L. A. YOUNG.

TUFTING BUTTON FOR CUSHION SEATS.

APPLICATION FILED APR. 10, 1908.

913,248. Patented Feb. 23, 1909.

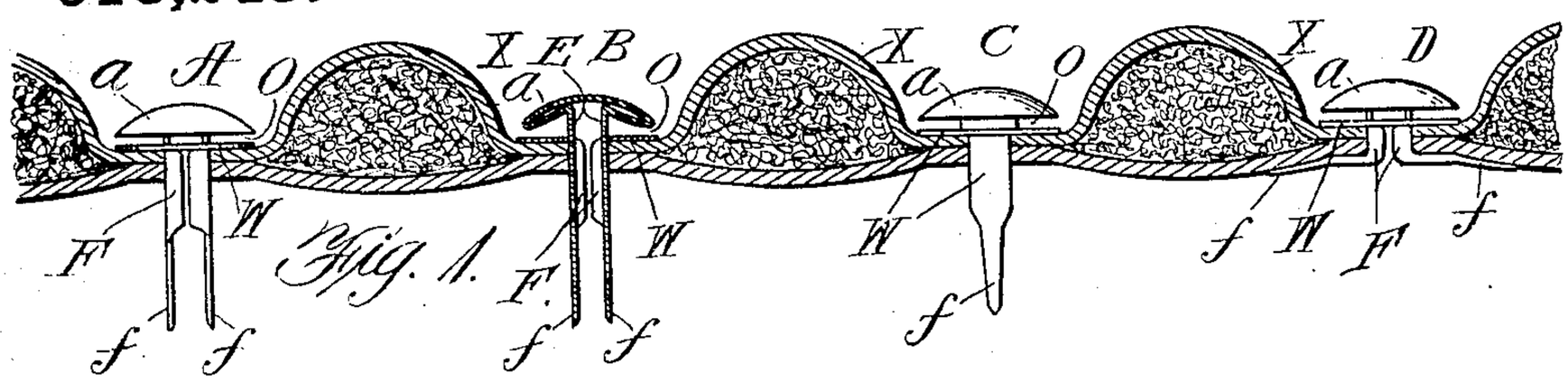


Fig. 1.

Fig. 2.

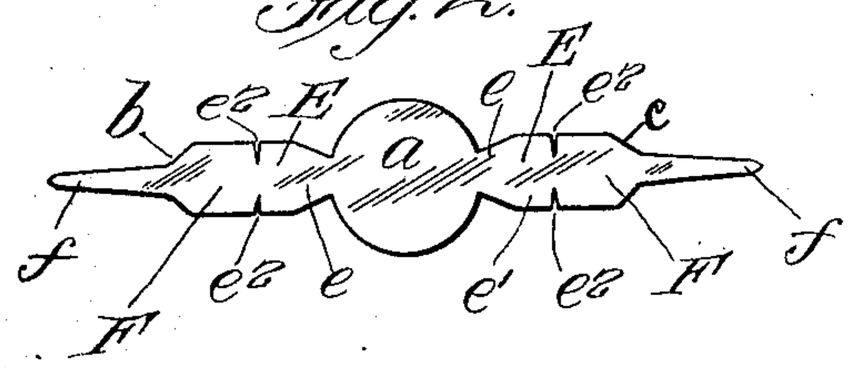


Fig. 3.

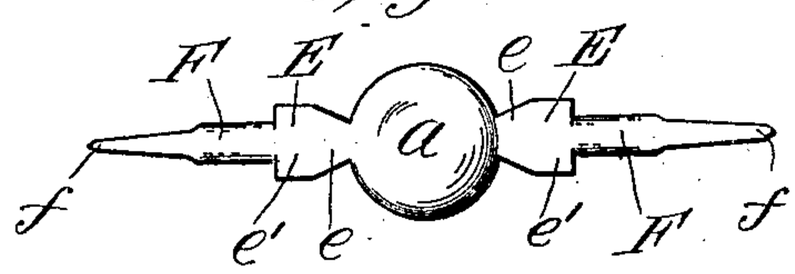


Fig. 4.

