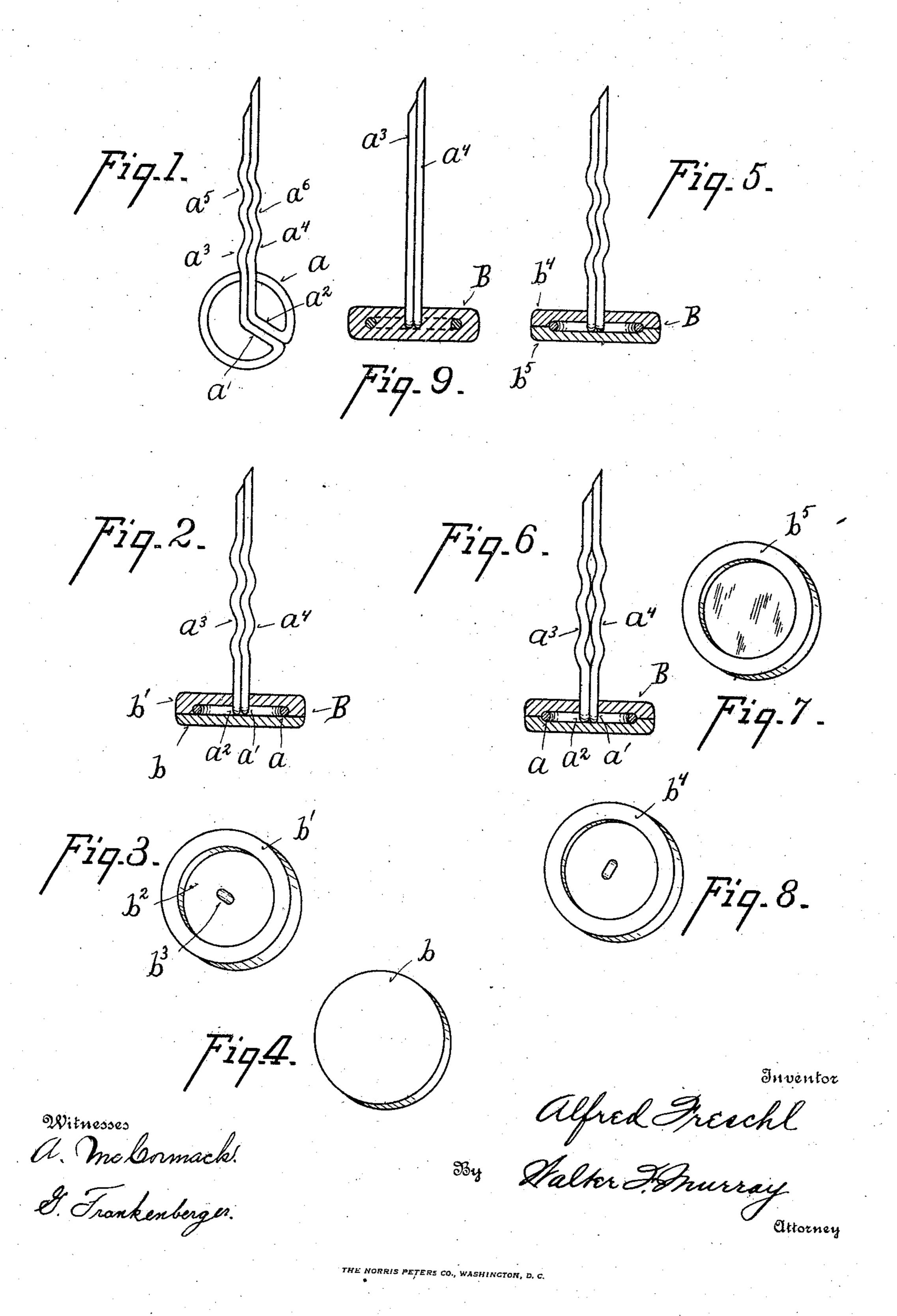
A. FRESCHL. TUFTING BUTTON. APPLICATION FILED NOV. 22, 1906.



UNITED STATES PATENT OFFICE.

ALFRED FRESCHL, OF CHICAGO, ILLINOIS.

TUFTING-BUTTON.

No. 859,934.

Specification of Letters Patent.

Patented July 16, 1907.

Application filed November 22, 1906. Serial No. 344,584.

To all whom it may concern:

Be it known that I, Alfred Freschl, a citizen of the United States of America, and a resident of Chicago, county of Cook, and State of Illinois, have in-5 vented certain new and useful Improvements in Tufting-Buttons, of which the following is a specification.

