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RETRACTABLE SUPPORT FOR ELECTRIC IRONS

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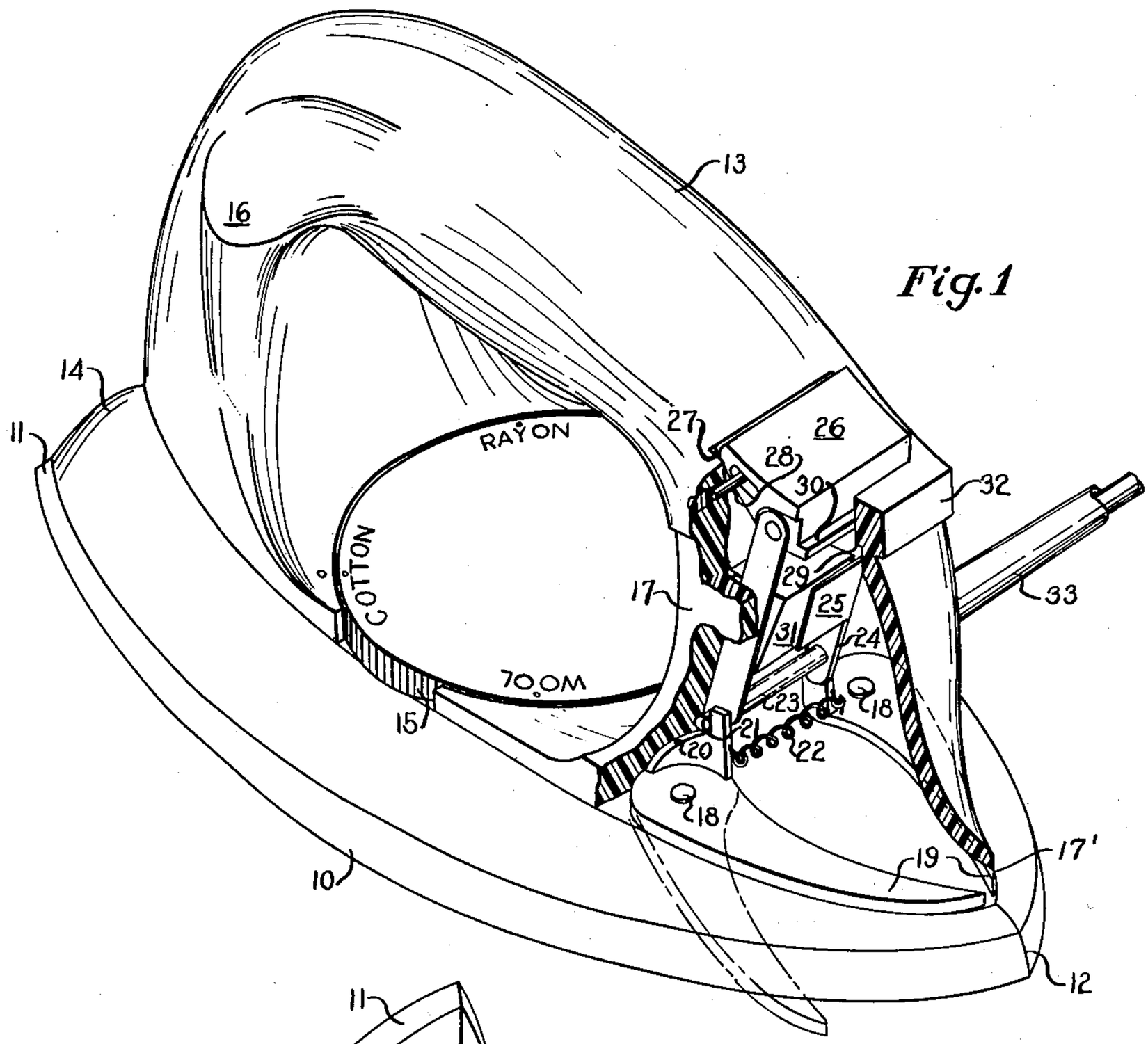

