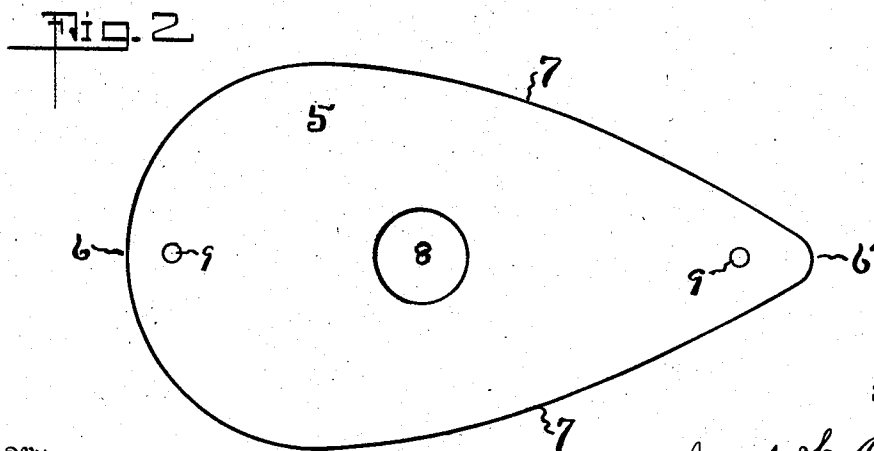
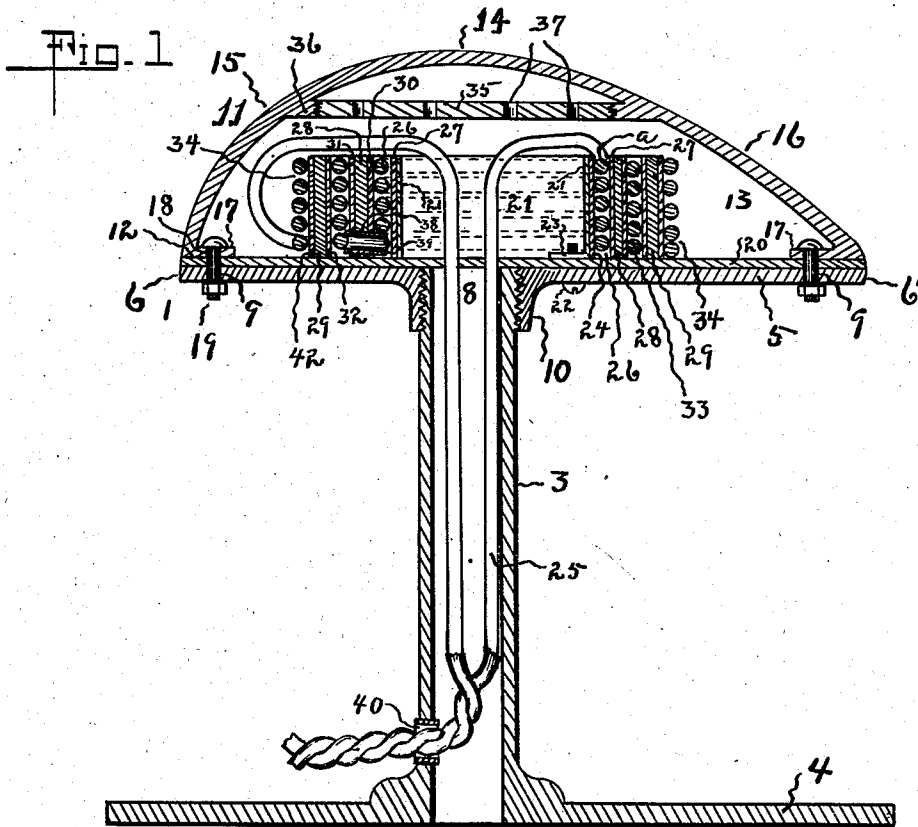


J. W. COOK.
PUFF IRON.

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Patented Oct. 19, 1909.



Witnesses

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JACOB W. COOK, OF OMAHA, NEBRASKA.

PUFF-IRON.

937,229.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JACOB W. COOK, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Puff-Irons, of which the following is a specification.

This invention relates to an improved puff iron, or device for ironing articles of wearing apparel, and more particularly shirt waists or garments having shoulder puffs or other like irregularly shaped surfaces.

Flat-irons ordinarily used for ironing flat surfaces frequently cause injury to the fabric when employed for ironing sleeves, shoulder-puffs or similar surfaces of garments, for the reason that these surfaces are not accessible to the operator and the pressure between the hot iron and ironing board tends to crush or roll the fabric, frequently resulting in creasing or injuring the goods, especially of light weight articles or garments of delicate texture.

The present invention includes means for ironing puffs or irregular surfaces of garments without pressing the goods between two surfaces, no ironing board being used, whereby rolling or creasing of the fabric is avoided; also for the provision of means whereby the fabric may be conveniently stretched at the time heat is applied.

The invention comprises a standard with a stationary, metallic head upon its upper end, the distal part of the head being beneath the operative face thereof. By this arrangement the operating part of the iron faces upward and the workman is thereby enabled to visibly inspect the result of his work as it progresses, and may have use of both hands for manipulation of the garment, which results in a saving of much valuable time.

The invention also has reference to the manner of construction and shape of the head which facilitates the heating thereof and adds to the usefulness of the article.

