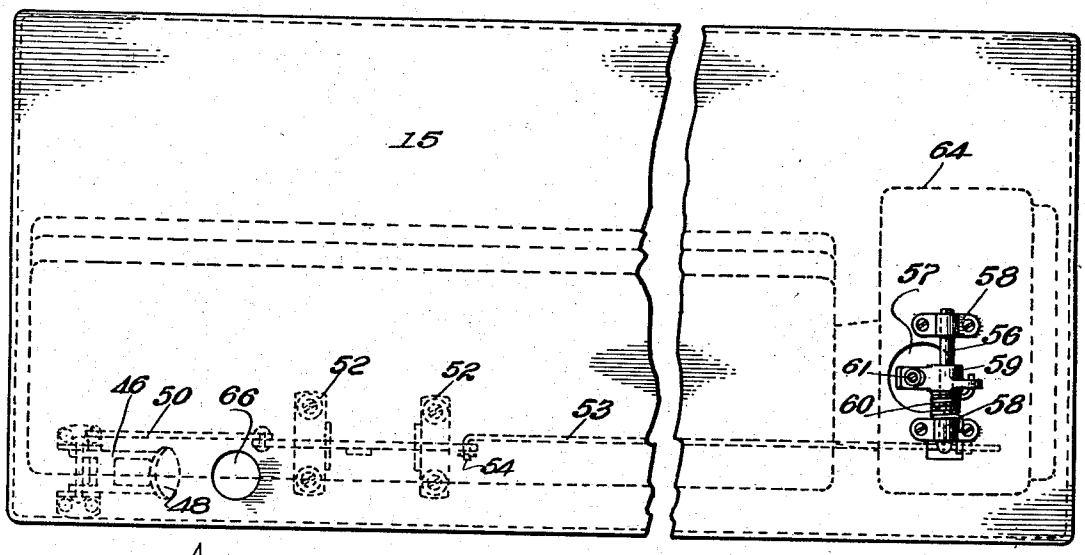


FIG. 4.

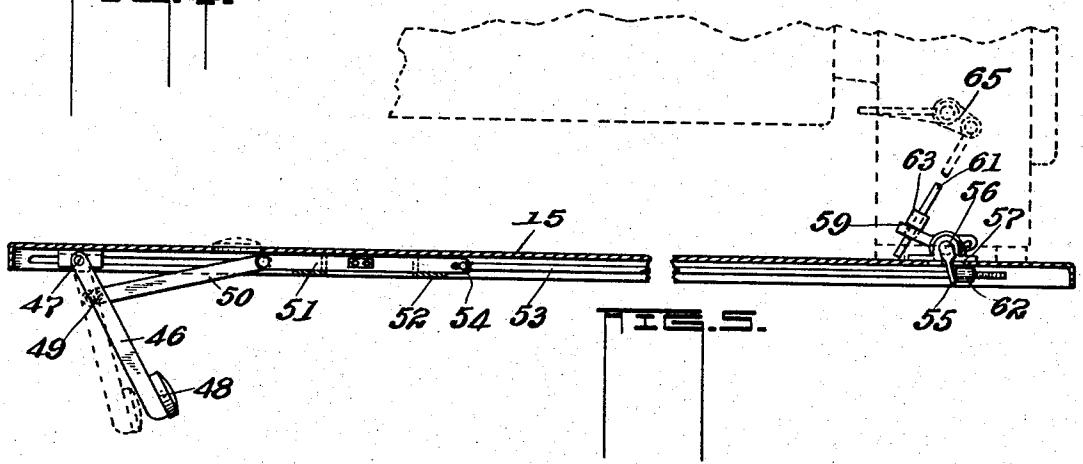


FIG. 5.

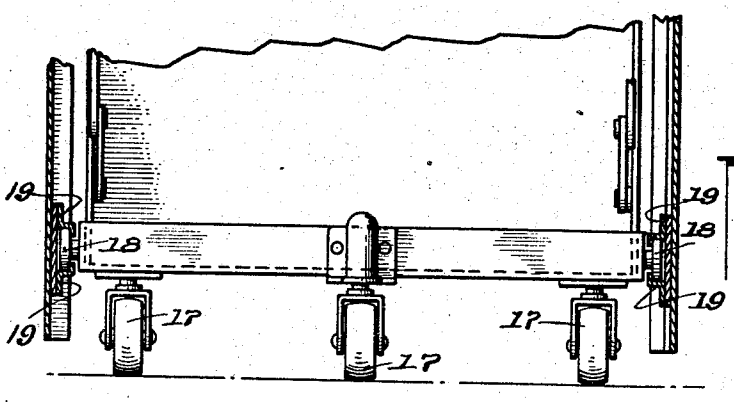


FIG. 6.