Fig. 1

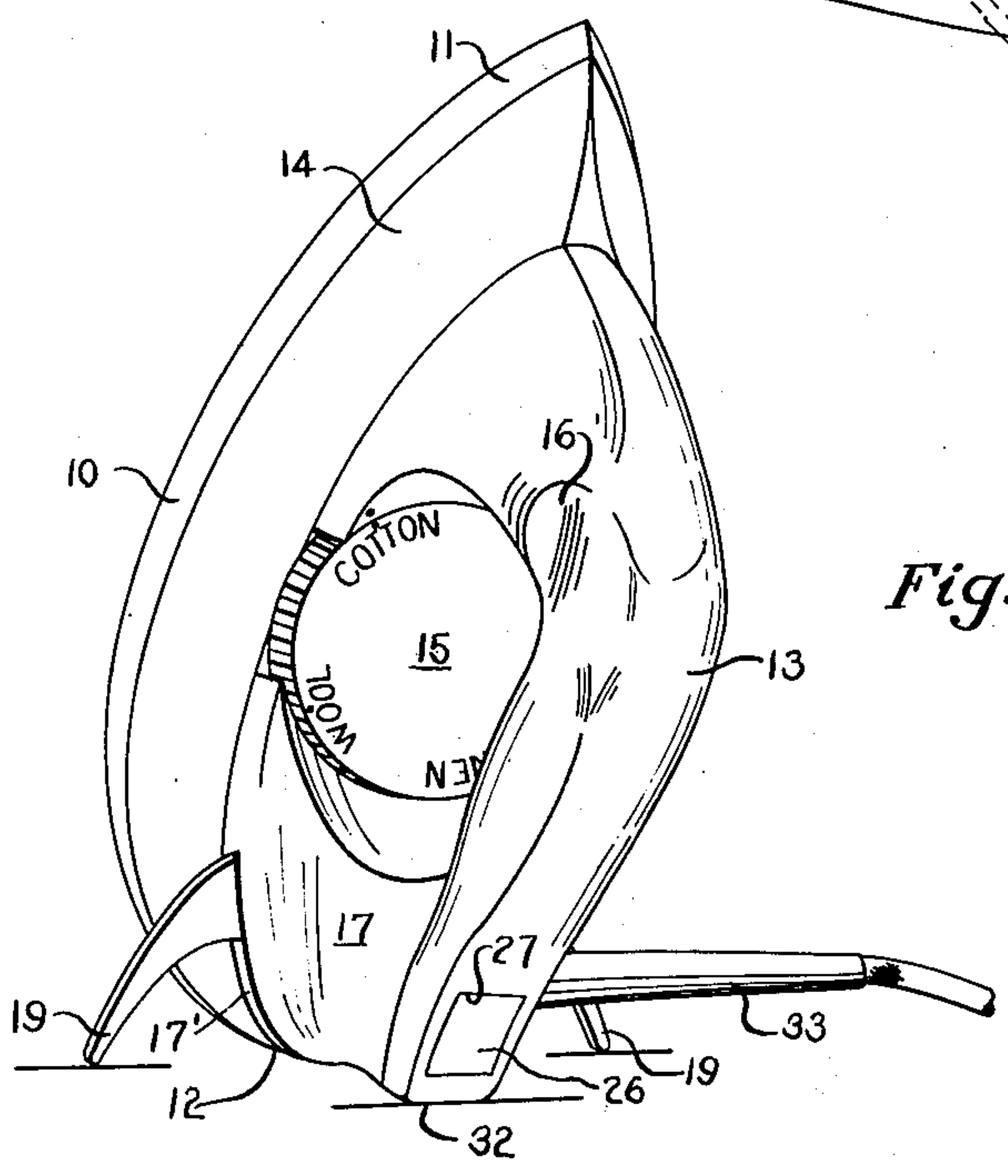

Fig. 2

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RETRACTABLE SUPPORT FOR ELECTRIC IRONS

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This invention relates to electric pressing irons and more particularly to those of the type in which both the toe and heel are pointed with means for supporting the iron on its heel end by upending the iron rearwardly.

