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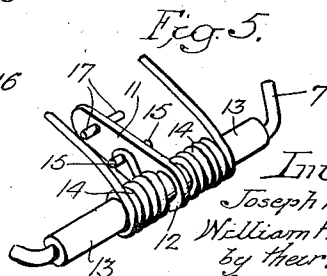
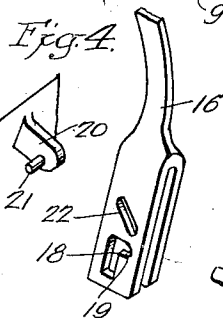
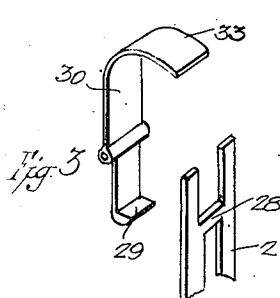
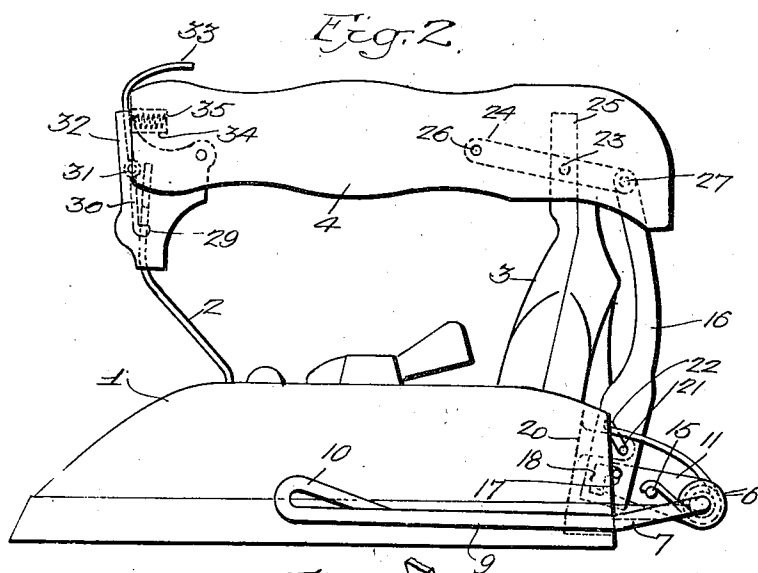
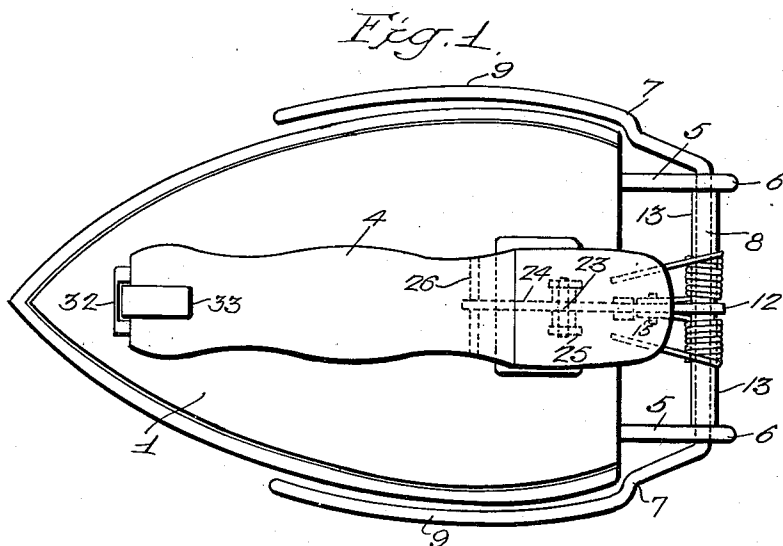
J. W. MYERS ET AL

2,019,431

FLATIRON LIFT STAND.

