

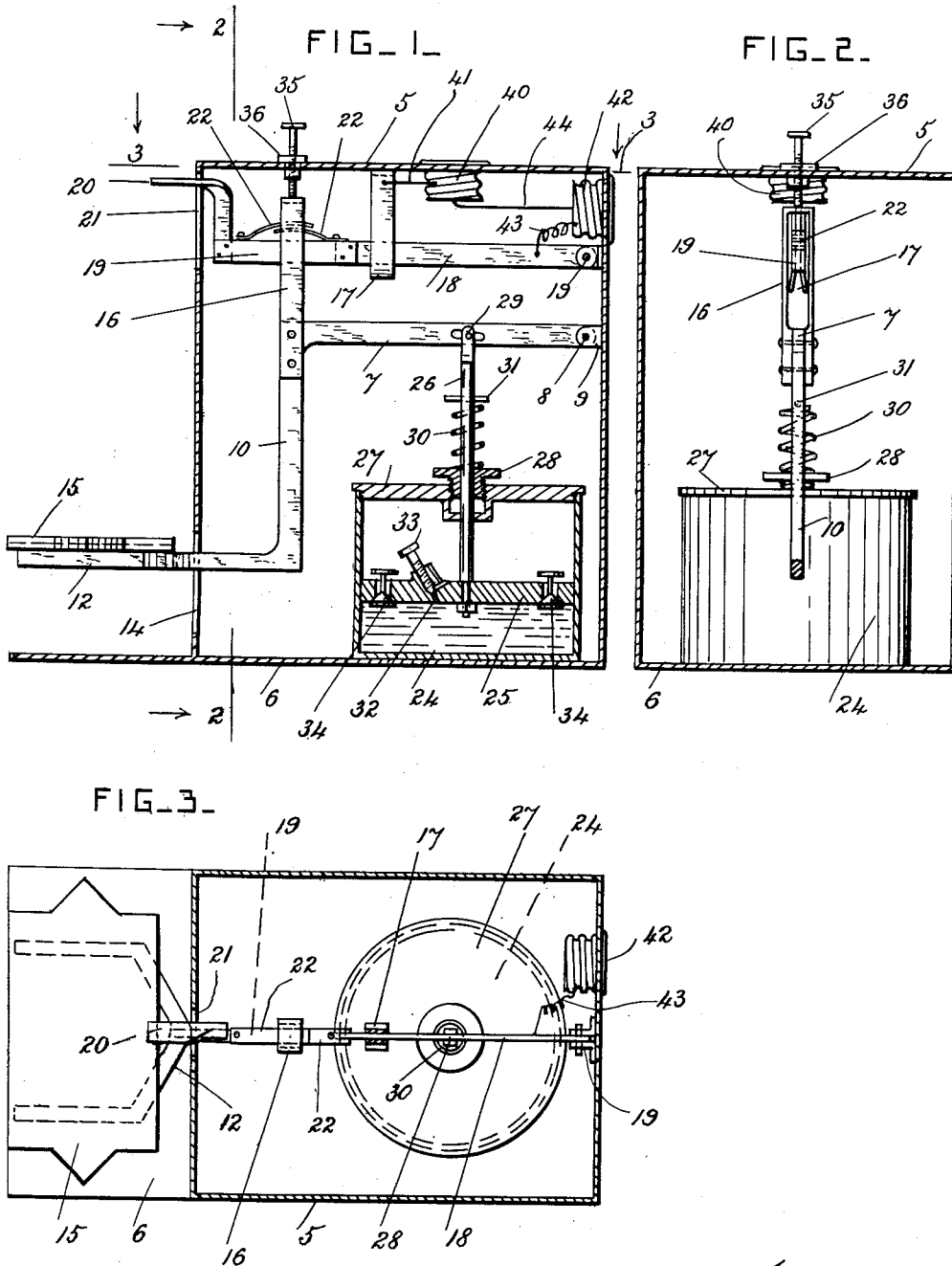
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STAND FOR ELECTRIC IRONS

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UNITED STATES PATENT OFFICE.

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STAND FOR ELECTRIC IRONS.

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To all whom it may concern:

Be it known that I, HARLEY Z. WOODEN, a citizen of the United States, residing at Ypsilanti, in the county of Washtenaw and State of Michigan, have invented certain new and useful Improvements in Stands for Electric Irons, of which the following is a specification.

This invention relates to stands for supporting irons which are heated by electricity and used in laundry work; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed whereby the iron is supported and kept in circuit for a predetermined period of time, and whereby the heating current is cut off automatically at the end of the said period.

In the drawings, Figure 1 is a side view of a stand constructed according to this invention. Fig. 2 is a cross-section, taken on the line 2—2 in Fig. 1. Fig. 3 is a sectional plan view, taken on the line 3—3 in Fig. 1.

A supporting casing 5 of suitable shape and size is provided, and has a base 6 which projects at its front side, and prevents it from being upset easily. A horizontal arm 7 is pivoted by a pin 8 to a lug or lugs 9 on the rear side of the casing, and has a vertical member 10 which extends downwardly from its front end. A forked arm 12 is connected to the lower end of the part 10, and projects through a slot 14 in the front side of the casing, and is arranged substantially parallel to the arm 7. A plate 15 is secured to the outer end portion of the arm 12, and the iron is placed on this plate when not being used. The plate is of a suitable shape to support the iron in any desired position, and suitable for a right-handed or for a left-handed person.

