June 16, 1953 R. W. DAVIS 2,642,209

METHOD OF AND AN APPARATUS FOR STEAMING, FORMING, FINSHING, AND RESTORING GARMENT POCKETS

Filed Aug. 23, 1951

Fig. 1.

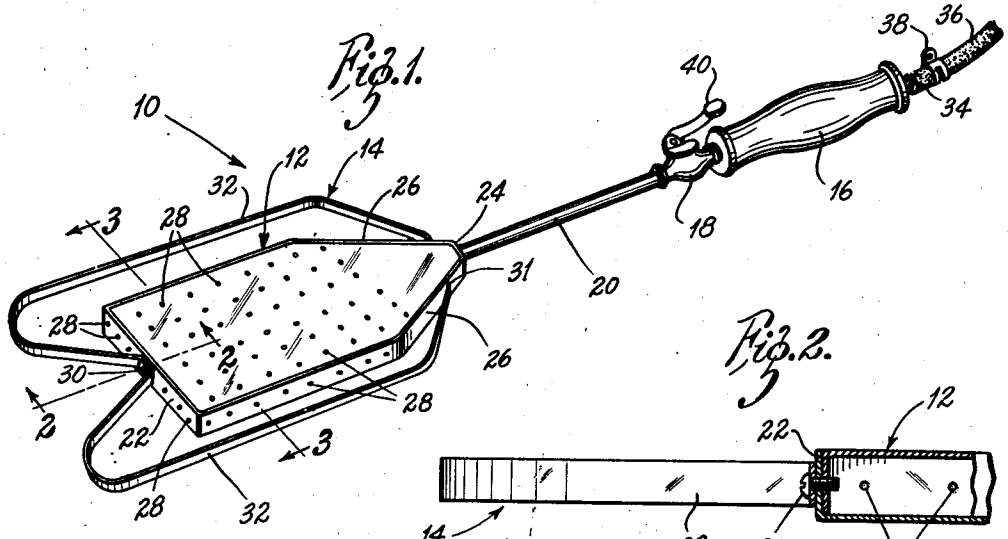


Fig. 2.

Fig. 3.

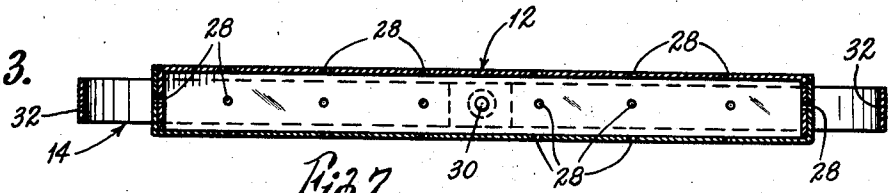


Fig. 7.

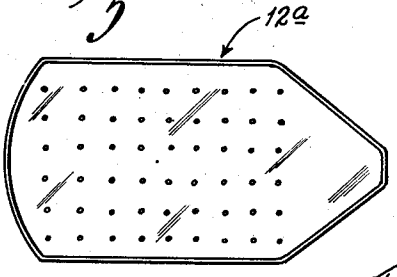


Fig. 5.

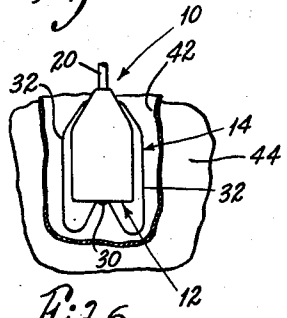


Fig. 4.

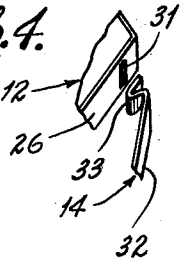


Fig. 8.

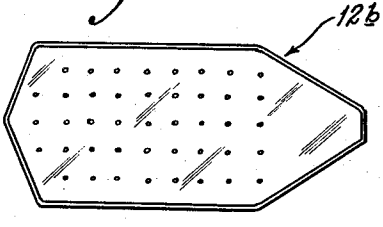


Fig. 6.

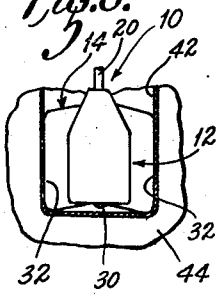
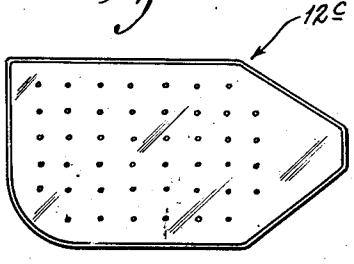


Fig. 9.



