Aug. 22, 1939. L. E. HOLT 2,170,591

PUFF SLEEVE IRONER

Filed Aug. 9, 1938

Fig. 1.

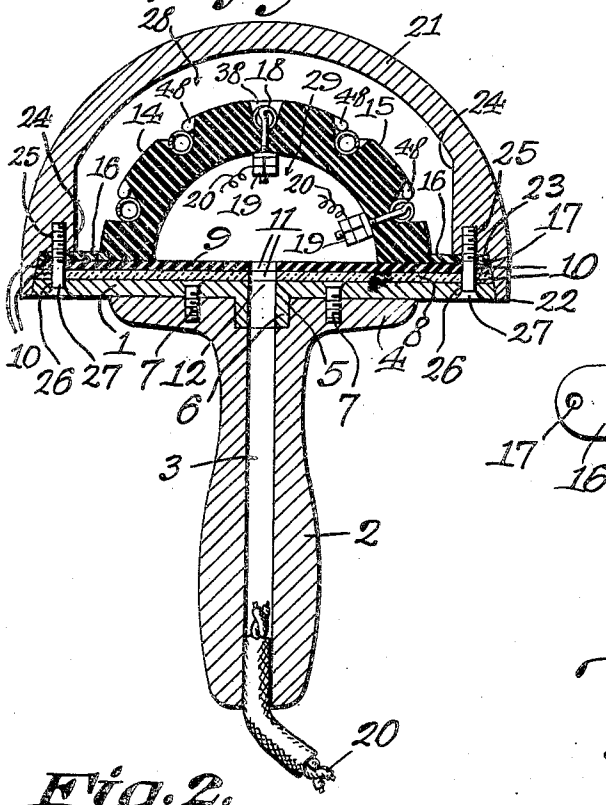


Fig. 3.

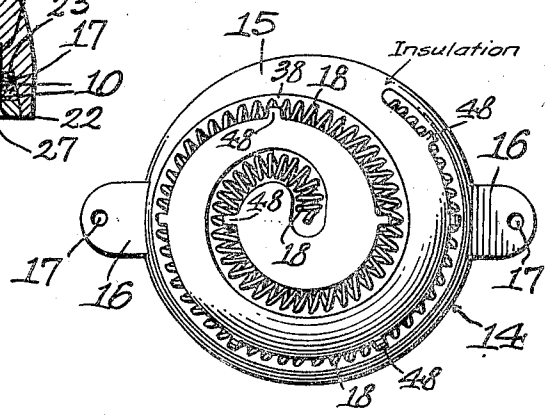


Fig. 4.

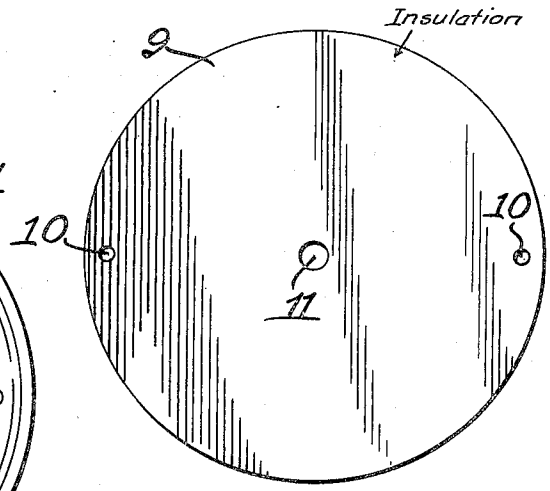
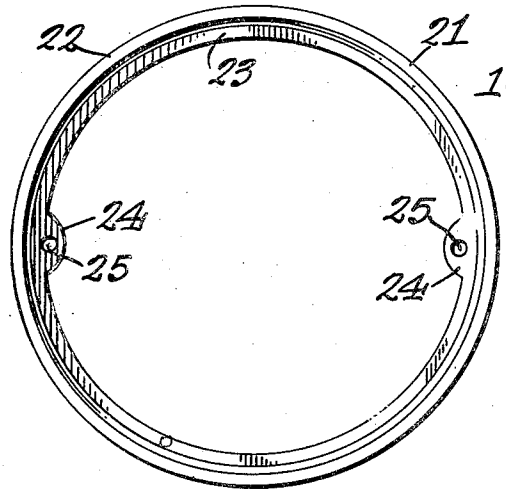


Fig. 2.



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PUFF SLEEVE IRONER

Lucile E. Holt, Los Angeles, Calif.

Application August 9, 1938, Serial No. 223,977

1 Claim. (Cl. 219—21)

A portable, hand-carried ironing instrument is needed, which may be used to work upon puff sleeves, or any sleeve having fullness, or to work upon material of any kind, in which there is fullness, such as shirring or gathering in the front of dresses or blouses. An ironing instrument of the sort alluded to should be capable of being manipulated readily, regardless of the amount of fullness. An instrument of the sort referred to should be strong and simple in construction, and capable of being taken down readily for repair. Means should be provided whereby the part of the ironing instrument which comes into contact with the fabric can be heated evenly, and sufficiently, without being heated to an extent which will result in a scorching of the cloth which is being ironed.

