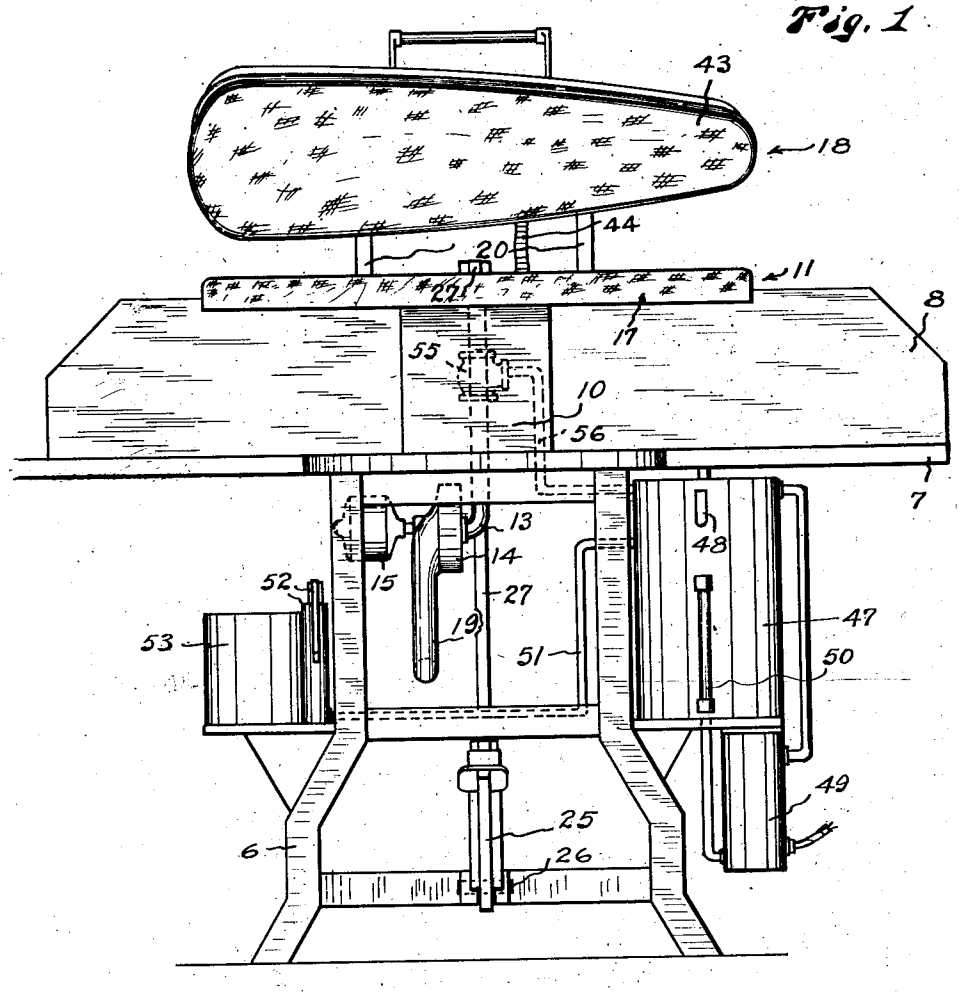
Nov. 17, 1925. 1,562,246

C. R. NELSON

ELECTRIC CLOTHES PRESSER

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Fig. 1



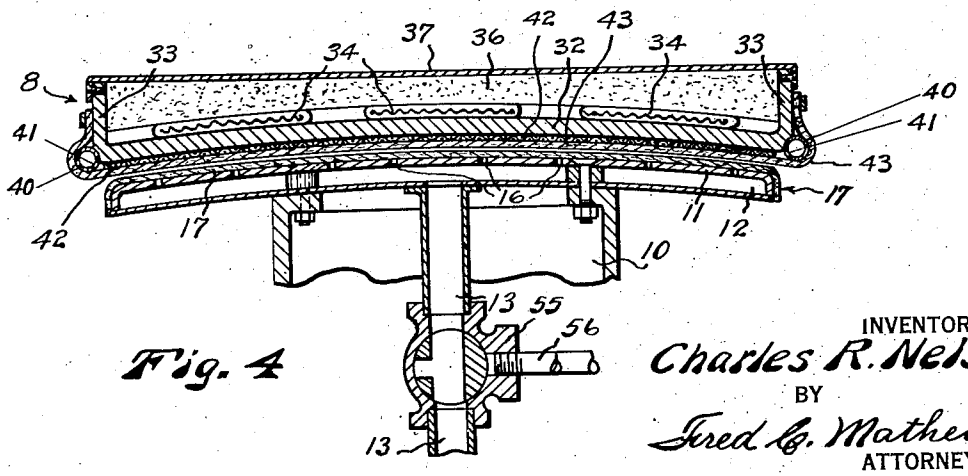


Fig. 4

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ELECTRIC CLOTHES PRESSER

