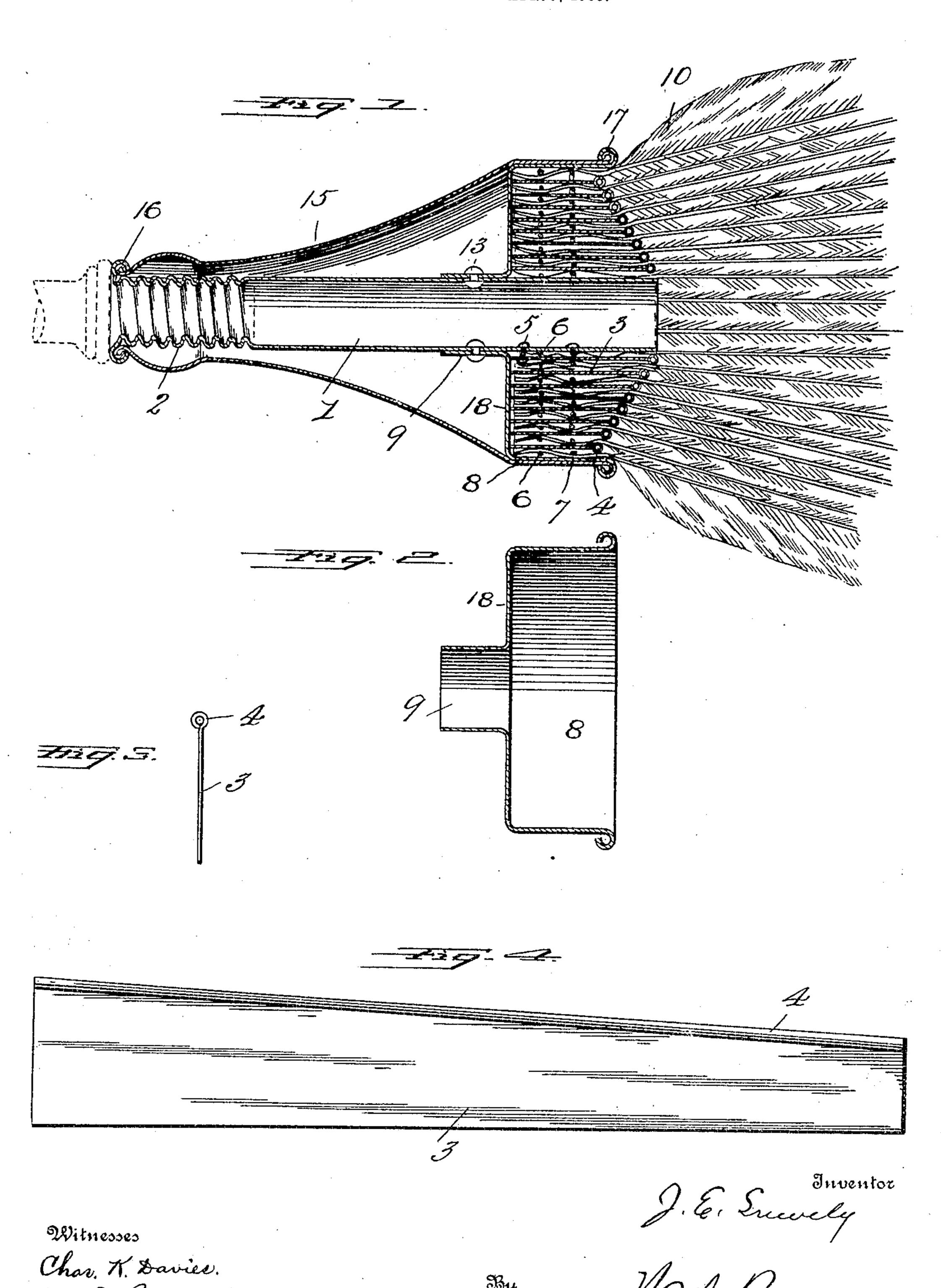
J. E. SNEVELY. FEATHER DUSTER. APPLICATION FILED APR. 9, 1906.



UNITED STATES PATENT OFFICE.

JAMES E. SNEVELY, OF SAN FRANCISCO, CALIFORNIA.

FEATHER DUSTER.

No. 843,113.

Specification of Letters Patent.

Patented Feb. 5, 1907.

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To all whom it may concern:

siding at San Francisco, in the county of San | layer of feathers 10, so that the quills of the Francisco and State of California, have in-5 vented certain new and useful Improvements in Feather Dusters, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to dusters and 10 brushes, and is intended especially to improve feather dusters, but is applicable to other brushes, like paint-brushes, to some

extent.

