April 7, 1936. C. E. GALVIN 2,036,964

PRESSING PAD

Filed March 11, 1935

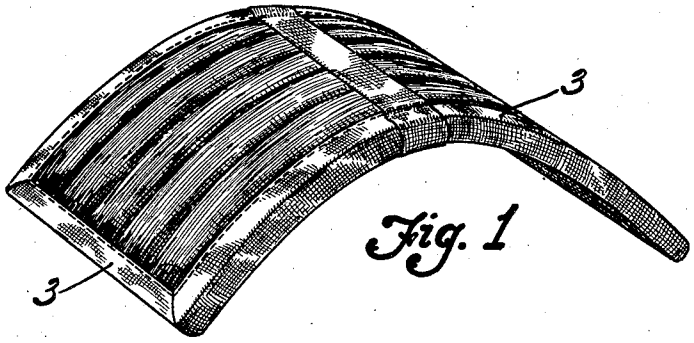


Fig. 1

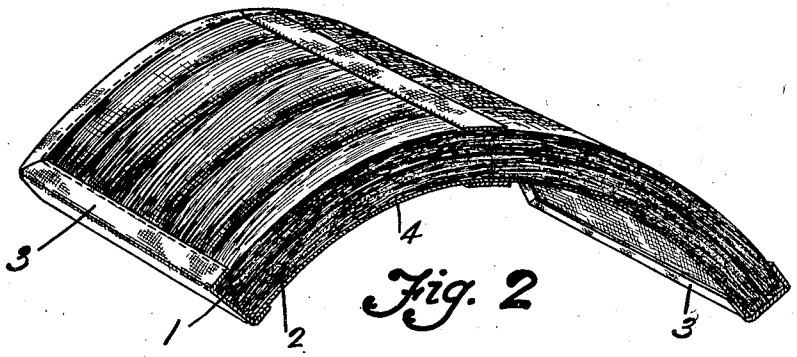


Fig. 2



Fig. 3

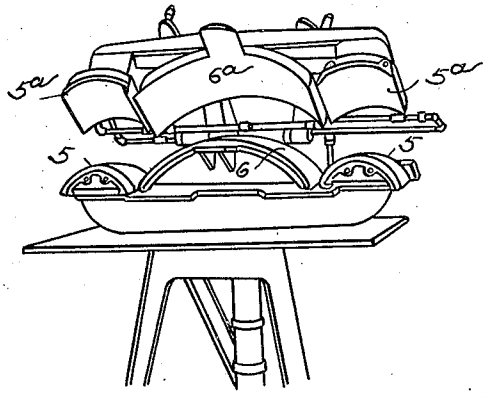


Fig. 5

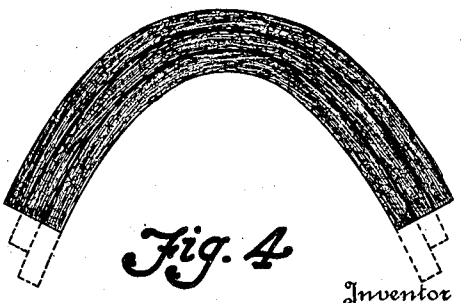


Fig. 4

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PRESSING PAD

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10 Claims. (Cl. 68—9)

This invention relates to garment pressing machines and more particularly to preformed pressing pads for use thereon.

For pressing certain portions of garments, such as collars, cuffs and shoulders, as well as other articles of contoured shape, forms or pads of similar curvature are ordinarily employed. Such pads to be effective are necessarily moderately thick. Likewise for best results it is desirable that the pad be of uniform resiliency and tension throughout. However, in bending the usual padding material to form the outer or convex side of the pad, it is somewhat stretched or under tension, tending to open the interstices thereof while the inner or concave side, being under compression, is crowded and compacted and tends to cause wrinkles.

In the present invention there is contemplated a form retaining contoured pad preferably, although not necessarily, made of metallic wool in which the material is evenly disposed under uniform tension, the resiliency and tension being equalized throughout the pad structure. In the preferred embodiment as illustrated, the pad consists of united superposed distinct laminæ of steel wool of different lengths, having their ends disposed flush with each other, thereby causing the pad to retain its bent form without unduly stretching or compressing different strata of the completed body.

The object of the invention is to improve the construction as well as the action of pressing pads whereby they may not only be economically manufactured but will be more efficient in use, capable of being accurately contoured and shaped into agreement with the article or portion thereof to be pressed, adapted to retain their contoured forms under various conditions of use, and unlikely to get out of repair.

