

Nov. 22, 1949

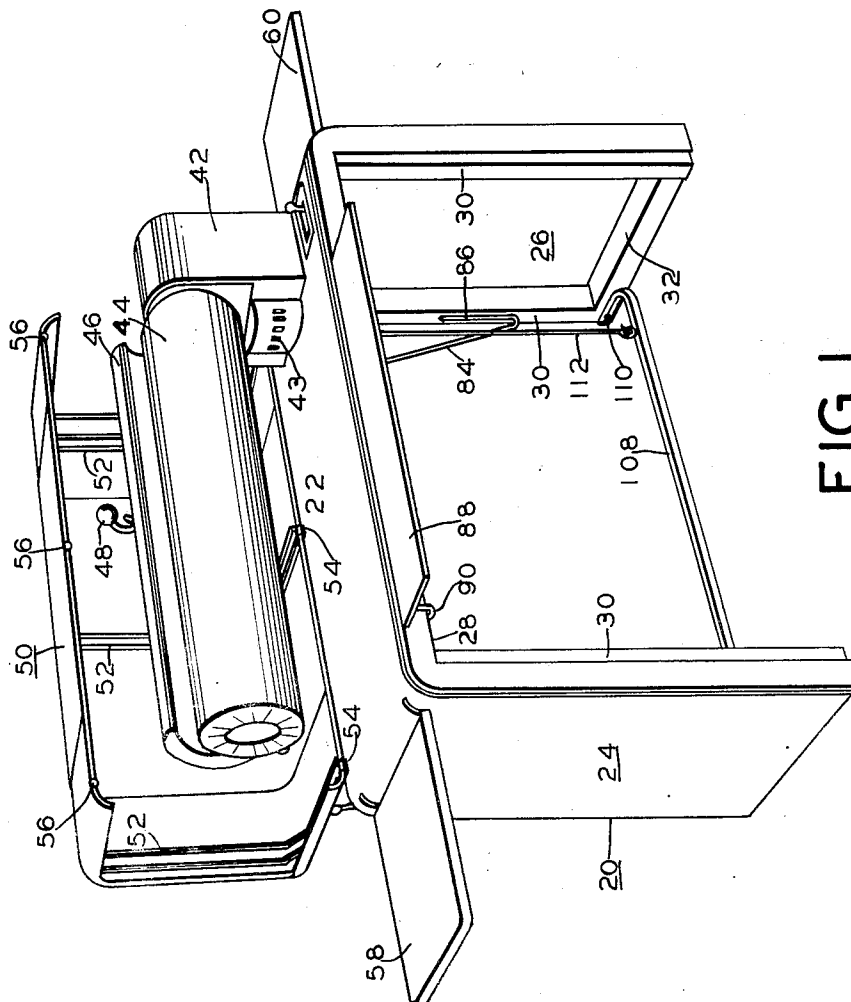
D. K. FERRIS

2,488,905

DOMESTIC APPLIANCE

Original Filed Aug. 23, 1939

3 Sheets-Sheet 1



Donald K. Ferris INVENTOR.
BY
Spencer Hardman & Co.
Attorneys

Nov. 22, 1949

D. K. FERRIS
DOMESTIC APPLIANCE

2,488,905

Original Filed Aug. 23, 1939

3 Sheets-Sheet 3

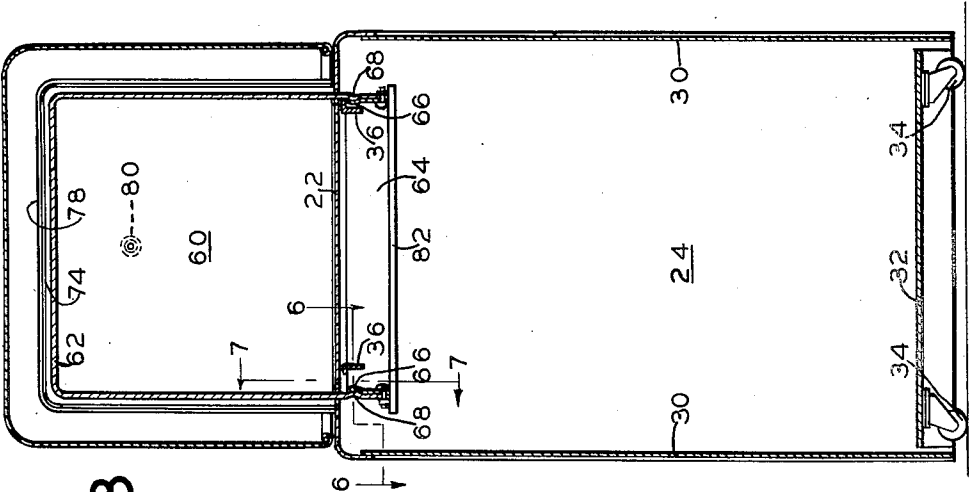


FIG. 3

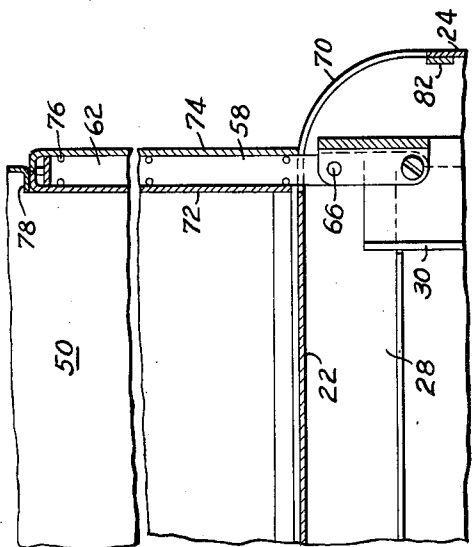


FIG. 4

INVENTOR.
Donald K. Ferris
BY
Spencer Hardman & Felt
Attorneys

UNITED STATES PATENT OFFICE

2,488,905

DOMESTIC APPLIANCE

Donald K. Ferris, Dayton, Ohio, assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware

Original application August 23, 1939, Serial No. 291,579. Divided and this application November 6, 1944, Serial No. 562,057

6 Claims. (Cl. 45—68)

1

This invention relates to a domestic appliance and more particularly to an ironing machine.

It is an object of my invention to provide an ironing machine which is attractive in appearance, convenient to use and also simple and inexpensive to construct.

It is another object of my invention to provide an improved means for supporting pieces during ironing but which can be moved out of the way when not in use.

It is a further object of my invention to provide an improved form of shelf construction for an ironing machine.

It is still another object of my invention to provide a construction in which a single sheet forms the top and end supports for an ironing machine.

Further objects and advantages of the present invention will be apparent from the following description, reference being had to the accompanying drawings, wherein a preferred form of the present invention is clearly shown.

In the drawings:

Fig. 1 is a perspective view of an ironing machine embodying my invention;

Fig. 2 is a sectional view through the ironing machine shown in Fig. 1 taken along the lines 2—2 of Fig. 4;

Fig. 3 is a sectional view taken along the lines 3—3 of Fig. 2; and

Fig. 4 is a sectional view taken along the lines 7—7 of Fig. 3.

Briefly, I have shown an ironing machine in which the table portion beneath the roll extends downwardly in the form of a continuous sheet to form the end supports for the ironing machine. A cover is provided for the machine and has inserted portions at each end which fold down to provide shelves extending from each end of the ironing machine. A lapboard is provided in front of the ironing machine which may be folded out of the way beneath the ironing machine. All parts of the machine are so constructed as to avoid exposed raw edges.