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3 Sheets-Sheet 1



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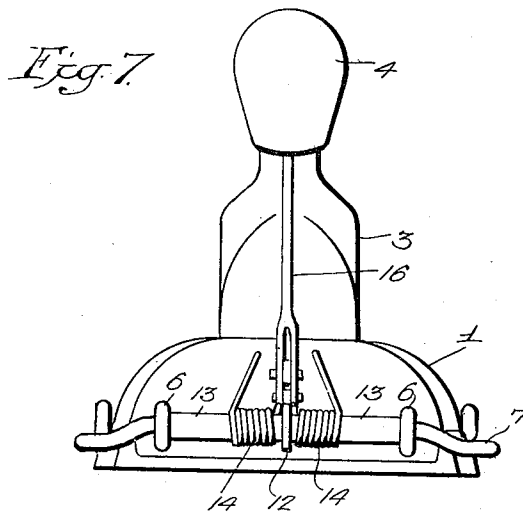
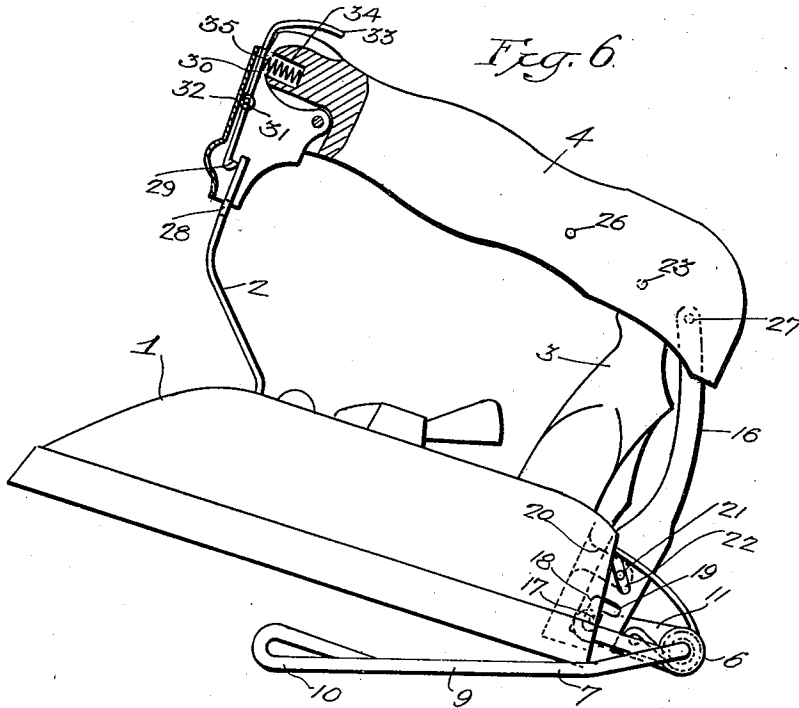
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FLATIRON LIFT STAND

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3 Sheets-Sheet 2



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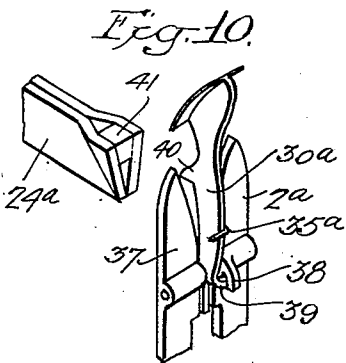
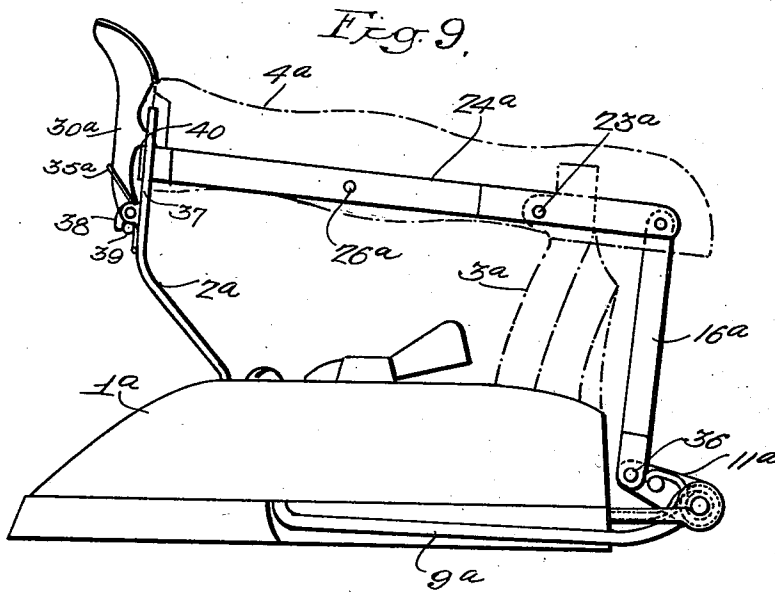
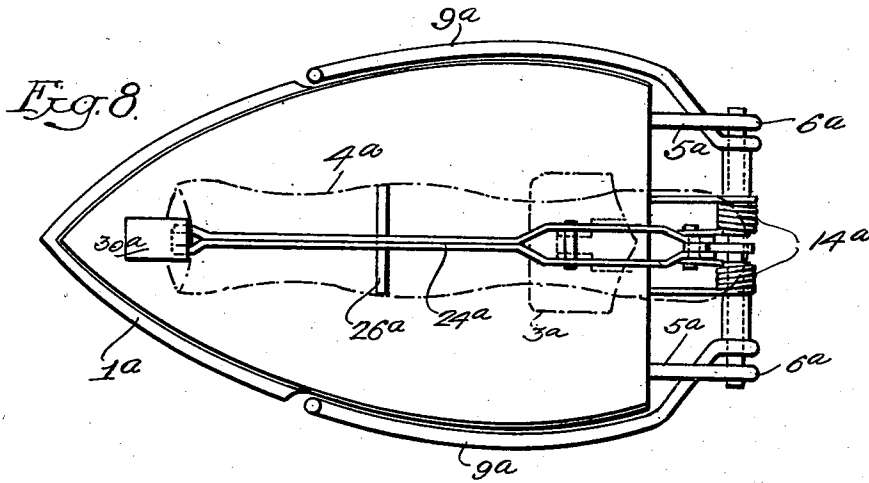
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FLATIRON LIFT STAND