Electric pressing irons having both the toe and heel pointed are known in the art. Such irons of necessity must be turned on their side when temporarily not in use in order to prevent the sole plate from burning the ironing board cover or the material being pressed. In addition, in such a position, the central edge of the sole plate also contacts the ironing board cover or the material being pressed when the iron is temporarily turned on its side. The central edge of the sole plate is usually very hot when the iron is in use and as a result the ironing board cover may be scorched by this edge when the iron is laid on its side while its heater is still energized.

Another disadvantage of prior irons having both ends pointed is that they are awkward to use by some users. Most present day irons are made to be turned rearwardly so as to be supported on their heel end and handle when not in use. To a user not accustomed to an iron which cannot be turned rearwardly to be supported the double pointed irons seem awkward and clumsy in use.

According to the present invention, a double pointed iron is provided with means for supporting it on its heel end so that no portion of the sole plate will contact the supporting surface thus assuring that the ironing board cover or the material being pressed will not be scorched or burned.

More specifically according to this invention retractable supporting means is provided on the rear of the iron for supporting the iron in an inclined position on its heel end so that the pointed heel thereof will be free of the supporting surface. The retractable supporting means is movable to an extended or supporting position by depressing an operating member on the rear of the handle with the heel of the operator's hand and is locked in such position by such movement. The supporting means may be returned to its non-supporting position by a second depression of the operating member and a slight forward movement. The supporting means is arranged to cooperate with the rear of the manipulating handle to support the iron in an inclined position on its heel so that the pointed heel thereof will be free of the supporting surface. Upon release of the operating member the supporting means is automatically returned to its retracted position.

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Other objects and advantages of this invention will become apparent as the description proceeds when taken in connection with the accompanying drawings in which:

Figure 1 is a perspective view of the iron according to this invention with parts of the rear of the handle broken away to better show the details of the supporting means; and

Figure 2 is a perspective view showing the iron of this invention supported on its heel end in an inclined position.

Referring to the drawings the reference numeral 10 represents a sole plate having a pointed toe 11 and a pointed heel 12. The sole plate 10 is heated by an electrical heater (not shown) in a manner well known in the art. The iron is adapted to be manipulated by a handle 13 secured to a heat dissipating cover plate 14 overlying both the sole plate 10 and the electric heater. The handle 13, cover plate 14, and sole plate 10 are secured together in any manner well known to the art.

A control knob 15 is rotatably mounted on the cover plate 14 to adjust a thermostatic control (not shown) for the electric heater. A thumb rest 16 is positioned at the forward part of the handle 13.

The rear leg 17 of the handle 13 is hollowed out to form a housing for the operating mechanism for the support of this invention. Pivoted at 18 to the cover plate 14 underneath recess 17' in the bottom of the rear leg 17 of handle 13 are a pair of supporting legs 19. The outer ends of legs 19 when in retracted position are positioned above the pointed heel 12 and slightly forwardly thereof.

Extending upwardly from the inner ends of the legs 19 are cams 20 having stops 21 at their upper inner edges. The outer ends of the legs 19 are biased toward each other by a spring 22.

Cooperating with the cams 20 is a pin 23 rotatably mounted in the lower ends of arms 24 rigidly secured together by a cross plate 25. An operating lever 26, positioned in a recess 27 in the rear of the handle 13, is pivoted to the upper ends of arms 24 and is slidable longitudinally in the recess 27 by means of a pin and slot connection 28. The recess 27, at its rear edge, has a downwardly facing shoulder 29 which cooperates with a rearward extension 30 of the manipulating member 26 as will be presently described. An abutment 31 extends into the recess of the leg 17 of handle 13 which cooperates

with the connecting member **25** to form a guide for the vertical movement of arms **24**.

