

(No Model.)

W. H. HUTCHINSON & H. A. CABLES.  
TUFT.

No. 440,710.

Patented Nov. 18, 1890.

Fig. 1.

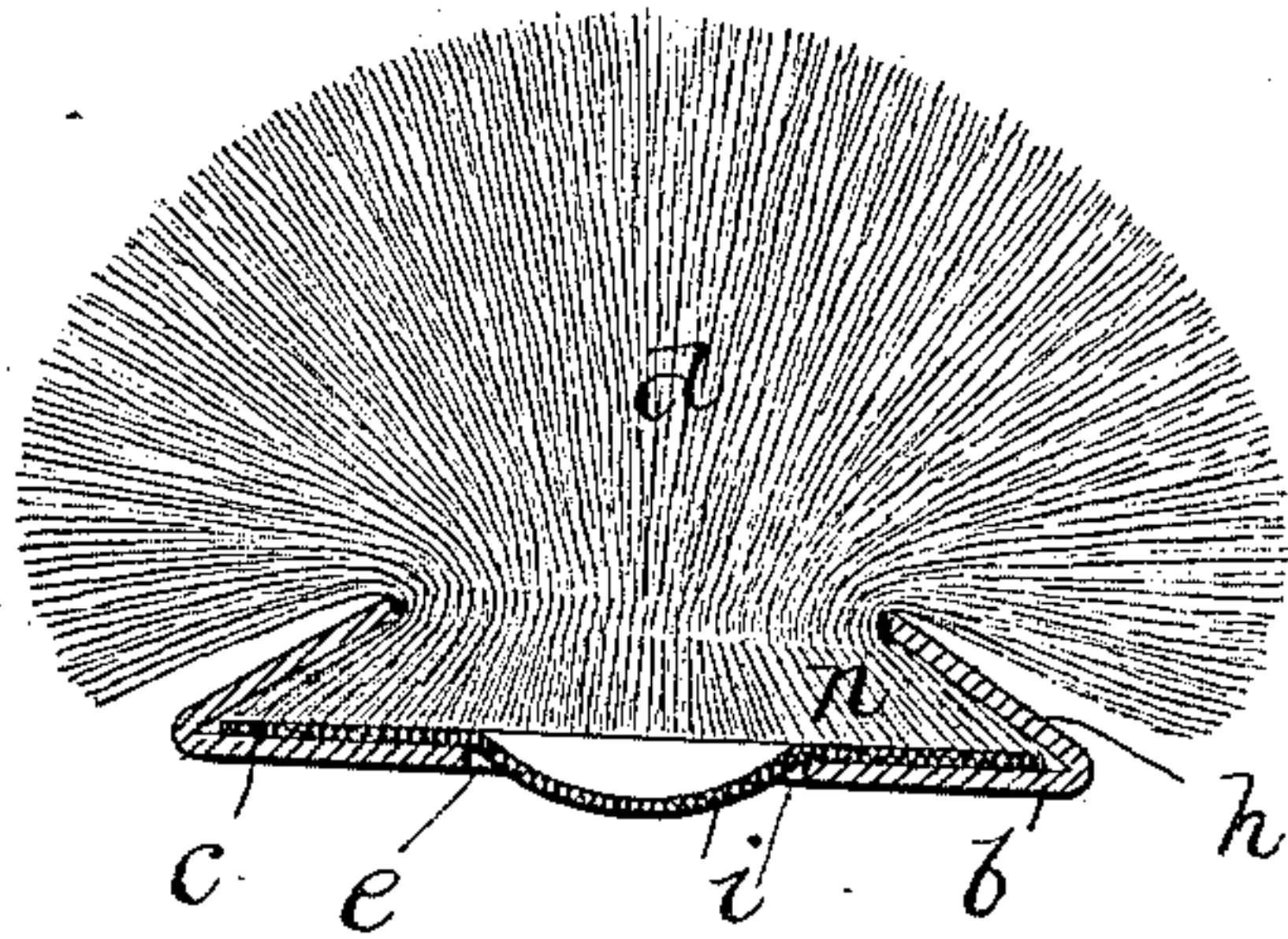


Fig. 2.