Referring now to the drawings and more particularly to Fig. 1, there is shown an ironing machine generally designated by the reference character 20 having a table support 22 and end supports 24 and 26 formed of downwardly extending portions at each end of the table support 22. These portions are formed of a continuous sheet which is provided with a flange 28 extending along each edge of the table support and the end supports. This flange is notched and welded at the ends of the table support 22. This flange 28

2

is further reinforced at the portions adjacent the end supports 24 and 26 by angle-shaped sheet metal members 30 which are spot-welded to the edge of the flange 28 so as to provide an inturned portion which reinforces the edge of the flange 28 so as to amply stiffen the end supports 24 and 26. At the bottom of the end supports 24 and 26 there are inserted between the flanges, channel members 32 which are spot-welded to the bottom of the end supports 24 and 26 and are provided with swivel casters 34 which allow the ironing machine to be easily moved about. The table support 22 is reinforced by two angle iron members 36 which extend longitudinally beneath the table support 22 and are fastened to studs 38 which are welded to the bottom side of the table support 22.

Upon one end of the table support over an aperture 40 there is provided a supporting head 42 containing the driving mechanism and supporting mechanism for the roll 44 which extends in one direction from the head. This driving mechanism includes an electric motor provided with a cooling fan. The head 42 is provided with apertures 43 so located that the air which has been heated by ventilating and cooling the motor is discharged through the apertures onto the damp ironed material after it comes off the roll. In this way this ventilating air dries the finished material and preserves the press. This warm air is admirable for this purpose since it is dry, but the discharge of any air upon the damp ironed material is highly beneficial since it carries away the steam and substitutes unsaturated air for the saturated air which normally collects in the zone underneath the roll. The head 42 also supports a shoe 46 which is provided with a release lever 48. A cover 50 is provided for covering the supporting head and roll. This cover 50 is generally box-shaped and is provided with reinforcing members 52. When the cover 50 is in the position shown in Fig. 1, the flat sides may be used for supporting pieces which have been ironed or which are to be ironed. The bottom edges of the cover are wire bound and each of these wire-bound edges are notched at three points to expose the wire core. This wire core, by means of bearing members 54 which are fastened to the table support 22, forms hinge connections for the cover 50. The three notched portions in the other edge are provided with rubber members 56 which serve as bumpers.

The cover 50 is completed by inserts 58 and 60 which fold down at each end of the table support to provide shelves upon which pieces may

3

be stored. These inserts 58 and 60 are each formed of a frame member 62 made of strap iron which is bent into a U-shape and pivotally connected to a bracket member 64. One of these bracket members 64 is welded to each of the ends of the longitudinal extending angle iron reinforcing members 38. The members 64 are each provided with a notch 66 which is adapted to register with the projection 68 upon the member 62 in order to hold resiliently the frame 62 in a vertical position. The frame 62 has its ends extending through slots 70 in the curved sheet metal surface at the ends of the table support 22.

The outer portion of the frame 62 carries two sheet metal sides 72 and 74. These two sheet metal sides have their edges turned inwardly to form a sort of butt joint. These sheet metal sides are spot-welded to the frame members 62. This is done by pinching the edges of the frame member 62 at several points designated by the reference character 76. By pinching the edges at these points projections are formed upon the edges of the member 62. These points serve as spot-welding points where the sides 72 and 74 are spot-welded onto the frame member 62. Through this procedure the dents normally occurring during spot-welding are avoided and a minimum of finishing is required at the welds. The turned-in edges of the sides 72 and 74 avoid the exposing of the raw edges which might catch or tear pieces being ironed. The edges of the cover 50 surrounding the inserts 58 and 60 are provided with an intumed flange 78. Each of the inserts is provided with a knob 80.

The projection 68 by its engagement with the indentation 66 will normally hold the inserts 58 and 60 in vertical position. However, the frame 62 is sufficiently resilient to permit the inserts 58 and 60 to be manually pulled down to the horizontal position. A stop bar 82 is provided at the lower ends of the slots 70 in order to support the frame 62 when the inserts 58 and 60 are lowered to the horizontal position. These bars 82 may be spot-welded to the inside of the sheet metal forming the supports 24 and 26. The cover 50 is provided with brace rods 84 having their lower ends riding within a slot 86 provided in the reinforcing members 38. These brace rods 84 support the cover 50 when it is open and hold the cover in a horizontal position as shown in Fig. 1.