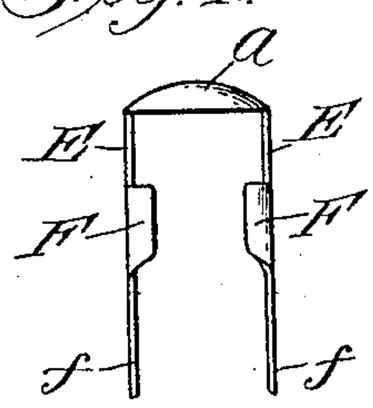


Fig. 5.

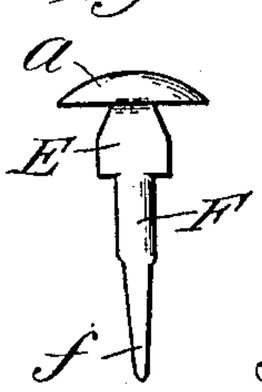


Fig. 6.

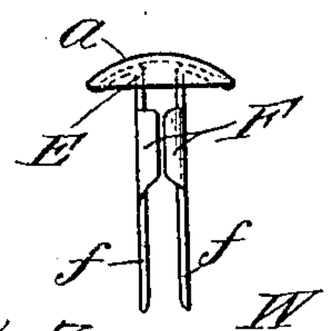


Fig. 7.

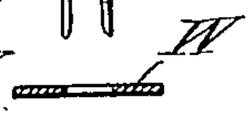


Fig. 8.

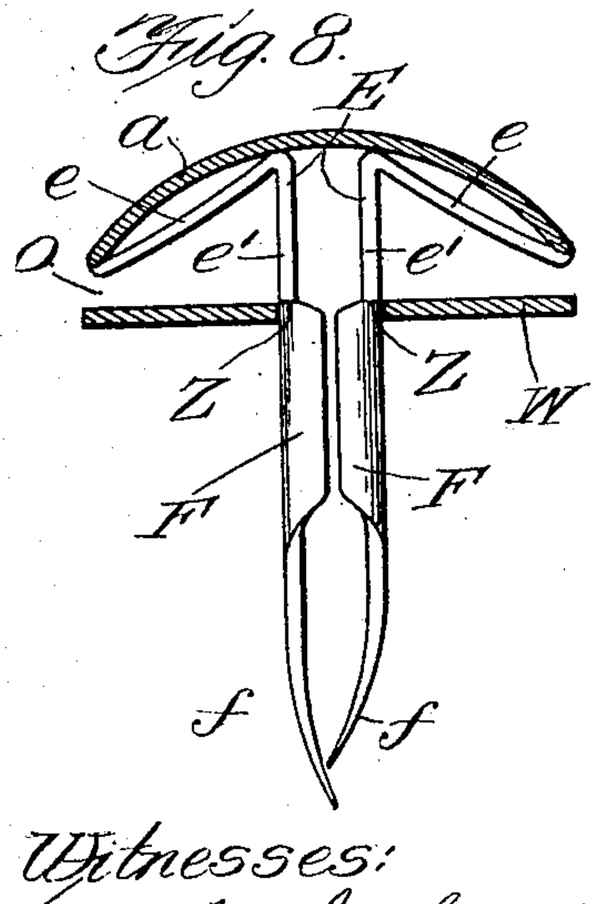


Fig. 9.