The object of my invention is a tufting button in which the parts of the button will not become separated in use, in which the prongs are held firmly to-10 gether so as not to spread apart at their base when bent in use, and in which the prongs are provided with a means of preventing the button from falling out of the cover of the cushion during the process of making the cushion.

In the use of tufting buttons there are several accidents which are to be guarded against. One is the pulling of the prong out of the head, the next the breaking of the prongs adjacent to the head, another the spreading of the prongs at their base, and still an-20 other the separation of the head from the back of the prong, producing what is known in the trade as "shiners."

Referring to the accompanying drawings, in which like parts are indicated by similar reference letters, 25 Figure 1 is a perspective view of a wire bent to form the back and prongs of a tufting button. Fig. 2 is a view of a tufting button embodying my invention, showing the prongs in elevation and the back and head in diametrical section. Figs. 3 and 4 are detail perspective views of the parts of the head shown in Fig. 2. Figs. 5, 6, and 9 are views similar to Fig. 2, but of modified forms of my invention. Figs. 7 and 8 are detail perspective views of the parts of the heads shown in Figs. 5 and 6.

Referring to the parts: The back and the prongs of 35 the tufting button embodying my invention are made from a wire which is bent into a circular loop, a, then into radial arms, a', a^2 , which lie in the same plane as the loop, a, and then into axial arms, a^3 , a^4 , which 40 project transversely from the center of the loop, a. The prongs are given crimps, a^5 , a^6 . About the back, a, radial arms, a', a^2 , and the base of the prongs, a^3 , a^4 , the head, B, of fiber, is then compressed.

In Fig. 2, the head is formed of circular disks, b, b'. 45 Disk, b, has formed upon one side a recess, b^2 , of a depth equal to the diameter of the wire which forms the back and prongs of the button. Disk, b, likewise has a central oblong slot, b^3 , the longer of whose diameters is twice that of the diameter of the wire and the 50 shorter of whose diameters is equal to the diameter of the wire. The disk, b, is placed over the metal prong so that the back, a, is seated in the recess, b^2 , and the prongs, a^3 , a^4 , project through the slot, b^3 . Then to finish the button the disk, b, is glued to the disk, b'.

In the modifications shown in Figs. 5 and 6, both of the disks, b^4 , b^5 , have recesses formed in them, each recess being equal to one half the diameter of the wire.

In the modification shown in Fig. 9, the fiber head, B, is molded about back a, the radial arms, a' and a^2 and around the base of the prongs.

In Fig. 6 the crimps in the prongs alternately diverge and converge instead of fitting into one another, as shown in Figs. 1, 2, and 5. The fiber head, B, being compressed firmly about the head, a, the radial arms, a' and a^2 and around the base of the prongs, 65 a^3 , a^4 , holds the parts of the back firmly in their relative position to each other, while the form of the back and radial arms provides a good frame for the head to get a firm hold upon.

In use when the prongs are bent, the fiber head 70 holding the arms, a', a^2 , and the base of the prongs together, prevents the spreading apart of the arms, a', a^2 , so that the head, B, is not loosened in its firm grip upon the metal part of the button. The fiber, likewise, fitting about the base of the prongs, has a tend- 75 ency to prevent the bending of the same at that point, so that any crystallization which may have occurred at the base of the prong due to the bending in the course of manufacture, is harmless. The firm hold of the head upon the back and radial arms prevents the 80 same being separated therefrom, so that when the pad is removed from the tufting machine, there is an absence of the so-called "shiners," that is, there are no metal parts exposed upon the cover of the couch by the heads becoming loose and falling away from 85 the rest of the button.

In using tufting buttons it is customary to insert them through the material which is to form the cover of the pad, and to place the cover face downward upon the mold-board of a tufting-machine, then to connect 90 the buttons to the tufting-posts. In this operation of placing the cover upon the mold-board after the buttons have been pushed through the cover, there is much inconvenience occasioned by the buttons dropping out of the cover. The crimps, a^5 , a^6 , in my 95 tufting-button prevent the occurrence of these accidents.

What I claim is:

1. As a new article of manufacture, a tufting button consisting of a wire bent into a loop to form a back, and 100 thence into prongs projecting transversely from the back and a head consisting of fiber compressed over the back and around the base of the prongs.

2. As a new article of manufacture, a tufting button consisting of a wire bent into a circular loop, then into 105 radial arms to form a back and thence into prongs projecting transversely from the back, and a head consisting of fiber compressed over the back and radial arms.

3. As a new article of manufacture, a tufting button consisting of a wire bent into a loop to form a back and 110 thence into prongs projecting transversely from the back, the prongs having crimps in them, and a head consisting of fiber compressed over the back and around the base.

ALFRED FRESCHL.

Witnesses:

H. O. DAY, R. C. MANSON.