The invention consists of the novel formation and arrangement of parts as described herein, pointed out by the appended claim and as illustrated in the accompanying drawing, wherein,—

Figure 1 is a view in longitudinal section of a puff iron embodying my invention. Fig. 2 is a plan view of the sustaining-plate.

Referring now to the drawing for a more

particular description, numeral 3 indicates a standard or tube having a transverse base 4 thereon. I provide a sustaining-plate 5 having a circularly formed end 6; the plate is elongated and has side edges 7 formed convergent toward its opposite end 6'; the plate is preferably rectangular in cross section and is provided with an opening 8 formed somewhat nearer end 6 than its opposite end. The plate is apertured at 9 to provide bolt-openings and is provided with a downwardly projecting, annular, internally-threaded flange or collar 10.

I provide the metallic ironing head 11 having a flat bottom or base 12 conforming to the shape of plate 5; it is formed as a hollow or shell-like structure to provide the recess or containing chamber 13, and has an outer convexed contact-surface 14, and while every part of its contact-surface is convexed, one of its ends 15 has a greater pitch than its opposite end 16.

Head 11 may have turned ledges 17 adjacent its flat base 12, and when apertured at 18 may be removably secured to plate 5 by bolts 19, and plate 5 may be removably secured, transversely seated, upon the upper end of standard 3; the upper end of the standard having a threaded connection with the reinforcing flange 10, as shown in the drawing.

As thus described the parts may be economically manufactured or cast, and they may be conveniently assembled or disassembled. Head 11 is electrically heated in a manner presently explained. While the ironing-head is rigidly secured upon the standard and is stationary thereon, the entire device may be movable, and in operation, a garment to be ironed may be manually pressed upon head 11, and puffs, folds or uneven surfaces of garments are accessible to a contact of one or the other ends of the head, and an advantage in the use of this form of a sad iron arises from the fact that both hands of the operator may be used for handling the garment or fabric to be ironed.

Intermediate plate 5 and base 12 of the head is seated plate 20, of asbestos or other similar material so that the intense heat generated within chamber 13 will not be communicated unduly to standard 3 or base 4, as, in operation it is convenient to occasionally change the direction of the ironing head, and the standard is then useful as a

handle; the asbestos plate 20 is also an electrical non-conductor and useful on that account for housing the coils of wire.

As a means for heating head 11, I provide the metallic sleeve or collar 21 which may be secured transversely upon asbestos plate 20 by screw 22 passed through holder 23. Sleeve 21 is oval to conform to the shape of base 12 of the head. Outwardly from and adjacent to sleeve 21 is placed a collar or electrical non-conductor lining 24, preferably of mica. At 25 is indicated an electrically charged wire, energized from an electrical generating plant; the wire is introduced and has its exit, preferably, at the lower part of the standard, as illustrated in the drawing, and, commencing at α after traversing the interior of the standard and aperture 8 of the sustaining-plate, it is wound about the mica collar or lining 24, to form the series of coils 26, care being taken to prevent the wire coils from contacting with each other.

Outward of the layer or series of coils 26 is disposed a mica lining or collar 27. At 28 and 29 are indicated metallic sleeves, preferably of copper; at 30, 31, 32 and 42 are shown sleeves of mica or of other suitable electrical non-conducting substance. Wire 25 is wound to provide the additional series of coils 33 and 34, and in each instance mica collars 30, 31, 32 and 42, above indicated, are interposed between the metallic sleeves and the wire coils.

The metallic sleeves 28 and 29 provide a supporting-wall to sustain the mica sleeves and to sustain the coils of wire; they also operate to retain the electrically generated heat, and this is their principal function. In operation, when the electrical charge is passed to wire 25, heat is communicated through the mica sleeves to the metallic sleeves 28 and 29, and the ironing surface of the head thereupon becomes heated.

In the upper part of chamber 13 adjacent the uppermost part of the head, is indicated a disk or intermediate partition 35; this disk may have a mounting by means of a threaded connection upon its edge, with projections 36 formed upon the inner sur-

face of the shell-like head; the disk is perforated, as shown at 37, and serves to retain the heat at the uppermost part of the head, and to equalize the heat generated in chamber 13, coming from the metallic sleeves.

The metallic sleeves 28 and 29 are disposed at right angles to plate 5 upon which they are supported, and after an inner coil has been formed wire 25 traverses aperture 38 in the metallic sleeve, the wire being insulated by a transverse sleeve 39 of an electrical non-conducting substance.

While I have shown only two metallic sleeves 28 and 29 and three wire coils 26, 33 and 34, the numbers of these parts may be increased if desired. It will be understood that wire 25 is continuous from its entrance within aperture 40 near the lower end of standard 3 to its exit therefrom. While I have shown only one opening 38 in the wall of a metallic sleeve and a single insulating collar 39, it will be understood that others are employed, since wire 25 must traverse from an inner coil to the outer side of an adjacent metallic sleeve to form the several wire coils.

Having fully described my invention, what I claim and desire to secure by Letters Patent is,—

In a device of the character described, the combination with a supporting standard, of a flat supporting plate mounted upon the upper end thereof, a housing having a substantially egg-shaped exterior mounted thereon, an asbestos sheet between said housing and said plate, a partition plate, threaded projections upon the under face of the housing into which said partition plate is threaded, said plate having openings formed therethrough, and an electric heating element disposed between said partition plate and said asbestos sheet and within said housing.

In testimony whereof I have affixed my signature in presence of two witnesses.

JACOB W. COOK.

Witnesses:

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