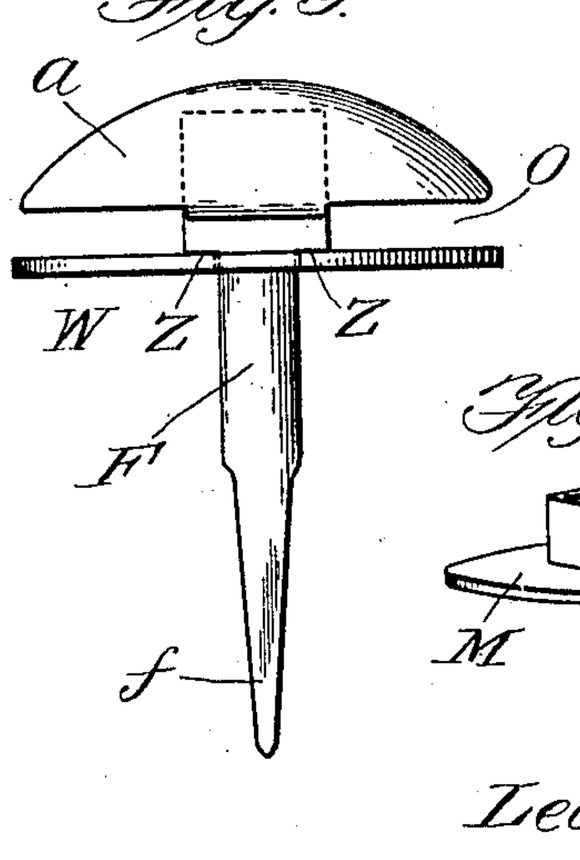


Fig. 10.

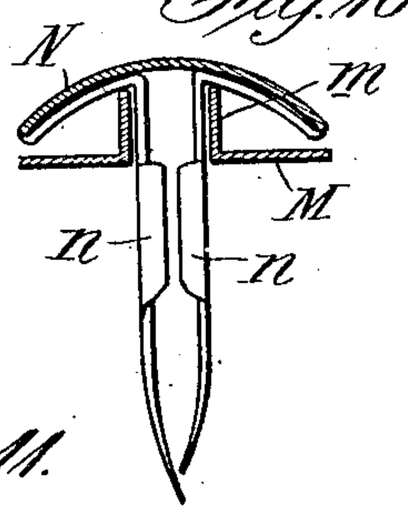
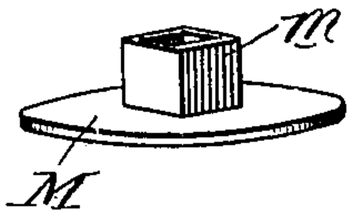


Fig. 11.



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UNITED STATES PATENT OFFICE.

LEONARD A. YOUNG, OF DETROIT, MICHIGAN.

TUFTING-BUTTON FOR CUSHION-SEATS.

No. 913,248. Specification of Letters Patent. Patented Feb. 23, 1909.

Application filed April 10, 1908. Serial No. 426,405.

To all whom it may concern:

Be it known that I, LEONARD A. YOUNG, a citizen of the United States, residing in Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Tufting-Buttons for Cushion-Seats, of which the following is a specification.

My invention relates particularly to that class of tufting buttons in which provision is made for the passage of air through them and they are consequently known as "ventilating buttons".

The object of my invention is to simplify the construction of such buttons in order to render them cheaper, stronger, and more durable. Improved buttons of this class are shown in my application for Patent No. 390,675, filed August 29, 1907. The button herein shown and described is of a much simpler construction.

In carrying out my present invention I form the button proper from a single piece of sheet metal bent or pressed into proper form to provide a concavo convex head and a split or bifurcated tubular shank, which latter is preferably formed with shoulders to receive a washer and hold it at such distance from the edge of the head as to provide an annular space or opening for the passage of air to or from the interior of the button head and to or from the hollow shank. At its lower end the shank of the button is provided with prongs, one of which is longer than the other and extends across its point. This enables the shank to be more easily inserted into the fabric and it also facilitates the spreading of the prongs and shank members after the shank has been thus inserted.

In the accompanying drawings, Figure 1 shows a section of the tufted top of a cushion with my improved tufting buttons applied. Fig. 2 is a top plan view of a sheet metal blank from which the button may be formed. Fig. 3 shows how this blank is pressed or swaged to give a concavo-convex form to the head and semi-tubular formation to the two members of the shank. Fig. 4 shows the next operation in which the shank members are bent down to assume positions at right angles to the head. Fig. 5 is another view in elevation of the blank shown in Fig. 4. Fig. 6 shows an elevation, the button blank being bent into its final form. Fig. 7 shows an elevation of the washer employed in connection with the button. Fig. 8 is a view on a larger scale partly in section and partly in elevation showing the construction of the button and how it is associated with the washer. Fig. 9 shows a side elevation of the button shown in Fig. 8 looking in a direction at right angles to that of Fig. 8. Fig. 10 is a view partly in section and partly in elevation of a modification. Fig. 11 is a perspective view of the washer shown in Fig. 10.

