

No. 730,324.

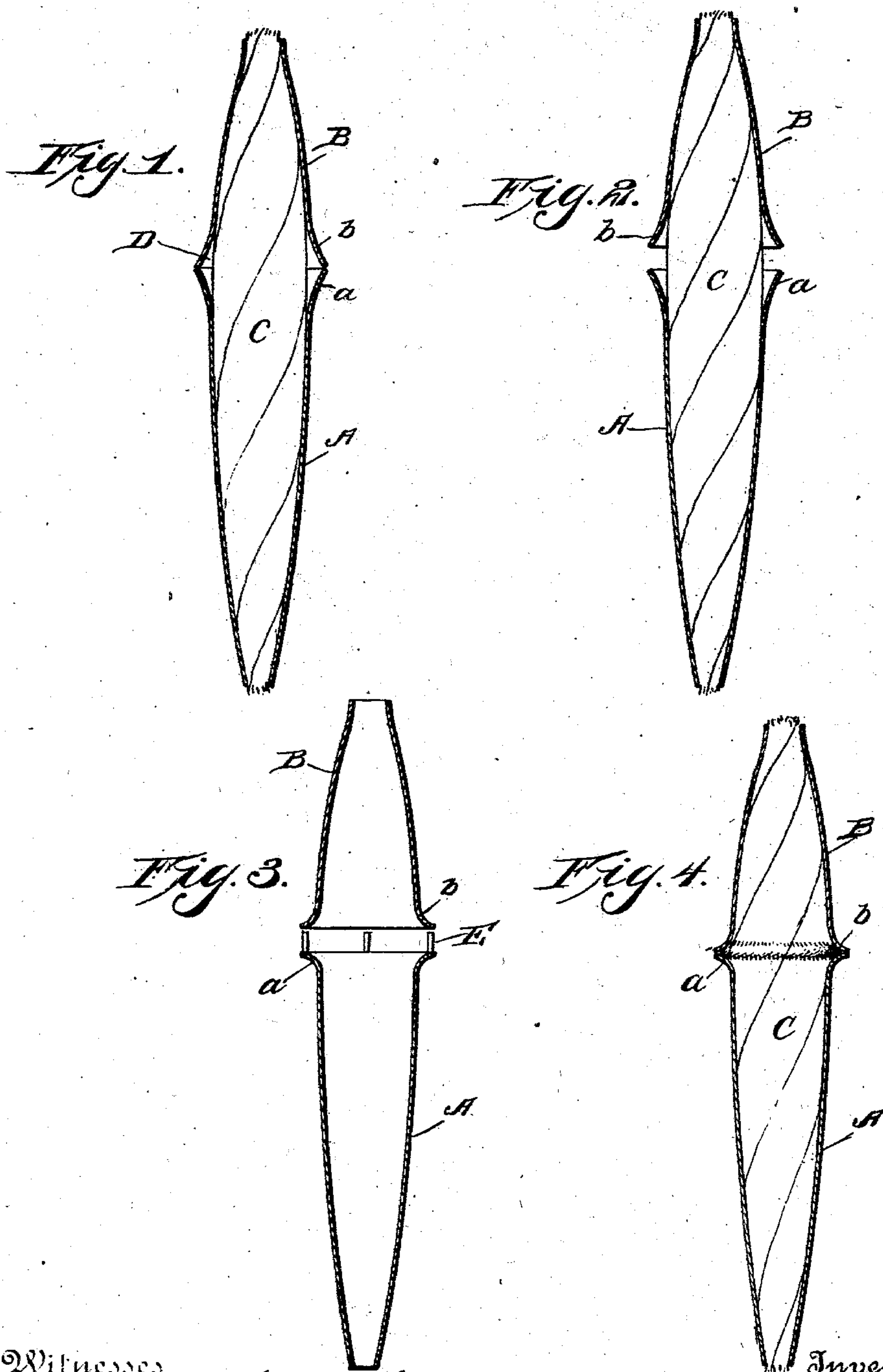
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S. S. WILLIAMSON.

METHOD OF FORMING CIGAR BUNCHES BY EXPANSION.

APPLICATION FILED AUG. 21, 1902.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

SAMUEL S. WILLIAMSON, OF PHILADELPHIA, PENNSYLVANIA.

## METHOD OF FORMING CIGAR-BUNCHES BY EXPANSION.

SPECIFICATION forming part of Letters Patent No. 730,324, dated June 9, 1903.

Application filed August 21, 1902. Serial No. 120,458. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL S. WILLIAMSON, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Methods of Forming Cigar-Bunches by Expansion, of which the following is a specification.