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3 Sheets-Sheet 3



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UNITED STATES PATENT OFFICE

2,019,431

FLATIRON LIFT STAND

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Application February 14, 1935, Serial No. 6,540

11 Claims. (Cl. 68-26)

This invention relates to devices for lifting and supporting a flat-iron away from an operating surface whenever the iron is not being used. The principal object of the invention is to provide an improved device of this character embodying certain novel features which render the device a marked improvement over prior devices of the same class.

A more specific object of the invention is to provide a device of this nature wherein there is provided a supporting member pivotally mounted at the rear of the iron and adapted and arranged to tiltably lift and support the iron away from the operating surface, and a pivoted handle for the iron operatively connected to the supporting member so that the latter may be moved to inoperative position by the handle.

Another object of the invention is to provide a device of this structure wherein there is provided latching means at the front end of the iron handle to maintain the supporting member in inoperative position.

Still another object of the invention is to provide a device of this construction having means for actuating the supporting member to lift and support the iron away from the operating surface whenever the said latching means is released, the device being automatically maintained in this condition until the handle of the iron is actuated to, in turn, actuate the supporting member and render the latching means effective.

Other objects and features of the invention will appear hereinafter. For a complete understanding of the invention, reference may be had to the accompanying drawings illustrating preferred embodiments of the invention.

In the drawings:

Fig. 1 is a plan view of a flat-iron embodying a preferred form of the invention;

Fig. 2 is a side elevational view of the device with the supporting member in inoperative position;

Figs. 3 to 5 are fragmentary perspective views illustrating more clearly certain parts of the device;

Fig. 6 is a side elevational view of the device with the lifting and supporting member in operative position;

Fig. 7 is a rear elevational view of the device;

Fig. 8 is a plan view of a flat-iron embodying an alternative form of the invention;

Fig. 9 is a side elevational view of the same device; and

Fig. 10 is a fragmentary perspective view illustrating certain parts more clearly.

Referring to Figs. 1 to 7 of the drawings, the iron therein illustrated comprises the usual body 1 having front and rear legs 2 and 3, respectively, extending upward therefrom and supporting the handle 4. In accordance with the present invention, a pair of spaced arms 5 extend from the body of the iron at the rear thereof. These arms may have their ends imbedded in the sole plate of the iron or they may be firmly attached in any other suitable manner. As illustrated, the arms 5 are formed as rod-like members with their free ends bent to form the loops or eyelets 6 through which a U-shaped supporting member 7 extends. In this manner, the base portion 8 of the supporting member is pivotally carried by the arms 5. The arms or sides 9 of the supporting member extend forwardly of the iron along the sides thereof and are arranged to clear the iron body during pivotal movement of the supporting member. The ends of the arms 9 may be looped as at 10 (see Fig. 2) to provide feet and to strengthen the supporting member at that portion of the same.

The base portion 8 of the supporting member is provided with a centrally-disposed arm 11 which may be formed integrally with the said portion. At the juncture of this arm and the portion 8, there is provided a flange 12 and a pair of sleeves 13 are mounted upon the portion 8 on the opposite sides of the said flange. The outer ends of these sleeves abut against the loops or eyelets 6 and the sleeves thus serve to maintain the supporting member in proper pivotal position on the arms 5. A pair of coil springs 14 are wound about the sleeves on opposite sides of the flange 12. The inner ends of these springs are hooked over or engage opposed pins 15 (see Fig. 5) carried by the arm 11. The outer ends of the springs are seated in recesses in the sheet metal cover of the body 1, although these spring ends may be secured to the body of the iron in any suitable manner. The purpose of the coil springs is to serve as actuating means to effect relative movement between the supporting member and the iron. The springs are arranged so that when the supporting member is moved to its inoperative position, shown in Fig. 2, the springs are wound or placed under tension.