The objects of the present invention are to construct a device which will have the characteristics above referred to, other advantages being made manifest as the description proceeds.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawing:

Fig. 1 shows in vertical section, a device constructed in accordance with the invention;

Fig. 2 is a plan of the cap;

Fig. 3 is a plan of the heating element;

Fig. 4 is a plan of the insulating disk;

In carrying out the invention, there is provided a base plate 1, which is flat, and of circular outline, the base plate preferably being made of aluminum. A handle 2 is disposed at right angles to the base plate 1 and may be made either of metal, such as aluminum, or of some other material, if preferred. The handle 2 has an axial bore 3, and the handle is provided at its inner end with a disk-like head 4, there being an enlarged recess 5 in the head 4, at the inner end of the bore 3. The base plate 1 has a nipple 6 which is received in the recess 5. Securing elements 7, such as screws, pass through the base plate 1 and enter the head 4 of the handle 2, to hold the base plate and the handle together. In operation, considerable strain is thrown on the connection between the base plate 1 and parts carried by it, on the one hand, and the handle 2 on the other hand. In order to relieve the strain on the screws 7, the nipple 6, extending into the recess 5, is provided.

A disk or sheet 8 of asbestos is mounted on the base plate 1 and acts as a heat-stop, preventing the handle 2 from becoming overheated. A disk or sheet 9 of insulating material, preferably mica, is superposed on the disk 8. The disks 8 and 9 have registering openings 10 disposed diametrically opposite to each other, and the disks 8 and 9 have registering central apertures 11, alined with a corresponding opening 12 in the base plate 1 and with the bore 3 of the handle 2.

On the insulating disk 9 is placed a heating element 14 which is electrically operated. The heating element 14 comprises a hollow body 15, made of insulating material, the body 15 being supplied with outwardly prolonged extensions or ears 16 having openings 17. The body 15 of the heating element 14 is hollow and is in the shape of a portion of a sphere. An electrical resistance 18 is seated in a spiral groove 38 in the body 15 and is retained securely but detachably by fingers 48 on the body, which overhang the groove. The resistance 18 is connected at its ends to binding posts 19, one of which is mounted upon the crown of the body 15 of the heating element 14, the other of which is mounted on the side of the body, near the insulating disk 9. The binding posts 19 project into the chamber 29 of the body 15.

Conductors 20 extend through the bore 3 of the handle 2, through the nipple 6, through the opening 12 of the base plate 1, through the registering apertures 11 of the disks 9 and 8, and into the chamber 29, the conductors extending continuously to the binding posts 19, although not so shown in Fig. 1 in order that more important structural details may appear the more clearly.

There is provided an ironing cap 21, made of metal, preferably aluminum. The cap 21 is hollow and in the form of a portion of a sphere. The cap 21 has a marginal flange 22 within which is received the base plate 1, and the disks 8 and 9. The flange 22 defines an annular shoulder 23 within the cap 21. From the shoulder 23, lugs 24 extend inwardly, and the lugs are supplied with openings 25, registering with the openings 10 of the disks 8 and 9, and with corresponding openings 26 located in the base plate 1 and receiving securing elements 27, such as screws, which pass through the openings 10 of the disks 8 and 9 and are threaded into the openings 25 of the lugs 24 on the cap 21, the parts being

bound tightly together, in a way which can be seen in Fig. 1 of the drawing.

The operation of the device will be understood readily. When the resistance 18 is heated, the air in the space 28 between the body 15 and the cap 21 is heated, and the cap itself is heated. No appreciable amount of heat will pass into the handle 2, to the discomfort of the operator, owing to the provision of the heat-stop or asbestos disk 8. The cap 21, and the body 15 of the heating element 14, have a common center of curvature, and, consequently, the cap will be heated fairly and evenly throughout its entire working area. The passage of heat to the handle 2 is checked not only by the heat-stop or disk 8, but, as well, because the chamber 29 is provided within the body 15.

The device, of course, is manipulated by grasping the handle 2. It is not intended that the article shall be placed upon a standard, or supported rigidly in any other manner. The general construction of the device is such that it will consummate the advantages and carry out the objects set forth in the opening portion of this specification.

Having thus described the invention, what is claimed is:

A portable, hand-operated ironing instrument comprising a hollow ironing cap of practically equal thickness throughout, a base attached to the cap and serving as a closure therefor, a handle secured to the base, centrally thereof, a hollow body fixed with respect to the base and the cap and located within the cap, and heating means carried by the body, there being an air space of substantially uniform extent between the body and the cap, the body having a cavity closed by the base and located inwardly of the handle and of sufficient size to minimize the heating of the handle, the handle being short and shaped for gripping in the human hand, the outer, working surface of the cap being in the form of a hemisphere of which the axis of the handle forms a pole, the location of the handle permitting the hemispherical working surface of the cap to be rocked laterally in any direction, under even pressure, upon the work to be ironed.

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