Dec. 16, 1941. F. LEVY-HAWES 2,266,427

ARTICLE OF MANUFACTURE

Filed May 28, 1940

Fig. 1

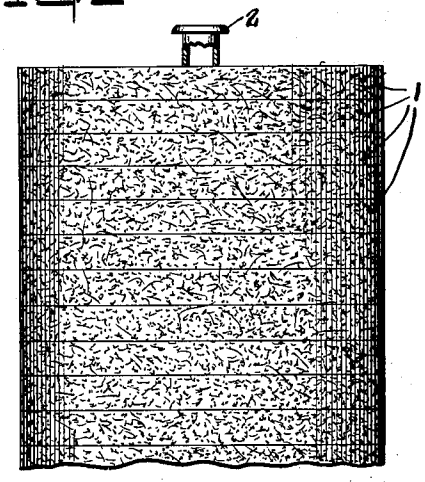


Fig. 4

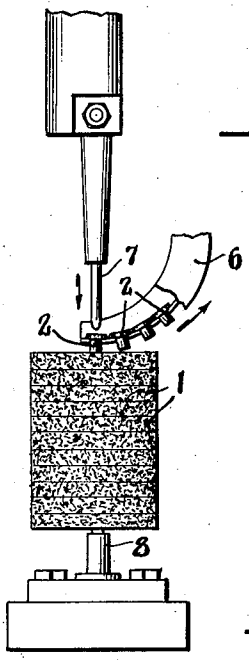


Fig. 2

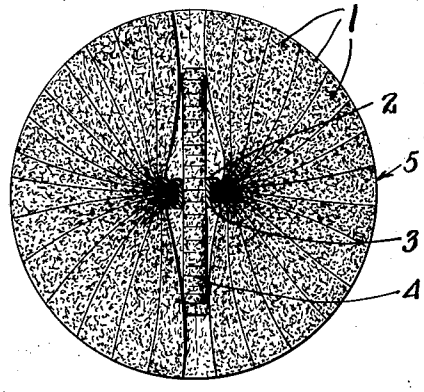
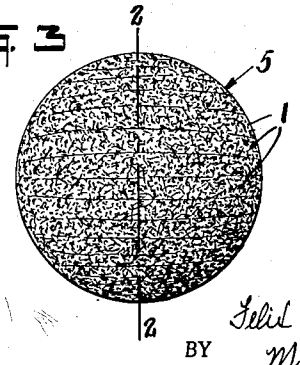


Fig. 3



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ARTICLE OF MANUFACTURE

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Application May 28, 1940, Serial No. 337,658

3 Claims. (Cl. 218—29)

My invention relates to a new and improved article of manufacture which can be used as a powder puff, for ornamental purposes, as a tampon, and for numerous other purposes.

One of the objects of the invention is to provide a soft and compressible article of manufacture, which can be made in the form of a sphere or in numerous other shapes, said article of manufacture comprising or being made wholly of soft and easily compressible material, said article of manufacture being held in its predetermined shape by suitable internal fastening means which are wholly concealed within the periphery of said article of manufacture.

Other objects of my invention will be set forth in the following description and drawing which illustrates a certain preferred embodiment, it being understood that the above statement of the objects of my invention is intended to generally explain the same without limiting it in any manner.

Fig. 1 is a side elevation showing the cylindrical pile of soft material which is used to manufacture the improved article.

Fig. 2 is a section through the line 2—2 of Fig. 3.

Fig. 3 is an elevation of the completed article.

Fig. 4 diagrammatically illustrates the mechanism which is used in accordance with the improved method.

In the preferred embodiment the improved article of manufacture is of general spherical shape, but the invention is not limited to any particular shape.

A series of layers of material 1, which form a cylindrical pile, are located between the anvil 8 and the punch 7 of an ordinary machine which is used for connecting sheets of material by means of an eyelet. This machine is well-known per se, so that it requires no specific description. The layers of material 1 are preferably made wholly of soft non-absorbent cotton batting or other resilient felted material or other material. Said material may be both compressible and resilient, or it may be soft and compressible and have little or no resilience. The invention is not limited to the use of any particular material, and the pile of material 1 may comprise superposed layers of different materials, including absorbent material, such as ordinary absorbent cotton.

An eyelet 2, which is made of any suitable metal, is supplied below the punch 7 of the machine by the conventional feed 6. Each eyelet 2 has a cylindrical shank and an enlarged head. Said enlarged head may be integral or split, in the usual manner.

The punch 7 forces the shank of the eyelet 2 through the pile of material 1, while the enlarged head of the eyelet is maintained at the top surface of the pile of material 1. The hollow shank of the eyelet 2 cuts through the pile of material 1, thus forming a punched-out cylindrical portion 4. The anvil 8 enlarges the shank of the eyelet 2, thus forming a head at the underside of the pile of material 1. The longitudinal axis of the shank of the eyelet 2 is preferably coincident with the longitudinal axis of the cylindrical pile of material 1.