A link 16 having its lower end bifurcated is connected between the handle 4 and arm 11. The bifurcated end of this link straddles the arm 11 with the pins 17 carried by arm 11 seated in the slots 18 (see Fig. 4) of the link. The slots 18 are each provided with a lateral recess 19 in which the pins 17 may seat as described hereinafter. A short arm 20 (see Fig. 4) protrudes

from the back of the body 1 and may be formed integrally with the sole plate of the iron. This arm carries pins 21 which are slidably seated in the slots 22 of link 16.

The handle of the iron is pivotally supported upon the rear leg 3 at 23. The handle may be formed of wood or like material and may have imbeddedly secured within it a metal strip 24 which may be pivotally connected to the metallic upright 25 of the leg 3 at the point 23. As illustrated, the strip 24 is secured to the handle by the transverse pin 26. The rear end of the strip 24 is pivotally connected at 27 to the upper end of link 16. The handle is recessed sufficiently to permit ample pivotal movement of the handle about the pivot 23 and to permit the required pivotal action between the handle and link 16 about the pivot 27. It will be seen that the handle is pivotally mounted near its rear end and is, therefore, capable of effecting lever action to move link 16, as will be explained later.

The front leg 2 is formed at its upper end as clearly illustrated in Fig. 3 to provide the transverse portion 28 which serves to secure and hold the nose 29 of the pivotal latch member 30. This member is pivotally mounted at 31 within a latch housing 32 carried at the forward end of the handle 4. The upper end of the latch member 30 is curved over the end of the handle to provide the finger-trip 33. The handle is recessed at 34 (see Fig. 2) and within the recess there is mounted a small coil spring 35 arranged to constantly urge the latch member 30 into engagement with the latch keeper 28.

With the device in the condition shown in Fig. 2, the supporting member is in inoperative position and the springs 14 are wound or under tension, as above mentioned. The pins 17 are seated in the lateral recesses 19 and the pins 21 are seated at the bottom of slots 22. The latch is in operative position, and is thus maintained by the latch spring. The user may use the iron in the normal manner without touching the trip 33 and the device will maintain its condition.

At such time as the user desires to cease the ironing operation, even though for a short period of time, the latch may be tripped by simply touching the finger-trip 33 with the thumb or a finger and this will release the front end of the handle, permitting the handle to pivot about the point 23. The springs 14 will cause the supporting member to move downward until the arms thereof engage the operating surface. At such time, the iron will be tiltably lifted to the position shown in Fig. 6. The pins 17 and 21 will now assume the positions in their respective slots shown in Fig. 6. The iron will be lifted and maintained in a tilted position away from the operating surface.

When it is desired to again use the iron, the user will press downward upon the handle and by this application of the simple lever, the link 16 will be drawn upward. At the same time, the tilted iron will be pressed downward and will rotate about the base portion 8 of the supporting member as a fulcrum. During this movement, the pins 17 and 21 will ride in their respective slots. When the heel of the iron engages the operating surface, it will act as a fulcrum, causing the supporting member to rotate about its pivot until the pins 17 have moved upward in slots 18 to a point adjacent the lateral recesses 19. Continued pressing of the handle will cause the pins 17 to seat in the recesses 19 and the latch will operate automatically to hold the for-

ward end of the handle and thereby hold the supporting member in inoperative position against the force of springs 14. The leverage obtained by the pivotal mounting of the handle, coupled with the weight of the iron body, enables the movement of the supporting member to its inoperative position against the force of springs 14 by the application of relatively light pressure applied to the handle. The pins and slots, which constitute a lost-motion connection between link 16 and arm 11, enable the requisite relative movement between these elements.

The device illustrated in Figs. 8 to 10 is generally similar to that above described and the corresponding parts have been designated by the same numerals. In this case, however, the link 16a is pivotally connected to the arm 11a at 36. A metallic insert strip 24a extends substantially the length of the handle and is pivotally connected to the rear leg at 23a. The rear end of strip 24a is pivotally connected to the upper end of link 16a, as before.

The front leg 2a is formed as illustrated in Fig. 10 with spaced prongs 37 pivotally carrying the latch member 30a therebetween. A small spring 35a is wound around the pivot and has one end bent around the latch member, as shown in Fig. 10, and the other end in engagement with leg 2a, as shown in Fig. 9. A stop 38, which is engageable by projection 39 of the latch member, 30 limits the movement of that member in one direction.