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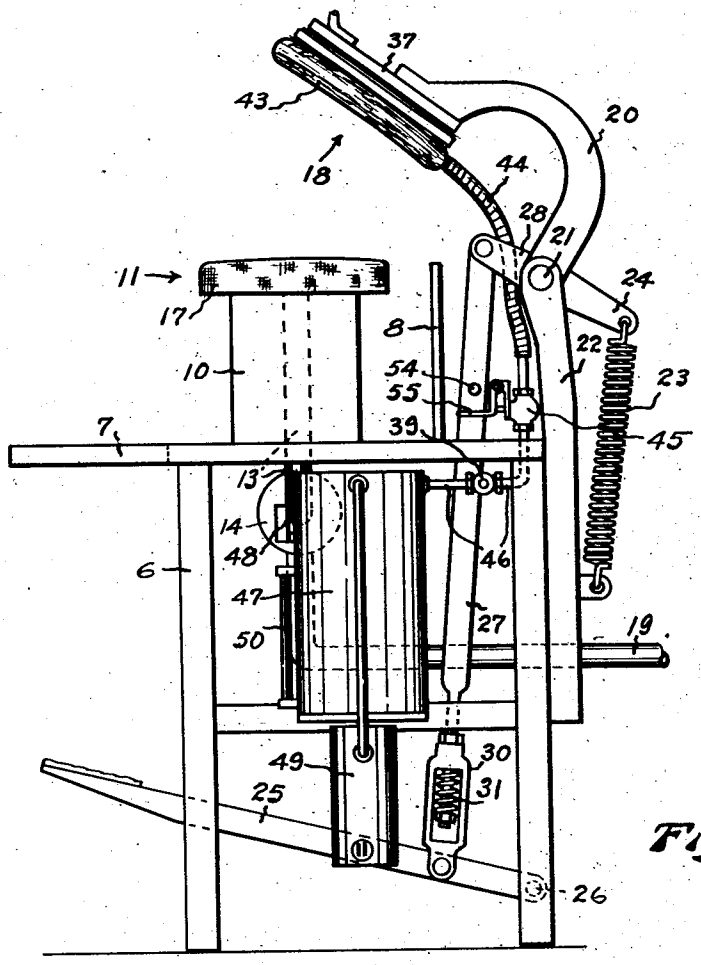


Fig. 2

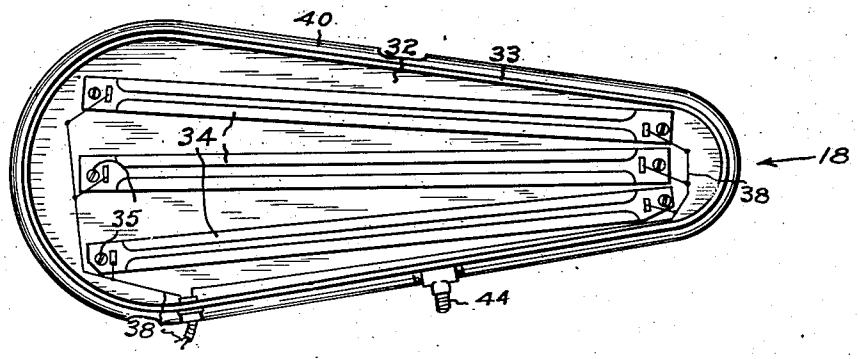


Fig. 3

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UNITED STATES PATENT OFFICE.