A loop 16 is secured to the upper part of the vertical member 10, and is arranged in line with it. The blade 18 of an electric switch is pivoted to a lug or lugs 19 on the rear side of the casing above the arm 7. A forked contact spring device 17 is secured to the top of the casing, and the blade 18 usually engages with this spring device, and is supported by frictional contact with it. The blade 18 has an extension 19 formed of insulating material, and which projects through the loop 16. A handle 20 is secured to the extension 19, and projects through a slot 21 in the front side of the

casing. Two springs 22 are secured to the upper side of the extension 19, and are adapted to engage with the upper end of the loop. A single spring may be used, but two springs which overlap each other as shown are preferably provided.

A dash-pot cylinder 24 is arranged inside the casing, and is provided with a slidable piston 25, and a piston-rod 26. The top of the cylinder 24 is closed by a cover 27 having a stuffing-box 28. The piston-rod is slidable in this stuffing-box, and its upper end is connected to the arm 7 by a pin 29. A helical spring 30 is arranged around the rod 26 between the gland of the stuffing-box and an abutment pin 31 on the piston rod.

The piston 25 has a passage 32 which is regulated by a needle-valve 33, and the cylinder is adapted to hold oil or similar fluid. One or more valves 34 are provided in the piston, and these valves 34 open automatically when the piston is raised in the cylinder by the spring 30, and permit the oil to pass freely from the upper part of the cylinder to its lower part. These valves are buoyant valves, or are otherwise adapted to close automatically when the piston is moved downwardly in the cylinder.

An adjusting screw 35 engages with a screwthreaded plate 36 secured to the top of the casing, and is arranged over the top of the loop 16, and forms a stop for the arm 7 and all the parts connected to it.

A socket 40 for the plug that carries the conductor cord of the iron is secured to the top of the casing. When the adjusting screw 35 is not provided, the plug socket may be arranged over the loop 16, or it may be arranged in any other convenient position on the casing. This socket 40 is connected to the contact spring 17 by a wire 41. A second socket 42 is also secured to the casing, and preferably to its rear side, and is connected in circuit with the blade 18 by a wire 43. A connecting wire 44 is arranged between the bottoms of the two sockets 40 and 42.

The plug of the cord for supplying electric current to heat the iron is inserted in the socket 42, and when the parts are in the positions shown the circuit of the wires of the supply cord is completed through the wires of the cord which is connected to the electric iron. The electric iron is of any

approved make, and its cord is made of any suitable length and stiffness to enable it to be used for laundry work to advantage.

When the iron is stood on the plate 15, it is heated by the current. The weight of the iron presses down the pivoted arm and the piston of the dash-pot, and the valve 33 is set so that the piston is a predetermined length of time, such as five minutes, in making its down stroke. When the top of the loop 16 strikes the upper spring 22 it presses it down on the lower spring, and the blade 18 is moved downwardly. When the blade commences to move, these springs cause it to move suddenly clear of the contact spring 17, so that the supply of current to the iron is cut off automatically. This is a great advantage, as an iron is frequently left standing on its stand through forgetfulness, and much current is thereby wasted.

When the iron is lifted off the plate 15 the arm 7 is raised to its original position by the spring 30, but the switch remains open until the blade 18 is raised by hand into engagement with the contact spring device 17 to close the circuit.

What I claim is:

1. In a stand for an electric iron, a pivoted arm for supporting the iron, a switch which normally closes the circuit to heat the iron and which is opened automatically when the pivoted arm is depressed by the iron, and a dash-pot which controls the descent of the said arm.

2. In a stand for an electric iron, a pivoted arm for supporting the iron, a spring for raising the arm when not loaded with the iron, a dash-pot which controls the descent of the arm when loaded with the iron, and an electric switch operatively connected with the said arm and normally closing the heating circuit, said switch being opened when the arm is depressed by the iron.

3. In a stand for an electric iron, a pivoted arm for supporting the iron, a spring

for raising the arm when not loaded with the iron, a dash-pot which controls the descent of the arm when loaded with the iron, a stationary spring contact device, a pivoted switch blade normally supported by the said contact device, and means connected with the said arm and operating to open the switch when the said arm is depressed by the iron.

4. In a stand for an electric iron, a pivoted arm for supporting the iron, a dash-pot which controls the descent of the arm, a loop secured to the said arm, a stationary spring contact device, and a pivoted switch blade normally supported by the said contact device and having an extension which projects through the said loop, the said switch being opened by the loop when the said arm is depressed by the iron and being adapted to remain open until the said arm is raised by hand.

5. In a stand for an electric iron, a pivoted arm for supporting the iron, a dash-pot which controls the descent of the arm, an electric switch provided with a pivoted blade and normally closing the circuit with the iron, means carried by the said arm and operating to open the switch when the arm is depressed, and a spring device which causes the switch to open suddenly when the said blade commences to move.

6. In a stand for an electric iron, a supporting casing, an arm pivoted to the rear side of the casing and provided with a support for the iron, a dash-pot arranged inside the casing under the said arm and having a piston and a piston-rod connected to the said arm, and an electric switch operatively connected with the said arm and normally closing the heating circuit, said switch being opened when the arm is depressed by the iron.

In testimony whereof I have affixed my signature.

HARLEY Z. WOODEN.