INVENTOR:
ROONEY W. DAVIS,
By Kingsland, Rogers & Ezell
ATTORNEYS

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METHOD OF AND AN APPARATUS FOR STEAMING, FORMING, FINISHING, AND RESTORING GARMENT POCKETS

Rooney W. Davis, Webster Groves, Mo., assignor of one-half to Herman C. Weeman, St. Louis, Mo.

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5 Claims. (Cl. 223—57)

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The present invention relates generally to the garment forming art, and more particularly to a method of and an apparatus for steaming, forming, finishing, and restoring pockets of garments to the original form, such as after cleaning of the garment and prior to the final pressing operation.

In brief, the present novel method of restoring garment pockets to original forms includes the mechanical stretching of the pockets to original form following the cleaning operation, or other operation upon the garment, and applying live steam while the pockets are expanded so that the pockets will maintain the shape to which re-formed during the pressing of the garment. The present novel apparatus for re-forming pockets of garments following cleaning or other operation upon the same includes a generally flat, pocket-insertable steam iron having openings throughout substantially its full area. In the preferred form, a deformable flat spring substantially surrounds the pocket iron and is disposed in the flat plane thereof, being associated with the pocket iron in a manner to permit ready insertion into the pocket and subsequent expansion to re-form the pocket. A handle and readily manipulatable steam valve are attached to the pocket iron.

Therefore, an object of the present invention is to provide a novel method of re-forming pockets of garments which have been cleaned, or otherwise handled, preparatory to final pressing of the garment.

Another object is to provide a novel pants pocket iron unit which may be readily inserted into the pocket of a garment, which has been cleaned or otherwise handled, for subsequent injection of steam into the pocket to effect re-forming thereof.

Another object is to provide a novel pocket ironing unit of the steam type which incorporates a readily replaceable deformable member adapted to re-form the pocket prior to the application of steam from the iron per se.

Another object is to provide a novel method of re-forming pockets of garments which have been cleaned or otherwise treated which eliminates the necessity of individually ironing the pocket prior to the pressing of the garment as a whole. Another object is to provide a novel pocket forming unit which is adapted to re-form pockets of cleaned or otherwise treated garments in minimum time and with a minimum number of pocket re-forming handling steps.

Other objects are to provide a novel pocket

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forming unit of the steam type which is of simplified construction, which may be readily used with minimum instruction, which operates at low cost and with minimum maintenance, and which otherwise fulfills the objects and advantages sought therefor.

The foregoing and other objects and advantages are apparent from the following description taken with the accompanying drawing, in which:

Fig. 1 is an isometric view of a pocket forming unit constructed in accordance with the teachings of the present invention;

Fig. 2 is an enlarged fragmentary longitudinal cross-sectional view taken substantially on the line 2—2 of Fig. 1;

Fig. 3 is an enlarged fragmentary transverse cross-sectional view taken substantially on the line 3—3 of Fig. 1;

Fig. 4 is an enlarged isometric view of portions of the iron and spring, illustrating the readily detachable connection;

Fig. 5 is a diagrammatic view of the unit of Fig. 1 just inserted into a pocket of a garment which has been cleaned or otherwise processed;

Fig. 6 is a view similar to Fig. 5 with the pocket re-formed; and

Figs. 7, 8, and 9 are plan views of steam pocket irons of various configurations.

Referring to the drawing more particularly by reference numerals, 10 indicates generally a steam type pocket forming unit incorporating the teachings of the present invention. The pocket forming unit 10 includes a pocket iron 12, a deformable pocket forming spring 14, a handle 16, a steam valve 18, and a steam pipe 20 which connects the steam valve 18 to the pocket forming iron 12.

The pocket forming iron 12 is formed as a flat steam casing, as is manifest from the drawing, including opposed end walls 22 and 24 and covverging side wall portions 26. Steam outlet ports or openings 28 of small diameter are formed in the walls of the pocket forming iron 12, as is clear from the drawing. One end of the steam pipe 20 is welded or otherwise secured in a suitable opening provided in the end wall 24.