An electric service cord **33** extends outwardly from the rear leg **17** of the handle **13** to lead electrical current to the heating element of the iron in any manner well known in the art.

Operation

If the user desires to support the iron on its heel end the operating member **26** is pushed downwardly and rearwardly by the heel of the hand. This will cause downward movement of the arms **24** guided by the abutment **31** which engages the connecting member **25**. The pin **23** will coact with the cams **20** on the legs **19** to move the legs **19** outwardly away from each other against the bias of spring **22** as shown in dotted lines of Fig. 1. The connecting member **25** engages with the abutment **31** to prevent forward movement of the arms **24**.

After the legs **19** have been moved outwardly by downward movement of the member **26**, a rearward movement of the operating member **26** will engage the lug **30** beneath the shoulder **29** so that the legs **19** will be locked in extended position. The iron may then be tipped backwardly upon its heel end and the outer ends of the legs **19** will cooperate with the rear end **32** of the handle **13** to support the iron in an inclined position.

The arrangement is such that the outer ends of the legs **19** will be positioned forwardly of the pointed heel **12** and the rear end **32** of the handle **13** will be positioned forwardly of the ends of the legs **19** so that the outer ends of the legs **19** and the rear end **32** of the handle will form a three point support lying in an inclined plane passing through a point rearwardly of the pointed heel **12** so that the iron may be supported on its heel end in an inclined position with the pointed heel **12** free of the supporting surface as shown in Fig. 2.

To release the legs **19** for movement to retracted position under the bias of spring **22** it is only necessary to press downwardly and forwardly upon the manipulating member **26** so as to release the abutment **30** from beneath the shoulder **29** and permit the legs **19** to move to their retracted position under the bias of spring **22**.

While I have shown but a single embodiment of my invention it is to be understood that this embodiment is to be taken as illustrative only and not in a limiting sense. I do not wish to be limited to the particular structure shown and described but to include all equivalent variations thereof except as limited by the scope of the claims.

I claim:

1. A pressing iron comprising, an iron body including a sole plate with a pointed heel positioned on the median line thereof, a manipulating handle having a rear leg supported by said body, said rear leg having a support on its upper rear end, a pair of supporting legs each pivoted to said body on a substantially vertical axis beneath the rear leg of said handle so as to be movable from a retracted position lying beneath said rear leg to an extended position extending outwardly and rearwardly at an acute angle to said body with one leg on each side of said pointed heel so that said body may be supported on said support and the outer ends of said supporting legs with said pointed heel above the supporting surface, an outwardly inclined cam on the inner end of each of said supporting legs so as to lie in a recess in said rear leg and a vertical reciprocating operating member in said recess engaging said cams so that downward movement of said operating member will move said supporting legs to their extended position and manually actuatable means connected to said operating member and operable to actuate the same.

2. A pressing iron according to claim 1 in which said manually actuatable means includes a manipulating member extending above the surface of said handle and manipulatable by downward pressure to move said actuating means downwardly to depress said operating member.

3. A pressing iron comprising, an iron body including a sole plate having a pointed heel positioned on the median line thereof, a manipulating handle having a recessed rear leg secured to said body, said recess extending from said body upwardly through said rear leg and opening through the top of said handle above said rear leg, a pair of supporting legs each pivoted to said body on a susbtantially vertical axis beneath said rear leg so as to occupy a retracted position beneath said rear leg and a rearwardly extended position at an acute angle to the sides of said body one on each side of said pointed heel with the outer ends of said legs and the rear end of said handle lying in a plane beyond said pointed heel when said legs are in extended position, outwardly inclined cams on the inner ends of said supporting legs and positioned in said recess, a vertically reciprocating operating member engageable with said cams for moving said supporting legs to their extended position and actuating means extending upwardly through the recess in said rear leg and accessible from the top of said handle and coacting with said operating member for moving the latter downwardly so as to move said supporting legs to their extended position.