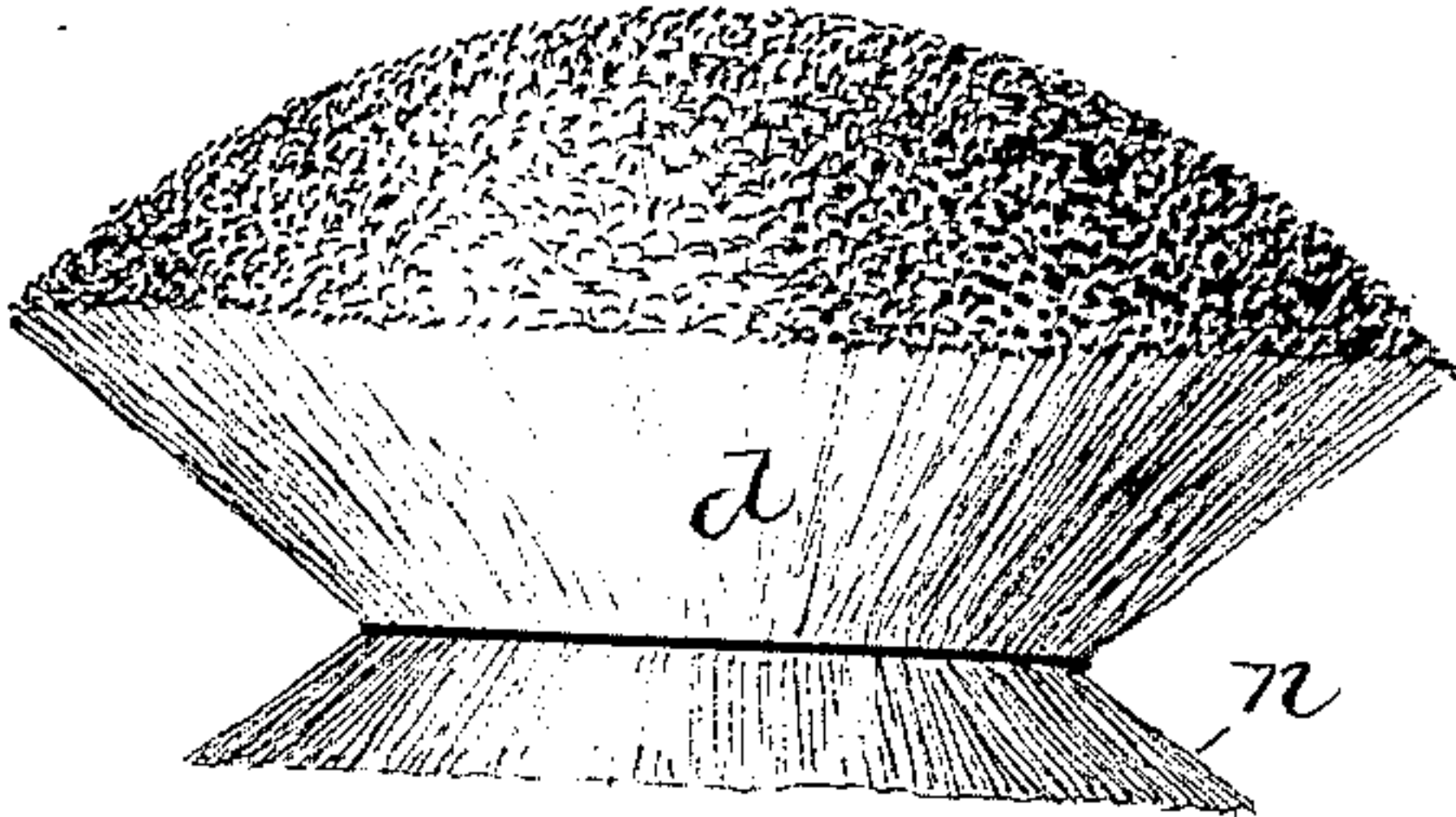


Fig. 3.