This invention relates to a new and useful improvement in the method of forming cigar-bunches by expansion, and has for its object to so treat a cigar-bunch during its formation as to permit the free expansion thereof longitudinally throughout its entire length and also to permit the free expansion of the central section thereof radially, thus overcoming the defects heretofore produced in the formation of cigars by the method of expansion.

It has been found by experience that when a cigar-bunch is so confined in a shaper it cannot expand longitudinally, that the tobacco composing the bunch in its natural tendency to thus expand is set by being thus cramped, and the result is that the resulting cigar is not a free smoker. Likewise, it has been found by experience that where the cigar-bunch is permitted to expand longitudinally only the central section or that containing the largest quantity of tobacco and which forms the principal portion of the cigar that is utilized in smoking is unduly set or cramped, so that the best results are not thereby obtained. In experimenting to overcome these defects I have found that perfect results are had by confining circumferentially the end sections of the cigar-bunch and leaving a portion of its central section free to expand radially, while also leaving the cigar-bunch free to expand longitudinally throughout its entire length.

In carrying out my present invention I use a form of shaper differing only slightly from that shown in Fig. 1 of the patent to C. E. Doyle, No. 585,348, issued June 29, 1897, or from the construction shown in Fig. 14 of my allowed application, Serial No. 107,892, filed May 19, 1902; but these slight differences are essential to the accomplishment of the results desired—as, for instance, in the Doyle construction the sections of the shaper are held against longitudinal movement relative to each other, and thus set or cramp the cigar-

bunch, as above explained, and in my above-referred-to allowed application the cigar-bunch is confined circumferentially throughout its entire length, thus cramping it at the vital point or where it should not be cramped, and, further, the flare of the cap and body in both of the above-referred-to constructions is not sufficient to produce the best results.

Referring to the drawings, Figure 1 represents a shaper made in two sections forming a body and cap, showing a cigar-bunch therein, the shaper being in section and the body and cap in contact or in the position they assume when first placed over the cigar-bunch; Fig. 2, a similar view showing the body and cap of the shaper as having moved longitudinally away from each other by reason of the longitudinal expansion of the cigar-bunch; Fig. 3, a section of the body and cap of a shaper of different form for producing the same result, in which gages are utilized to determine the relative position of the body and cap when first placed over a cigar-bunch; and Fig. 4, a section of a shaper having a cigar-bunch therein, illustrating the effect that such a shaper would have on a cigar-bunch were the cap and body held against free longitudinal movement.

In the drawings, A represents the body and B the cap of the shaper. The upper end of the body is flared to a considerable degree, so as to provide the mouth *a*, while the lower end of the cap is likewise flared to provide the mouth *b*.

When the cigar-bunch (indicated by C) is placed within the body and the cap closed thereover, a considerable section of the bunch will be left unconfined, as indicated at D, by reason of the extensive flare in the mouth of both the body and cap, and this unconfined section of the cigar-bunch will therefore be free to expand circumferentially, and as the body and cap are not held together the bunch is free to expand longitudinally throughout its length. This free movement of the cap relative to the body not only prevents the setting or cramping of the tobacco composing the bunch, but also prevents the crowding of the tobacco during expansion into the unconfined section, which prevents the marring of the shape of the bunch, as would otherwise be the case, as is clearly illustrated in Fig. 4,



where the body and cap are presumed to be held against longitudinal movement relative to each other, and the bunch being held against longitudinal expansion is flared in the recess formed by the flared mouths of the body and cap, producing an unsightly ridge upon the bunch.

It is essential in the carrying out of my present improvement that the flare of the body and cap be gradual, since otherwise there would be a tendency to crease or mark the cigar-bunch at the points where the shaper left the unconfined section—as, for instance, if the shaper were constructed as shown in the patent of J. J. Bach, No. 260,638, of July 4, 1882, or even as shown in the Doyle patent above referred to a crease or ledge would be formed upon the bunch, as recognized and clearly illustrated in Fig. 2 in the said Doyle patent.

In Fig. 3 I have shown a different form of shaper from that above described for carrying out my method by sharpening the flare

of both the body and cap and providing the mouth of the body or the cap with gage-pins E. These pins limit the downward movement of the cap and determine the length of the unconfined section upon the cigar-bunch in the same manner as the extended flare of the body and cap above described.

Having thus fully described my invention, what I claim as new and useful is—

The method of forming cigar-bunches consisting in confining the end sections of the bunch against radial expansion, leaving the central section free to expand radially, and also leaving the entire bunch free to expand longitudinally.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

SAMUEL S. WILLIAMSON.

Witnesses:

L. W. MORRISON,  
S. D. HEINRICHS.