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UNITED STATES PATENT OFFICE

1,994,742

INCLOSURE AND MECHANISM FOR IRONING MACHINES

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Application May 25, 1934, Serial No. 727,486

8 Claims. (Cl. 68—9)

This invention has reference to ironing machine cabinets, especially to a cabinet structure adapted to support and house an ironing machine in such a manner as to sturdily support it in a position for convenient practical use or to afford an inclosure for the same when not in use, the machine when not in use, being hidden away in the structure to the end that the cabinet will then have a neat compact appearance.

An object of the invention is to provide a cabinet unit having a compartment adapted to receive an ironing machine, the same being provided with means whereby the machine may be withdrawn from the compartment and supported in a convenient position for use.

Another object is to provide a cabinet having a movable base member to which an ironing machine may be attached, the base member being provided with a novel mechanism by means of which the ironing machine is manually controlled.

Another object lies in the provision of an ironing machine cabinet having a member adapted to be moved into vertical or horizontal position to form, when in vertical position, a side or panel member for the cabinet and when in horizontal position a supporting shelf for the ironing machine.

An additional object is to provide a mechanism connected with said side panel member whereby, when an ironing machine is placed within the cabinet and the member is placed in vertical or closed position, the machine is moved into invisible position, and further it is an object to provide that when the side member is moved to horizontal position the machine is moved and easily removed from the cabinet and adjusted in position for practical use.

An additional object lies in the provision of a member movable into or out of a cabinet, the same forming a supporting element for the cabinet and having a mechanism forming a connection between it, the cabinet, and the ironing machine supporting element whereby, when the member is moved out of the cabinet, the ironing machine support member is actuated to facilitate adjustment of the ironing machine as aforementioned.

Other objects will appear in the following description and accompanying drawings in which:

Fig. 1 is a perspective view of my cabinet with an ironing machine attached in position for use;

Fig. 2 is a sectional side elevational view of the same, taken approximately from a center line of the device, showing portions of the mechanism and dotted outlines of various parts in operated position, all of which will be described.

Fig. 3 is a fragmental sectional view taken from line 3—3 in Fig. 2.

Fig. 4 is a broken plan view of the ironing machine base member showing elements of a control mechanism to be described;

Fig. 5 is a side elevational sectioned view showing the mechanism disclosed in Fig. 4, as will be described.

Fig. 6 is a fragmented elevational view taken from line 6—6 in Fig. 2.

Fig. 1 discloses my cabinet as generally comprising an upright three sided cabinet structure 10 composed of a back panel 11 and side panels 12 and 13.

Another element of the cabinet comprises a three sided carriage member 14 arranged in nested relation to the structure 10, the same being slidable into or out of the cabinet.

A base member 15, adapted to have an ironing machine secured hereto, rests upon the member 14 in the position shown and is movable thereon as will be described later.

The structure so far described is supported upon the floor by means of caster members 16 attached to the lower portion of the structure 10 adjacent panel 11 and caster members 17 attached to the member 14.

The carriage 14 is retained in the structure 10, in slidable relation therewith, by means of roller members 18 attached to the lower portion of member 14, the same being movably retained in runways 19 formed on the inner surfaces of panels 12 and 13. Details of the structure are clearly disclosed in Figure 6.

Fig. 2 discloses that member 14 is provided with casters 17 at both its outer and inner extremities, by means of which it is made a self contained structure, movable relative to cabinet 10 and adapted, by means of rollers 18 moving in runways 19, to support the cabinet in cooperation with casters 16.

Fig. 2 illustrates one side of the device as the same would be viewed from a center line drawn therethrough.

The mechanism shown and about to be described is duplicated on the opposite side of the cabinet and while the mechanism will herein be described as a single apparatus it is to be assumed that the description covers identical mechanism on the opposite side.

At a lower forward point 20 on the carriage 14 is pivotally attached a link member 21 the op-

posite end of which is pivotally attached at 22 to a lower arm 23 of a bell crank 24 which is pivotally mounted at 25 and has an upper arm 26. The extremity of arm 26 is provided with a lug portion or roller 27 which is slidably connected with a bench member 28 by means of a bracket member 29 secured to the under side thereof.

Intermediate the support 25 and lug 27, the arm 26 has a pivotal connection 30 with an upwardly extending link member 31 which latter is pivotally connected as at 32 with a handle bar structure comprising arms 33 and a transverse bar 34.