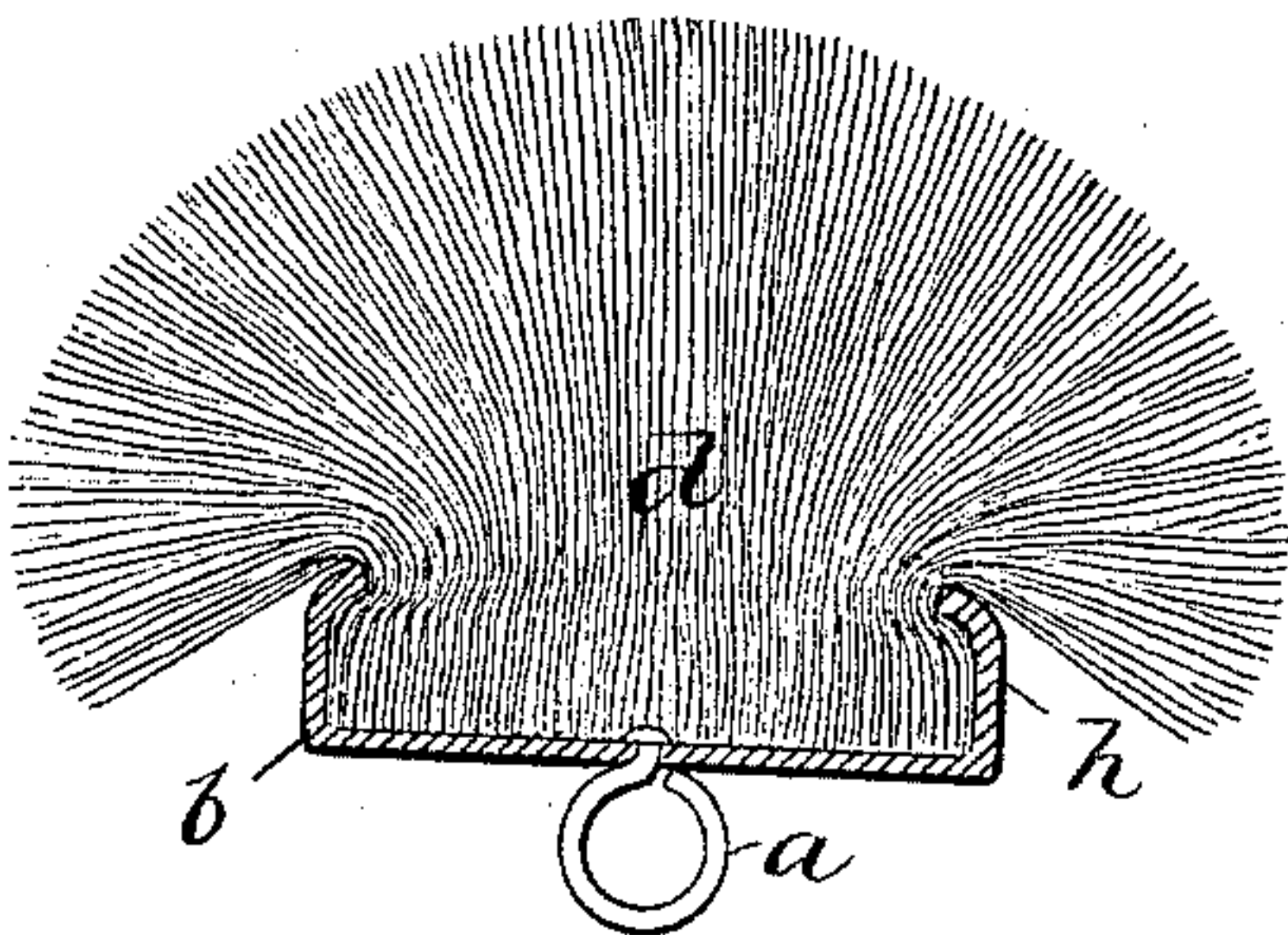


Fig. 4.