The object of the invention is to make a 15 duster or brush of the character above referred to with light metallic tube as a base of construction and with the feathers, bristles, or fibers of which the body of the brush is composed secured to the tube substantially 20 in the manner to be hereinafter explained.

Figure 1 is a longitudinal section of a duster-head, the feathers being broken and part of a removable wooden handle indicated in dotted lines. Fig. 2 is a section of the sup-25 porting-sleeve detached. Fig. 3 is an end view, and Fig. 4 a face view, of the winding-

strip.

In constructing this brush or duster, I use a metallic tube 1 as a base of construction. 30 This tube is preferably cylindrical for most of its length, but has a threaded portion 2, into which the handle may be secured. The brush or feather duster is constructed around the central core or tube 1 by rotating the tube 1 35 and feeding in between the said tube and a metallic binding-strip 3 the stock 10, which is to form the brush or duster, so that the stock is in a coiled layer between the turns of the binder-strip. The binding-strip 3 has a 40 turned-over edge 4 and, as shown, tapers from end to end. The objects of the turnedover edge of the binding-strip are to hold the stock more firmly and to cause the stock to flare outwardly. The object of the taper or 45 the bevel of the binding-strip is that the turned-over edge 4 may form a tapering helix and yet not prevent the body 3 of the binding-strip from coiling in a spiral with the ribbon-body of the coil substantially parallel 50 with the axis of tube or core 1. The inner end of strip 3 is secured to tube 1 (or core) by rivet 5 or other common means for holding two pieces of metal to each other.

Besides the coiled binding-strip 3 the 55 feathers or other fibers 10 are preferably held

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Be it known that I, James E. Snevely, re- | to tube 1 by wires 6 and 7. One of these wires is within and the other without each feathers are bent or crimped by the wires and by the edge of the binding-strip, as indi- 60 cated in Fig. 1 The turned-over edge 4 of the binding-strip 3 bears with a crimping or bending pressure on the quills of the feathers, and as this edge gradually recedes from the tip of the brush the stock has a tendency to 65 flare out beyond the end of strip 3. The fact that the binder-strip does not extend as far over the feathers on the outer coils as on the inner will itself cause or permit the flaring of the feathers or bristles, which is very 7° desirable in some kinds of brushes and in feather dusters. The inner ends of the wires 6 and 7 are secured to tube 1 and are firmly held as the coiling proceeds. The outer ends of wires 6 and 7 n.ay be tied or otherwise fas- 75 tened, as is common in broom-making.

After the brush-stock is bound to tube 1, the metallic cup or cover 8 is applied to brush. This cup 8 has a thimble 9, which slips over the tube 1, and the cup part of the 80 cover 8 surrounds the wound portion of the brush. The thimble 9 is secured to the tube 1, as by rivets 13 or in other suitable manner.

A conical sleeve or cuff 15 is applied to the completed brush-head. This sleeve 15 neatly 85 covers the metallic cup 8 and tapers down to the size of tube 1 at its threaded portion. The end of tube 1 may be crimped over the small end of the sleeve, as shown at 16, and the outer end of cup 8 may be crimped over 90 the cuff, as at 17, whereby the cuff becomes a brace and support for the tube 1 and cup 8 and holds all the parts together with great firmness, making also a neat finish for the brush. The flat or disk part 18 of the cup 8 95 forms a firm support for the ends of the feathers or other brush-stock.

What I claim is—

1. In a brush of the character described, the central tube, a coiled binder-strip at- 123 tached thereto and having its edge receding as a tapered helix, and brush-stock between the coils of the binder-strip.

2. In a brush of the character described, a central tube, a tapering binder-strip coiled 105 thereon, and brush-stock secured between

the coils of the binder-strip.

3. In a brush of the character described, a central core, a coiled binder-strip, and coiled binding-wires alternately inside and outside 110 of layers of brush-stock, and brush-stock arranged as described, whereby the stock is crimped by the wires.

4. In a brush of the character described, a 5 central core, a binder-strip secured thereto and having a thickened edge, and brush-stock secured between coils of the binderstrip, the thickened edge of the binder-strip forning a tapered helix, as set forth.

5. The combination with the tubular core,

of the brush-stock arranged in coiled layers about the same, a cup surrounding the coiled stock, and a conical sleeve or cuff crimped to the cup and to the tubular core.

In testimony whereof I affix my signature 15

in presence of two witnesses.

JAMES E. SNEVELY.

Witnesses:

R. A. Bruce, C. J. Tucker.