The link 31, Fig. 2, is connected with arm 33 at 32 as noted. The arm has a downwardly extending portion 35 which is pivotally supported at 36 on the frame structure of cabinet 10.

A coil spring 38, anchored at 39 upon the frame structure of the cabinet and attached to arm 26 of the bell crank 24, acts to counteract the weight of the operating mechanism and to assist in manipulation thereof as will be described.

A bench member 28 has already been noted as having slidable connection with arm 26 and this member is pivotally mounted at 40 upon the carriage 14 as illustrated in detail in Fig. 3.

In view of the foregoing description it will be apparent that movement of the carriage 14 in and out of cabinet 10 will bring about, through the medium of link 21 and bell crank 24, a pivotal movement of bench 28 upon its support 40, and that, with the parts in position as shown in solid lines in Fig. 2, if the carriage is moved into the cabinet 10 the relative movements of the mechanism will bring about movement of bench 28 in such a manner that, when the carriage is placed fully within the cabinet, the bench member will occupy the vertical position indicated in dotted lines. The dotted outline also shows the relative position of the cooperative parts of the mechanism when the bench is placed in the vertical position noted.

The mechanical movements described may be produced, as already noted, by means of pushing the carriage 14 into the cabinet or pulling the same out of the cabinet and may also be produced by means of manual operation of the handle bar structure 34—34 as follows;

A dotted outline indicates that the handle bar structure may be rotated upon the pivot 35 to produce a crank movement of 32 whereby when the handle bar is rotated into the dotted line position the link 31 is forced downwardly to rotate the bell crank 24 on its pivot 25 to propel carriage 14 into the cabinet and rotate bench 28 on pivot 40 into vertical position as above described.

Figs. 4 and 5 illustrate in detail that base member 15 is adapted to support an ironing machine and so proportioned as to be slidably supported on the bench member 28.

Lug members 42 on the inner side of the upstanding edge portions 43 of bench 28 engage complemental slots 44 formed in depending edges 45 of base 15.

By means of the slots the base 15 is properly retained in association with bench 28 and its movement relative thereto is limited.

Secured to the under side of base 15 is an ironing machine control mechanism comprising a lever member 46 pivotally supported at 47 and having a pad 48 attached to its lower end. Disposed near the pivot 47 is a pivot 49 to which is attached a link 50 pivotally attached at its opposite end to a link member 51. Link 51 is slidably supported upon the base by means of guide brackets 52 and has a connecting rod member 53 attached at 54. The rod 53 extends toward the end of base 15 and is movably retained in a downwardly extending arm portion 55 of a shaft 56.

Portion 55 extends through an opening 57 in base 15, and shaft 56 is rotatably mounted on the upper surface of the base by means of brackets 58.

An arm member 59 is secured to shaft 56 intermediate the brackets, as shown.

A spring 60, supported upon shaft 56 and anchored to an extending portion of arm 59, reacts between the stationary bracket 58 and arm 59 to rotate arm 59 in a counterclockwise direction as viewed in Fig. 5, whereby lever 46, through the connecting mechanism described, is normally urged to the position shown in solid lines in Fig. 5.

Arm 59 is connected through a link 61 with a control mechanism of any ironing machine which may be attached to the base.

Adjustable nuts 62 and 63 provide means whereby the link 61 and rod 53 may be adjusted relative to arms 55 and 59.

Since the ironing machine herein noted may be of special or conventional design it will not be described further than to say that the housing 64 encloses a control mechanism having a member such as 65 whereby the ironing machine control mechanism may be connected through link 61 with the control mechanism described.

With particular reference to my control mechanism, it is to be noted that base 15 is provided with an opening 66 so disposed as to align with pad 48 when the lever 46 is moved upwardly adjacent the under side of the base. The pad 48 is preferably so proportioned as to enter opening 66 with a certain amount of frictional resistance so that when the parts are placed in the closed position noted lever 46 will be retained thereat until the pad 48 is forced out of the opening.

Fig. 1 indicates the manner of use of my control mechanism. When the device is opened and bench 28 is projected into horizontal position, base 13 is slid forwardly upon the bench to the position shown in dotted lines in Fig. 2, whereupon the pad 48 is moved downwardly to be in convenient position for operation by the knee of the operator.

When it is desired to fold the ironer away, pad 48 is replaced in opening 66 whereupon base 15 may be slid backwardly upon the bench, after which the mechanism may be folded away as described.