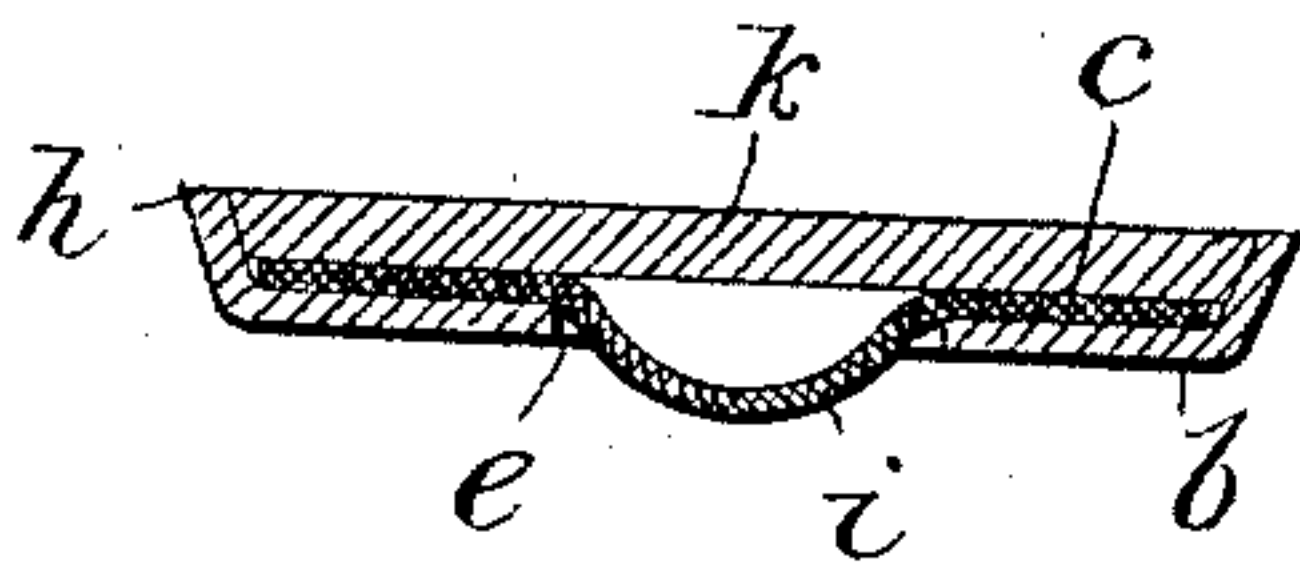
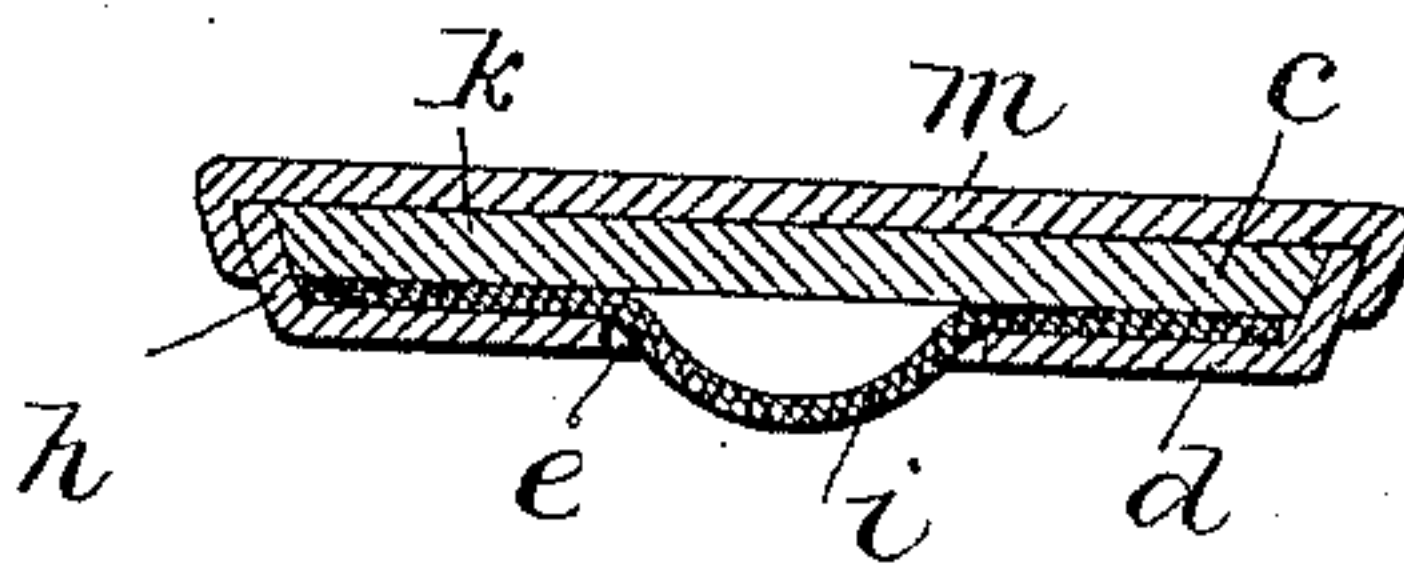


Fig. 5.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## TUFT.