The enlarged head 3 which is formed at the lower end of the shank of the eyelet is clearly shown in Fig. 2.

When the article is removed from the machine, the high compression of the pile of material 1 at its central axis causes the material to fold over and wholly to conceal the eyelet 2, thus forming the completed article 5, which is of spherical or of substantially spherical shape. The natural resilience of the material maintains the same, in its final spherical shape.

The eyelet 2 is wholly covered by the soft and compressible material of the completed article 5, so that said article can be used as a powder puff and for numerous other purposes.

I can use any suitable means for confining and compressing the material at the central portion thereof and such means may be applied by hand. For example, I can use an ordinary wire staple instead of an eyelet, and I can also use a closed thread loop, instead of a metal eyelet or metal staple. Since such closed loop can be formed by hand or by numerous well-known machines, specific description is not required.

As a single practical example and without limiting the invention thereto, the following details are given. In said example, the original height of the cylindrical pile of material was 2 inches, and its diameter was 1.5 inches. The original height of the eyelet 2 was 3/16 inch. The height of the eyelet, after it had been finally shaped, was 3/32 inch. The diameter of the eyelet was 1/8 inch, and said diameter remained substantially unchanged. The resulting article of manufacture 5 was of approximately spherical shape and it had an approximate diameter of 1 3/8 inches.

Instead of compressing the pile of material 1 only at its axis, the aforesaid axial holding means may be employed, together with auxiliary holding

means which may be arranged concentrically around said axial holding means.

Likewise, instead of using a single holding member at the axis of the cylindrical pile of material, I can use a plurality of said holding members which can be arranged equidistant from each other along the arc of a circle whose radius is small compared to the radius of the cylindrical pile of material. The cross-section of the pile of material, instead of being circular, may be square or rectangular or of any shape.

Part of the pile of material may consist of a sheet or sheets of gauze or other material, of the type which is used for making bandages. Said gauze may be located at the top or bottom of the pile material, or both at the top and bottom, or intermediate the top and bottom, in one layer, or in vertically spaced layers. The material 1 may be wholly or partially absorbent or waterproof.

The completed article may be enclosed in any suitable wrapper made of textile or other material, such as gauze or the like. The holding member may also be used for holding a loop of ribbon or the like, so that the completed article 5 will be provided with a loop for handling or suspending the same.

The inherent resilience of the material maintains the same overlying the holding means, so as to conceal said holding means. However, it would not be departing from the invention if auxiliary means were used for maintaining the material of the completed article of manufacture overlying the holding means, so as to conceal said holding means.

If a large article is made according to the above method, said article will have opposed ends which will be recessed, and the lines along which the original pile of material has been folded, due to the compression by the holding member, will be clearly visible. This will depend upon the extent to which the pile of material has been compressed at its axial portion. There may be great variations between the original height of the mass of material and the height of the compressed portion thereof, and numerous effects can be secured by varying these factors. By compressing the compressed zone of material only slightly relative to the original height of the pile of material, said height of material will merely fold around the ends of the fastening member 2.

By connecting a pile of material which is of rectangular shape, by means of stitches or other fastening means along an axis of said rectangular pile, a cylindrical member can be formed.

I have shown a preferred embodiment of my invention, but it is clear that numerous changes and omissions can be made without departing from its spirit.

The method can be utilized in connection with a single layer of cotton batting or any other felted and compressible or resilient material. By forming the pile of material 1 of layers of different colors of the same material or of different materials, very pleasing ornamental effects can be secured.

I claim:

1. An article of manufacture made of resilient material, a portion of said material being held compressed by holding means which are located wholly inwardly of the outer periphery of said article of manufacture, the resilience of said material maintaining said material wholly surrounding said holding means, said holding means being a metal eyelet having enlarged heads, the bore of said eyelet being filled with the aforesaid material.

2. A substantially spherical article of manufacture made of resilient material, said article of manufacture being a deformed substantially spherical mass of said material, said article of manufacture having a substantially centrally located holding means which maintains the central portion of said material under high pressure, the resilience of said material and the pressure of said holding means coacting to maintain said material in its spherical form wholly overlying and wholly concealing said holding means, said holding means having a length substantially less than one-quarter of the diameter of the spherical article.

3. An article of manufacture made of resilient material, a portion of said material being held compressed by holding means which are located wholly inwardly of the outer periphery of said article of manufacture, the resilience of said material maintaining said material wholly surrounding said holding means, said holding means having enlarged heads and a bore, the bore of said holding means being filled with the aforesaid material, said material extending beyond the ends of said holding means.

FELIX LEVY-HAWES.