A further object of the invention is to provide a preformed and form retaining pressing pad or the like of substantially uniform tension and resiliency throughout.

A further object of the invention is to provide a pressing pad which will be unlikely to develop wrinkles, and wherein there will be little or no tendency for the material to be displaced, or "skid" under pressure.

A further object of the invention is to provide an improved form of metallic wool pad of increased efficiency, resiliency and durability.

A further object of the invention is to provide a metallic wool pad wherein the material will be substantially uniformly distributed and tensioned.

A further object of the invention is to provide a contoured form retaining laminated metallic wool pad.

A further object of the invention is the provision of a metallic wool or other fibrous pad possessing the desirable characteristics and meritorious features herein mentioned.

With the above primary and other incidental objects in view, as will more fully appear in the specification, the invention consists of the features of construction, the parts and combinations thereof, and the mode of operation, or their equivalents, as hereinafter described and set forth in the claims.

In the drawing wherein is shown the preferred but obviously not necessarily the only form of embodiment of the invention, Fig. 1 is a perspective view of a completed pad embodying the present invention. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a detail view of the pad elements before interconnection in contoured form. Fig. 4 is a diagrammatic view. Fig. 5 illustrates a typical pressing machine upon which such pads may be used.

Like parts are indicated by similar characters of reference throughout the several views.

In pressing garments it is quite desirable that the pads employed be contoured to agree with the portion of the garment to be pressed and special forms of pads are provided for different purposes such as collar pads, cuff pads, yoke pads, shoulder pads and others. For present illustrative purposes a very simple form of contoured pad has been adopted without intent or purpose of limiting the invention. It is to be understood that the invention is applicable to pressing and other pads of various shapes and sizes other than that herein shown and described. Metallic wool has long been used as a padding material for pressing machines for which it is well adapted because of its elasticity, non-moisture absorbent qualities and resistance to deterioration under influence of heat and moisture. Whether the pad be of metallic wool or of other non-metallic fibrous material, the deflection of a unitary body of material of sufficient bulk out of a flat shape into a contoured curvilinear form of pad necessarily stretches one side of such bent body of padding material, placing such side under tension and simultaneously relaxes the opposite side or places it under compression. The tendency is for the tensioned side to stretch and thin out and the fibers to separate under pressure while the under side, being under compression, tends to wrinkle and the fibers be-

come unevenly bunched. Such dissimilar conditions existing in a single body of padding material cause ununiform resiliency and unequal pressure upon the garment. When subjected to heavy pressure in use the fibrous material tends to shift or separate, thus further aggravating the condition.

The present invention overcomes these difficulties by providing a laminated construction wherein the different laminæ are of different length agreeing with the inside and outside extent of the curved pad and with the length on intermediate lines in event more than two strata are employed. Such laminæ are united with their ends flush with each other, the progressive elongation of successive strata compensating for the variation of circumferential extent of the different strata at different distance from the center of curvature.

While the construction is applicable to pads of various materials, metallic wool is the preferred material. This material may be arranged in superposed strata of felted or tangled fibers in unsystematic relation, but the preferable material comprises a metallic wool fabric made by interlacing, weaving or knitting rovings of metallic wool material wherein the fibers extend in substantially parallel longitudinal relation interlaced or united by transverse tie or warp wires. Such material is now available upon the open market.

Referring to the drawing, the pad illustrated comprises superposed laminæ 1 and 2 of metallic wool material. The successive layers 1 and 2 are preferably, though not necessarily, of fabricated material, either woven or knitted, but may be of felted or tangled character. Although for simplicity of illustration and explanation but two layers or strata are shown in the drawing, it is to be understood that a greater number may be employed. These layers or laminæ 1 and 2 are of different lengths, the outer strata being of greater length than the inner strata as shown in Fig. 3. When bent into arcuate form as shown in Figs. 1 and 2, the angle of curvature being the same, the longer outer strata 1 being further removed from the center of curvature will coincide at its ends with those of the inner strata 2. The differential existing in the lengths of the several superposed curved laminæ is further illustrated in Fig. 4. The relative lengths of the several laminæ as embodied in the finished pad are shown by solid lines while the extent of laminæ of equal length is illustrated by dotted line extensions. While maintained in such bent coincident relation the superposed strata are united by stitching or other interconnection between the strata, or by providing a marginal binding 3 by which they are held together. Such interconnection of the strata renders the pad assembly for retaining and prevents the united laminæ from again straightening out. The result is the same whether two or more laminæ are employed. Whatever number of independent layers may be employed, each layer or strata is unstrained and of even uniform tension throughout; and the assembly of superposed separate or independent layers will afford uniform resiliency and resistance to pressure throughout.