Figs. 1 and 2 illustrate a cover member 67 adapted to be placed upon the cabinet, as shown in dotted outline in Fig. 2, when the device is in closed position, it being further adapted to be placed and supported at the side of the cabinet as shown in Fig. 1 as for instance by means of arms secured to the side wall of the cabinet or in some other suitable manner when the device is opened for use. In this position it is obviously useful as a supplementary work table.

It will be noted that the front portion of carriage 14, when the carriage is positioned inwardly of the cabinet, is adapted to form a side panel portion thereof, and that the outward portion of bench member 28 is adapted, when the bench is vertically disposed within the cabinet to form a

closure for the upper portion of the front side of the cabinet.

After the parts are manipulated into folded position as described, replacement of cover 67 completes the housing feature of the cabinet.

In view of the foregoing it will be apparent that my ironing machine cabinet is adapted to support an ironing machine in convenient working position as shown in Fig. 1, or to provide a portable compact housing for the same when the ironing machine is not in use.

What I claim is:

1. A portable ironing machine comprising a cabinet, a supporting member movable horizontally with respect to the cabinet, a support pivoted on said member about a horizontal axis, an ironing mechanism mounted on said support, means including said supporting member to support said mechanism in vertical inoperative position within the cabinet, and means to guide said support and mechanism, upon movement thereof, to a horizontal operative position outside the cabinet with that end of the mechanism which is uppermost when the mechanism is in a vertical position furthest from the cabinet and with the mechanism substantially at the level of the upper end of the mechanism when in vertical position.

2. A portable ironing machine comprising a cabinet, a supporting member movable horizontally with respect to the cabinet, a support pivoted on said member about a horizontal axis, an ironing mechanism mounted on said support, means including said supporting member to support said mechanism in vertical inoperative position within the cabinet, and means to guide said support and mechanism, upon movement thereof, so that the upper end of said mechanism tilts out of the cabinet while its lower end rises until the mechanism reaches a horizontal operative position.

3. A portable ironing machine comprising a cabinet, ironing mechanism movably mounted in said cabinet, means to move said mechanism from a vertical inoperative position within the cabinet to a horizontal operative position outside the cabinet, means movable away from the cabinet to support the ironing mechanism at a point outside the cabinet in such horizontal position, said means being movable with respect to the ironing mechanism, and means interconnecting said ironing mechanism, said cabinet and said supporting means to move said supporting means automatically away from the cabinet to supporting position when the ironing mechanism is moved to horizontal position.

4. A portable ironing machine comprising a cabinet, ironing mechanism movably mounted in said cabinet, means to move said mechanism from a vertical inoperative position within the cabinet to a horizontal operative position outside the cabinet, means movable away from the cabinet to support the ironing mechanism at a point outside the cabinet in such horizontal position, said means being movable with respect to the ironing mechanism, and means interconnecting said ironing mechanism, cabinet and supporting means to move said supporting means automatically away from the cabinet to supporting position when the ironing mechanism is moved to horizontal position, and to return said supporting means towards the cabinet when the mechanism is moved towards vertical position.

5. A portable ironing mechanism comprising a cabinet, a supporting member movable horizontally with respect to said cabinet, a support pivoted on said member about a horizontal axis, and an ironing mechanism longitudinally slidable on said support whereby the mechanism when in horizontal position may be slid substantially out of the cabinet.

6. A portable ironing machine comprising a cabinet, a supporting member having means thereon to engage the floor movable horizontally towards and from the cabinet, an ironing mechanism movably mounted in said cabinet, means to support said mechanism in vertical inoperative position within the cabinet, means including said supporting member to support said mechanism in horizontal operative position outside the cabinet, and means interconnecting said mechanism and member to move said member away from the cabinet when the mechanism is moved to such horizontal position.

7. A portable ironing machine comprising a cabinet, means attached to one side of said cabinet for supporting the same, an ironing mechanism movably mounted in said cabinet, means to support said mechanism in said cabinet in a vertical inoperative position and to support the inner end of said mechanism when the mechanism is in a horizontal operative position, and a common means for supporting said ironing mechanism at a point outside the cabinet when in its horizontal position and for supporting another side of the cabinet.

8. A cabineted ironing machine comprising a cabinet having a pair of side walls, a front wall and a rear wall, said side and rear walls being integrally joined together, means connecting said front wall and side walls to guide said front wall for movement toward and away from the rear wall, ironing means carried by said front wall movable thereon to operative projected position in which the major portion of the ironing means is beyond the confines of the integrally joined walls of the cabinet and to inoperative retracted position within the cabinet, and means operative to project said front wall away from the rear wall and simultaneously to move said ironing means on said front wall to operative position.

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