The latch member is provided with a latching nose 40 which is adapted to seat upon the seating portion 41 at the forward end of member 24a which serves as the latch keeper. The said end is tapered downward, as shown in Fig. 10, so that it may ride between the prongs 37. The upper end of the latch member is formed to provide the trip 33a.

With the device in its inoperative position as shown, the latch spring maintains the latch in operative position and the supporting member is, in turn, maintained in inoperative position against the action of its springs. When the user desires to elevate the iron, slight pressure of the finger trip of the latch member will disengage the latch and allow pivotal movement of the handle, thus allowing the supporting member to rotate under the impetus of its springs; whereupon, the iron is raised and maintained in tilted position above the operating surface. When it is desired to again use the iron, pressure applied to the handle will cause the iron to move downward about the supporting member pivot as a fulcrum until the iron engages the operating surface. At such time, the pivotal movement of the handle to permit automatic latching of the front end thereof will raise the supporting member through the connecting links 16a. Aside from the differences just described, the device is similar in construction and operation to the previously described device.

It will be seen from the above description that a device constructed in accordance with the invention embodies simple structure and novel features which make the device effective in action and easy to operate. Although certain specific forms of the invention have been disclosed herein, it will be understood that various other forms and modifications are possible within the scope of the invention as defined by the appended claims.

We claim:

1. In a flat-iron, a pivoted handle for said iron, 75

supporting means pivotally carried at the rear of said iron and extending forwardly thereof, and means operatively connecting said supporting means to said handle.

2. In a flat-iron, a pivoted handle for said iron, supporting means pivotally carried at the rear of said iron comprising a pair of arms extending forwardly of the iron along the sides thereof, and means operatively connecting said supporting means to said handle.

3. In a flat-iron, a pivoted handle for said iron, a U-shaped supporting member pivotally carried at the rear of said iron with its arms extending forwardly of the iron along the sides thereof, and means operatively connecting said supporting member to said handle.

4. In a flat-iron, a pivoted handle for said iron, supporting means pivotally carried at the rear of said iron, and extending forwardly thereof, means for actuating said supporting means relative to the iron and vice versa, whereby the iron may be tiltably lifted from an operating surface, and means operatively connecting said supporting means to said handle whereby said supporting means may be moved to inoperative position.

5. In a flat-iron, a pivoted handle for said iron, supporting means pivotally carried at the rear of said iron and extending forwardly thereof, means for actuating said supporting means relative to the iron and vice versa, whereby the iron may be tiltably lifted from an operating surface, means operatively connecting said supporting means to said handle whereby said supporting means may be moved to inoperative position, and means for latching said handle to maintain said supporting means in said position.

6. In a flat-iron, a handle for said iron pivoted near the rear thereof, supporting means pivotally carried at the rear of said iron and extending forwardly thereof, and a link operatively connecting said supporting means to the rear of said handle.

7. In a flat-iron, a handle for said iron pivoted near the rear thereof, supporting means pivotally carried at the rear of said iron comprising a pair of arms extending forwardly of the iron along the sides thereof, and a link operatively connecting said supporting means to the rear of said handle.

8. In a flat-iron, a handle for said iron pivoted

near the rear thereof, a U-shaped supporting member pivotally carried at the rear of said iron with its arms extending forwardly of the iron along the sides thereof, and a link operatively connecting said supporting member to the rear of said handle.

9. In a flat-iron, a handle for said iron pivoted near the rear thereof, supporting means pivotally carried at the rear of said iron and extending forwardly thereof, means for actuating said supporting means relative to the iron and vice versa, whereby the iron may be tiltably lifted from an operating surface, and a link operatively connecting said supporting means to the rear of said handle whereby said supporting means may be moved to inoperative position.

10. In a flat-iron, a handle for said iron pivoted near the rear thereof, supporting means pivotally carried at the rear of said iron and extending forwardly thereof, means for actuating said supporting means relative to the iron and vice versa, whereby the iron may be tiltably lifted from an operating surface, a link operatively connecting said supporting means to the rear of said handle whereby said supporting means may be moved to inoperative position, and means for latching said handle to maintain said supporting means in said position.

11. In a flat-iron, a handle for said iron pivoted near the rear thereof, a U-shaped supporting member pivotally carried at the rear of said iron with its arms extending forwardly of the iron along the sides thereof, spring means arranged to actuate said supporting member relative to the iron and vice versa, whereby the iron may be tiltably lifted from an operating surface, a link pivotally connected at one end to the rear of said handle and connected at its other end to said supporting member through a lost-motion connection, whereby said supporting member may be moved against the force of said spring means to inoperative position by actuation of said handle, and means for latching the front end of said handle to maintain said supporting member in said position.

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