The deformable spring 14 is preferably continuous and of a configuration and cross-section illustrated in the drawing. The spring 14 is anchored by a suitable screw 30 to the end wall 22 of the iron 12 intermediate the ends thereof, and includes duplicate resilient side segments 32, each of which terminates in an S portion 33 removably received in a slot 31 in the wall portion

26 of the iron 12. It is to be understood that the resiliency of the spring 14 is such that when the looped portions normally disposed outwardly from the end wall 22 of the iron 12 are pressed against the bottom seam of a pocket, they will flatten from the positions shown in Fig. 5 to, or approaching, the positions shown in Fig. 6, and the anchored end S portions of the side segments 32 will deform from the positions of Fig. 5, to, or approaching, positions of Fig. 6. In normal rest position of the spring 14, the free end S portions 33 are biased longitudinally of the iron 12, in effect (to the right in Fig. 1), to maintain the pivotal connections in the slots 31.

The handle 16 has a steam passage therethrough which may be in the form of a pipe 34 which extends from both ends thereof. At one end, the pipe 34 receives one end of a steam supply hose 36 attached thereto by a suitable clamp 38. At the other end, the pipe 34 is connected to the steam valve 18 by threaded engagement with the casing thereof, or in any other suitable manner.

The steam valve 18 is of conventional construction, and includes an internal steam shut-off valve of any suitable type (not shown) which is opened by pivotal action of a thumb lever 40. The casing of the steam valve 18 receives the other end of the steam pipe 20, preferably by cooperating threads.

In Fig. 6, the unit 10 is shown in a pocket 42 of a garment 44 with the flat spring 14 expanded laterally from the iron 12 in pocket reforming position. With the pocket 42 thus expanded to its original configuration, steam is permitted to flow into the iron 12 by manipulation of the thumb lever 40 which passes through the openings 28 and into the pocket 42 to provide the necessary moisture at high temperature to eliminate wrinkles for subsequent pressing of the pocket 42 as the garment 44 as a whole is pressed upon a mandril or by other means. manifestly, the unit 10 may be readily inserted into a pocket 42 with the spring 14 in its rest position, even though the pocket 42 may be rumpled and, to a degree, reduced in size temporarily by the cleaning process. Both the iron 12 and the spring 14 are formed at the upper ends to facilitate ready removal from a formed pocket.

In Figs. 7, 8, and 9, there are shown three modifications 12*a*, 12*b*, and 12*c*, respectively, of the pocket iron 12. The iron 12 may be used in one configuration or another for particular standard pockets without the employment of the spring 14. In such instances, the pocket is substantially completely filled by the iron 12 per se, the pocket re-forming operation being otherwise the same as described above.

Manifestly, there have been provided a novel method of re-forming the pockets of cleaned or otherwise treated garments and a novel pocket forming unit for effectively carrying out the objects and advantages of the present invention. Obviously, pockets of new garments, or the like, may be formed by the present method and with the present apparatus.

It is to be understood that the foregoing description and the accompanying drawings have been given by way of illustration and example. It is also to be understood that changes in form of the several parts, substitution of equivalent elements or steps, and rearrangement of parts or steps, which will be readily apparent to one skilled in the art, are contemplated as within the scope of the present invention, which is limited only by the claims which follow.

What is claimed is:

1. In combination, a pocket forming unit of the steam iron type comprising a casing formed for insertion into a pocket, steam ports in said casing distributed around the walls thereof, a steam inlet leading into said casing for the introduction of steam, said casing including converging side wall portions at the end adjacent the steam inlet to facilitate the removal of the pocket forming device from a pocket of a garment, and a spring secured to and substantially surrounding said casing, said spring being deformable laterally from its rest position upon the insertion of the pocket forming device into a pocket to conform itself to substantially the original outline of the pocket.

2. The combination of claim 1 in which said spring includes substantially duplicate side segments each of which terminates in a free end which pivotally engages an opening in the side of the casing, said free ends being biased to maintain pivotal contact with said casing in rest position and during pocket forming movement of said spring.

3. In combination, a pocket forming unit of the steam iron type comprising a casing formed for insertion into a pocket, steam ports in said casing distributed around all the walls thereof adapted to contact said pocket, a steam inlet leading into said casing, and a deformable spring anchored to said casing at one end and including segments extending around a major portion of the casing, said segments terminating in "S" portions pivotally connected in slots in the casing, said spring being expandible laterally from rest position to define the outline of a pocket into which said unit is inserted.

4. The combination of claim 3 in which said spring is held in said slots by its own biasing action and is readily removable from said casing for repair or replacement.

5. The combination of claim 3 and including a handle connected to said casing having a steam passage therethrough, and a steam valve between the handle and the casing readily operable by the thumb of a hand grasping the handle.

ROONEY W. DAVIS.

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