The machine is operated by a pedal 108 which is in the form of a tubular member bent rearwardly at its ends to form a sort of U-shape. The ends of the tubular member are connected by pivot bolts 110 to the channels 32 and the reinforcing members 38 as best shown in Fig. 8. The rigid tubular construction of this pedal causes it not only to be a useful member for controlling the operation of the ironing machine but it also forms a valuable structural connection between the extreme lower ends of the supported portions 24 and 26. This pedal 108 is provided with an operating link 112 which connects it to the control for the ironing machine. This type of pedal enables the operator to use either foot for the operation of the machine at any point between the two supporting portions 24 and 26. It will be seen that my machine is attractive in appearance, convenient to operate and has considerable area where pieces being worked upon may be supported.

This application is a division of my copending application, Serial No. 291,579, filed August 23, 1939, for Domestic appliance (Patent 2,382,219).

While the form of embodiment of the inven-

4

tion as herein disclosed, constitutes a preferred form it is to be understood that other forms might be adopted, all coming within the scope of the claims which follow.

What is claimed is as follows:

1. An ironing machine including a single sheet metal member bent at right angles at two spaced places to form a top and two legs, the lateral edges of said metal member being bent at right angles to form reinforcing edges, said metal member having spaced slots at said two spaced places, and shelf extensions having hinge means extending through said slots and being secured to the underside of said metal member.

2. An ironing machine including a single sheet metal member bent at right angles at two spaced places to form a top and two legs, the lateral edges of said metal member being bent at right angles to form reinforcing edges, said metal member having spaced slots at said two spaced places, shelf extensions having hinge means extending through said slots and being secured to the under-side of said metal member, and a three sided cover hinged adjacent the rear lateral edge of said top, said three sided cover and shelf extensions folding upwardly and joining to form a box-like cover for said top.

3. An ironing machine including a main table body and a sheet metal shelf structure, said shelf structure including a frame extending along three bounding edges of the structure and having two extensions hinged to said main table body, and a set of two pan-shaped sheet metal parts forming flat surfaces of large area on opposite sides of said frame and having three of their edges inwardly turned adjacent and enclosing said frame.

4. An ironing machine including a main table body and a sheet metal shelf structure, said shelf structure including a frame extending along three bounding edges of the structure and having two extensions hinged to said main table body, and a set of two pan-shaped sheet metal parts forming flat surfaces of large area on opposite sides of said frame and each having three of their edges inwardly turned adjacent and enclosing said frame, said edges being in substantial alignment forming a butt-type joint.

5. An ironing machine including a main table body and a sheet metal shelf structure, said shelf structure including a frame extending along three bounding edges of the structure and having two extensions hinged to said main table body, and a set of two pan-shaped sheet metal parts forming flat surfaces of large area on opposite sides of said frame and having three of their edges inwardly turned adjacent and enclosing said frame, said parts having their flat portions bonded directly to said frame.

6. An ironing machine including a main table body and a sheet metal shelf structure, said shelf structure including a frame extending along a plurality of bounding edges of the structure and having two extensions hinged to said main table body, and a set of two pan-shaped sheet metal parts forming flat surfaces of large area on opposite sides of said frame and having their edges inwardly turned enclosing said frame, said frame being provided with welding projections, said parts having their flat portions welded to said frame at said welding projections.

DONALD K. FERRIS.

(References on following page)

2,488,905

5

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,359,479	Angle	Nov. 23, 1920
1,560,255	Janes	Nov. 3, 1925

5

Number
1,858,857
2,016,850
2,087,530
2,140,836
2,206,004
2,261,588
2,299,688
2,405,491

6

Name	Date
Huntley	May 17, 1932
Bittermann	Oct. 8, 1935
Potchen	July 20, 1937
Gerhardt	Dec. 20, 1938
Ford	June 25, 1940
O'Connor	Nov. 4, 1941
Ferris	Oct. 20, 1942
Clark	Aug. 6, 1946