4. A pressing iron comprising, an iron body including a sole plate having a pointed heel positioned on the median line thereof, a manipulating handle having a recessed rear leg secured to said body, said recess extending from said body upwardly through said rear leg and opening through the top of said handle above said rear leg, a pair of supporting legs each pivoted to said body on a substantially vertical axis beneath said rear leg so as to occupy a retracted position beneath said rear leg and a rearwardly extended position at an acute angle to the sides of said body one on each side of said pointed heel with the outer ends of said supporting legs and the rear end of said handle lying in a plane beyond said pointed heel when said legs are in extended position, cam means on the inner ends of said supporting legs, means engageable with said cam means and operable upon downward movement thereof to move said supporting legs to their extended position, movable means extending upwardly through the recess in said rear leg and cooperating with said cam engaging means to move the latter downwardly and means accessible from the top of said handle and cooperating with said movable means to actuate the same.

5. A pressing iron according to claim 4 in which said actuating means is movable downwardly and rearwardly to move said supporting legs to extended position and means operable upon downward and rearward movement of said actuating means for locking said actuating means in its downward and rearward position to lock said supporting legs in their extended positions.

6. A pressing iron comprising, an iron body in-

cluding a sole plate having a pointed heel positioned on the median line thereof, a manipulating handle having a rear supporting leg attached to said body, said handle having an open recess above said rear leg, a pair of supporting legs each pivoted to said body on a substantially vertical axis beneath said rear leg so as to occupy a retracted position beneath said rear leg and a rearwardly and outwardly extended position at an acute angle to said body with one leg on each side of said pointed heel and with the outer ends of said supporting legs and the rear end of said handle lying in an inclined plane beyond said pointed heel when said legs are in extended position, an actuating member positioned in said open recess coacting with means on said legs for moving said supporting legs to their extended position and means coacting with said actuating member for locking said actuating member in a position to hold said supporting legs in their extended position.

7. A pressing iron according to claim 6 in which said actuating member is mounted in said recess for downward and rearward movement and said locking means comprises coacting abutments on the wall of said recess and on said actuating member engageable with each other for locking said actuating member in its lower rearward position upon movement thereof to that position.

8. A pressing iron comprising, an iron body including a sole plate having a pointed heel positioned on the median line thereof, a manipulating handle secured to said body and having a rear supporting leg, a pair of legs each pivoted to said body on a substantially vertical axis beneath said rear leg so as to normally occupy a retracted position beneath said rear leg and movable to a rearwardly and outwardly extended position in the plane of the top of said body and at an acute angle to the length of said body one on each side of said pointed heel with the outer ends of said pivoted legs and the rear end of said handle lying in a plane inclined to the vertical beyond said pointed heel when said legs are in extended position and means operable from said handle and

coacting with said pivoted legs to move them to their extended position.

9. A pressing iron comprising, an iron body including a sole plate having a pointed heel positioned on the median line thereof, a manipulating handle having a rear leg secured to said body, the rear leg of said handle having its rear end formed with a support extending rearwardly thereof and having a recess formed in its bottom end above said body, and a pair of supporting legs each pivoted to said body on a substantially vertical axis in said recess beneath said rear leg so as to occupy a retracted position beneath said rear leg and movable to a rearwardly and outwardly extended position at an acute angle to the sides of said body with the ends of said supporting legs positioned on opposite sides of said pointed heel in which position the outer ends of said legs and the rear end of said handle lie in a plane beyond said pointed heel.

10. A pressing iron according to claim 9 including spring means for biasing said supporting legs to their retracted position and means operable from said handle for moving said supporting legs to their extended position against the bias of said spring means.

11. A pressing iron according to claim 9 including spring means for biasing said supporting legs to their retracted position, means for moving said supporting legs to their extended position and means for locking said supporting legs in their extended position against the bias of said spring means.

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