CHARLES R. NELSON, OF SEATTLE, WASHINGTON.

ELECTRIC CLOTHES PRESSER.

Application filed January 3, 1925. Serial No. 307.

To all whom it may concern:

Be it known that I, CHARLES R. NELSON, a citizen of the United States, and a resident of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Electric Clothes Pressers, of which the following is a specification.

My invention relates to improvements in electric clothes pressing machines and the object of my invention is to simplify and increase the efficiency of clothes pressing machines of this nature.

A further object is to provide in a clothes pressing machine a padded pressing buck having means around the edge of the buck for supplying steam between the buck and the pad that covers the face of the buck.

Another object is to provide an electric clothes pressing machine that is equipped with simple and compact bucks wherein simple and efficient electric heating elements of standard construction are disposed.

A further object is to provide means for creating a suction through a pressing buck to clean the clothes and draw the dust out of the same as they are being pressed and to dispose of excess steam.

Other and more specific objects will be apparent from the following description taken in connection with the accompanying drawings.

In the drawings Figure 1 is a front elevation of an electric clothes pressing machine constructed in accordance with my invention.

Fig. 2 is a side elevation of the same.

Fig. 3 is a plan view looking down into the upper buck with the cover and heat insulating packing removed to reveal the arrangement of the heating elements.

Fig. 4 is a view in cross section on a larger scale of the two bucks.

Referring to the drawings, throughout which like reference numerals designate like parts, 6 designates an upright stand whereon is supported a table 7 having an upright back 8 to prevent clothes from being pushed off of the rear side.

10 is a bracket extending upwardly from table 7 and supporting a lower pressing buck 11. The buck 11 is preferably hollow as at 12 and is connected by a pipe 13 with a suction fan 14 that is driven by a motor 15 whereby suction may be exerted through holes 16 in the pressing face of buck 11 to draw out dust from clothes that are being pressed and to draw steam down through said clothes, the dust and steam thus drawn out being disposed of through any suitable discharge pipe 19 connected with suction fan 14. A padding 17 of porous material is provided on buck 11.

18 is an upper buck movably supported on curved arms 20 that are pivoted by shaft 21 to the upper ends of rigid bracket members 22 that extend upwardly from support 6 at the rear of the machine so that the upper buck 18 may be lowered squarely on top of the lower buck 11 or may be lifted upwardly clear of the lower buck as shown in Figs. 1 and 2. A spring 23 secured to a short lever arm 24 serves to lift the upper buck 18 and to hold the same in an elevated position, the spring preferably being just strong enough to lift the weight of buck 18.

Buck 18 is lowered by a pedal 25 that is pivoted at 26 to support 6 and is connected by a link 27 with a lever arm 28 on shaft 21. A turnbuckle 30 and spring 31 may be included in and form a part of link 27 to afford adjustment and resilience to the connection. The only time that a relatively heavy pressure need be exerted on pedal 25 is when the same is at the bottom of its stroke and upper buck 18 is pressed down onto lower buck 11; the lever 28 is arranged so that its effective leverage will be at a maximum at this time thus affording greater pressure when needed and greater speed as the buck 18 is moved toward the upper limit of its movement.

The structure of the upper buck 18 is an important feature of this invention. Said buck comprises a shallow relatively long tapered housing member having a pressing face 32 and side flanges 33 that form a receptable wherein three, more or less, long flat electric heating elements 34 of the form commonly termed space heaters are disposed. The space heaters 34 are relatively flat in construction and rest flat against the inner surface of the pressing face 32 of the buck. Screws 35 at the ends of the space heaters secure the same to the buck. A relatively thick pad 36 of heat insulating material, as asbestos, is disposed on the top of the space heaters 34 and a cover plate 37 is secured over the top of the buck. The heating elements 34 are connected in parallel with suitable circuit wires 38 through which current may be supplied.