The pad may, if desired, be provided with an asbestos or other fabric lining 4, which also being shorter than the outer strata of metallic wool further tends to hold the pad in its curvilinear form. Such lining 4 is desirable for some conditions of use but is not an essential or necessary feature.

In Fig. 5 there is shown a typical pressing machine to which the type pad illustrated is applicable. The pads of different size are indicated at 5 and 6 upon corresponding forms, and coact with corresponding portions 5a and 6a of the presser head 7 of the machine. Such application of the pad to a pressing machine is for illustrative purposes only and with no intent of unnecessarily limiting the scope or application of the invention, it being understood that the pad is useful for other purposes and in other apparatus.

From the above description it will be apparent that there is thus provided a device of the character described possessing the particular features of advantage before enumerated as desirable, but which obviously is susceptible of modification in its form, proportions, detail construction and arrangement of parts without departing from the principle involved or sacrificing any of its advantages.

While in order to comply with the statute, the invention has been described in language more or less specific as to structural features, it is to be understood that the invention is not limited to the specific features shown, but that the means and construction herein disclosed comprise the preferred form of several modes of putting the invention into effect, and the invention is therefore claimed in any of its forms or modifications within the legitimate and valid scope of the appended claims.

Having thus described my invention, I claim:

1. In a pressing pad for a garment pressing machine or the like, a form retaining body of metallic wool padding material of curvilinear contoured form comprising superposed separable strata of metallic wool nested one within another conjointly forming a unitary cushion and interconnected with each other in their contoured nested relation whereby one stratum of said padding material will resist the straightening of another stratum of said padding material.

2. In a pressing pad for a garment pressing machine or the like, a form retaining body of metallic wool padding material of curvilinear contoured form comprising superposed laminae of metallic wool material of unequal lengths bent into arcuate segments of equal angular extent and nested one within another in contacting relation and conjointly forming a unitary cushion with their ends substantially in agreement and means interconnecting the laminæ of padding material into a single unitary self form retaining body.

3. In a pressing pad for a garment pressing machine or the like, a form retaining body of metallic wool padding material of curvilinear contoured form comprising superposed distinct layers of metallic wool material collectively bent into arcuate form about a common center and assembled in contacting relation one against another and means interconnecting the layers of padding material into a single unitary self form retaining body.

4. In a pressing pad for a garment pressing machine or the like, multiple portions of metallic wool fabric each comprising substantially parallel rovings of metallic wool and transverse tie wires uniting the rovings, said fabric portions being bent into corresponding contoured shapes and nested one against another, and tie means

interconnecting the nested portions one with another whereby said portions will be retained in their contoured shapes independently of other retaining means.

5. In a pressing pad for a garment pressing machine or the like multiple preformed layers of metallic wool padding material superposed one upon another in concentric contoured relation to form a resilient cushion and means binding the contoured layers of padding material together in non-shifting relation whereby one layer of padding material will be prevented from materially changing its shape by the resistance of another layer of padding material.

6. A pressing pad for a garment pressing machine or the like comprising superposed laminæ of padding material of unequal length bent into curvilinear form in parallel contacting relation wherein their ends are substantially flush with each other and tie means interconnecting such curvilinear laminations of padding material into a unitary self form retaining assembly.

7. A pressing pad for a garment pressing machine or the like comprising independently formed layers of padding material bent into curvilinear form about a common center and nested one within the other in concentric contacting relation, said nested laminæ being united one with another in contacting relation after bending whereby when subjected to straightening pressure the different layers of the pad will be strained one in compression and the other in tension.

8. In a pressing pad for a garment pressing machine or the like, multiple sections of metallic wool fabric each comprising substantially parallel rovings of metallic wool and transverse tie wires interconnecting the rovings into unitary flat bodies, said sections being superposed one upon the other in concentric contacting curvilinear form, and united with each other while in such curvilinear formation.

9. In a pressing pad for a garment pressing machine or the like, multiple superposed independent layers of padding material each bent into curvilinear formation and nested one within the other in contacting relation one against another, the layers of padding material being interconnected in their bent formation whereby one layer of padding material will resist the straightening of another.

10. In a pressing pad for a garment pressing machine or the like, multiple separable layers of padding material superposed one upon another in parallel contoured curvilinear contacting relation and tie means holding the layers of padding material united in non-shifting relation whereby one layer of padding material will be prevented from materially changing its shape by the resistance of a different layer of padding material.

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