In Fig. 1 I have shown how my improved buttons may be applied to a cushion. At A a side elevation of the button is illustrated as it would appear when stuck through the tufted top X of the cushion, the shank members being unbent. At B the button in the same condition is shown partly in section and the washer with which it is associated is also shown in section. At C the same button is illustrated in a position at right angles to that shown at A and B. At D the drawings illustrate how the two members of the shank are bent.

The button is preferably made from a blank, such as shown in Fig. 2, there being a central portion *a* for the head, and shank portions *b*, *c*, projecting from diametrically opposite sides of the central portion. Each shank portion has an upper part E, the inner portion *e*, of which is somewhat narrower than the outer portion *e'*. The middle portion, F of the shank is of substantially the same width as the portion *e'*, but between the portion F and the part E there are slits e^2, as illustrated. The part F is prolonged into a prong *f* which is somewhat narrower than the part F. One of the prongs is preferably made longer than the other, as illustrated in Figs. 8 and 10, and extends across its point. This enables the shank to be more easily inserted into the fabric and it also facilitates the spreading of the prongs and shank members after the shank has been thus inserted. The blank shown in Fig. 2 is first pressed into the shape shown in Fig. 3, then the shank members are bent to the position shown in Figs. 4 and 5, and then to that shown in Fig. 6 which completes the formation of the button.

It will be observed by reference particularly to Fig. 8 that the button is made from one piece of metal, the head being concavo-convex in form, while the shank is tubular. The upper part E of each shank is bent inward and made to bear against the under

side of the button head at a point between the axis of the button and its edge, and each shank has a downwardly projecting portion *e'* which extends to the upper end of the vertical portion, F, of the shank. This formation provides shoulders at *z* which constitute a bearing for the washer W. The lower portion of the shank passes through the washer and when the washer comes in contact with the shoulders *z* it is held thereby some distance from the outer edge of the button, thus providing a space or opening O between the edge of the button and the washer.

By reference to Fig. 1, it will be seen that air can freely pass from the outside between the edge of the button and the washer and down through the shank, or it may pass up through the shank and out under the edge of the button.

By the particular formation shown and described not only is a seat formed for the washer, but the button is strengthened by causing the upper portions of the shank to bear against the button head between its outer edge and its axis. I may also accomplish a similar result by the devices shown in Figs. 10 and 11. In this case the head N of the button is provided with shanks *n*, *n* which are prolonged upwardly, rest against the inner side of the head and are joined to the edge thereof. I use this in connection with a washer M which has an upwardly projecting boss or flange *m*, the upper edge of which bears against the under side of the head and holds it above the upper face of the washer, leaving a ventilating space as indicated. In this instance the shank is shown as made square and the boss *m* is correspondingly formed.

I claim as my invention:—

1. A button comprising a concavo-convex head and a bifurcated tubular shank having shoulders below the head and an opening at the side above the shoulders; and a washer threaded on the shank below the shoulders and bearing against them.

2. A button comprising a concavo convex head and a bifurcated tubular shank having shoulders below the edge of the head, an opening at the side above the shoulders and below the edge of the head, parallel shank portions immediately below the shoulders arranged close together in parallel relation and in line with those portions of the shank above the shoulders and prongs beyond said last mentioned portion, for the purpose specified.

3. A button comprising a concavo convex head and shank members formed integrally therewith having portions which extend from the edge of the head up and into the head and bear against the middle portion thereof and then extend downward in parallel lines and have prongs on the lower ends.

In testimony whereof, I have hereunto subscribed my name.

LEONARD A. YOUNG.

Witnesses:
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THOMAS J. WEADOCK.