40 is a steam supply pipe that extends partially or entirely around the buck 18 near the lower edge thereof, and is provided at intervals with relatively small perforations 41 arranged so as to direct jets of steam out over or under the pressing face 32. The pressing face 32 is covered by a pad, preferably made up of a layer of fine wire mesh 42 disposed adjacent the pressing face 32 and an external pad 43 formed of one or more layers of relatively porous fabric. The external pad 43 in preferably drawn upwardly over the steam pipe 40 and secured to the sides of the buck so that the steam from the pipe 40 is directed inwardly through the space occupied by the wire mesh 42 between the presser face 32 and the pad 43 whereby such steam may pass outwardly through pad 32 to dampen the clothes that are being pressed and help heat the pad 43. I find that this method of supplying steam is very advantageous in an electrically heated clothes presser as it applies the steam where needed and yet keeps all moisture away from the electric heating elements in the buck. The steam in the pipe 40 is further superheated by the heat from the buck and the pipe 40 being covered by a pad 43 tends to retain the heat.

The pipe 40 is connected by a pipe or conduit 44 with an automatically operated valve 45 which may, in turn, be connected by a pipe 46 with the upper part of a boiler 47. An electric heater 49 of the form commonly termed a bayonet type heater is connected with the boiler 47 to heat the water and produce steam therein. A relief or safety valve 48 and water gauge 50 are preferably provided on the boiler. The boiler 47 is arranged to be filled by a pipe 51 connecting the boiler 47 with a pump 52 that receives water from an open receptable 53 into which water may be readily poured.

The valve 45 is preferably arranged to be closed by a spring and is adapted to be opened by engagement of a pin or lug 54 on the link 27 with a handle or lever member 55 on the valve so that when the upper buck is raised as shown in the drawings, the valve 45 will be closed but when the upper buck is lowered the valve 45 will be opened and permit steam to flow into the pipe 40 just as the buck is brought down onto the clothes that are being pressed, which steam will be forced outwardly through the pad 43 of said upper buck. An additional valve 39 is preferably provided in pipe 46 for permanently shutting off the steam.

In the usual operation of this clothes pressing machine the upper buck is heated and the water in the boiler 47 is heated sufficiently to generate steam and produce a pressure in the boiler that will force the steam out through the pipe 40. The clothes to be pressed are placed on the lower buck when the upper buck is raised and the heated upper buck is then brought down firmly onto such clothes by pressing the foot lever 25. As the upper buck approaches the lowermost limit of its movement the valve 45 is automatically opened and steam is forced out through the pad of the upper buck to moisten the clothes and further heat the upper buck pad.

The suction through the lower buck draws dust and loose dirt out of the clothes and draws the steam down through the clothes thus both cleaning the clothes and taking care of excess steam that would otherwise be objectionable.

For certain classes of work as in steaming velvet or plush steam is preferably admitted to the bottom buck also. This may be done by providing a two way valve 55 in pipe 13 and connecting the same with boiler 47 by a pipe 56 so that either a vacuum or steam pressure may be produced in lower buck 11.

The foregoing description and accompanying drawings clearly disclose a preferred embodiment of my invention but it will be understood that changes in the same may be made within the scope and spirit of the following claim.

I claim:

In a clothes pressing machine a buck having a pressing face, a steam conduit pipe extending around said buck adjacent the edge thereof and having perforations for directing steam inwardly across the pressing face of said buck, a layer of wire mesh covering the face of said buck and forming porous means for permitting an even distribution of said steam and a fabric pressing pad covering said wire mesh and extending around and over said steam pipe and secured to said buck.

The foregoing specification signed at Seattle, Washington this 20th day of December, 1924.

CHARLES R. NELSON.