SPECIFICATION forming part of Letters Patent No. 440,710, dated November 18, 1890.

Application filed May 8, 1890. Serial No. 350,970. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM H. HUTCHINSON and HARTLEY A. CABLES, citizens of the United States, residing at Rochester, Monroe county, New York, have invented certain new and useful Improvements in Tufts, of which the following is a specification.

Our invention is a tuft provided with a metallic cup-like backing and central flexible or textile nipple for facilitating the attachment of the tuft to the fabric, as fully set forth hereinafter, and as illustrated in the accompanying drawings, in which—

Figure 1 is a sectional view of our improved tuft; Fig. 2, an external view of the fibrous body of the tuft separate from the backing. Fig. 3 is a sectional view of the ordinary tuft. Figs. 4 and 5 are sectional views illustrating the backing of an ordinary button.

Heretofore in the manufacture of tufts it has been customary to provide each tuft with a metallic eye *a*, secured to or carried by a metallic cup *b*, within which the end of the body *d* of the tuft is secured by crimping the flange *h* of the cup at the edge, as shown.

It has long been desirable to dispense with metallic eyes, which hold the tuft at an objectionable distance from the fabric and are otherwise undesirable, and to use backings having linen or textile nipples, as in the backing of ordinary buttons; but the methods heretofore devised for this purpose have not proved to be practicable. The reason for this may be understood on reference to Fig. 4, illustrating the ordinary backing of a button consisting of a cup *b*, having a flange *h*, a central opening *e*, and a disk *c* of linen, which is clamped within the back of the cup by a pasteboard disk *k*, so that a portion will project through the opening *e* to constitute the nipple *i*. The facing *m* is crimped to the back of the button, so as to confine the disk *k*, as shown in Fig. 5. Any attempt to connect such a backing to the body *d* of a tuft, Fig. 2, would be unsuccessful, as there is no means of forcing the disk *k* down onto the disk of linen *c* in a tuft, as usually made.

To secure the advantages of the button-backing, and yet secure the body of the tuft to the backing without leaving the linen disk loose,

we have devised the construction illustrated in Fig. 1. Thus we make use of a cup *b*, having a flange *h* and an opening *e*, and within the cup we place a disk of linen *c*, as in the ordinary button-backing. Instead, however, of using the disk *k* to secure the linen disk, we condense and consolidate the portion *n* of the body of the tuft by mechanism not necessarily here described, and if necessary we apply cement to the consolidated portion of the tuft, and introduce the latter while so condensed within the flange of the cup, and then we bend in the entire flange at an angle to the back, as shown in Fig. 1, thereby not only further condensing and contracting the portion *n* of the tuft, but clamping it against the disk *c*, and clamping the latter at the edge or periphery firmly between the inner portion of the tuft and the inner face of the backing, so that it is securely held in place in such manner that it cannot be drawn out through the opening *e*. If desired, a thin plate may be placed upon the disk *c*, so as to be clamped with the latter at the edge when the flange *h* is turned inward. This, however, is not essential, but serves to strengthen the back.

An additional effect of the bending in of the flange *h* at an angle is to reduce the thickness or depth of the backing, rendering it less liable to be exposed, while the forcing of the edge of the flange into the body of the fibers causes the latter to spread downward, as shown in Fig. 1, so as to cover and conceal the backing.

Without limiting ourselves to the precise construction shown, we claim—

A tuft consisting of a body of fibers, a metallic cup having a central opening and a peripheral flange, and a textile disk clamped with the inner ends of the fibers between the back of the cup and the flange, substantially as set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

WILLIAM H. HUTCHINSON.

HARTLEY A. CABLES.

Witnesses:

W. I. BURRITT,

JOHN A. NIVEN.