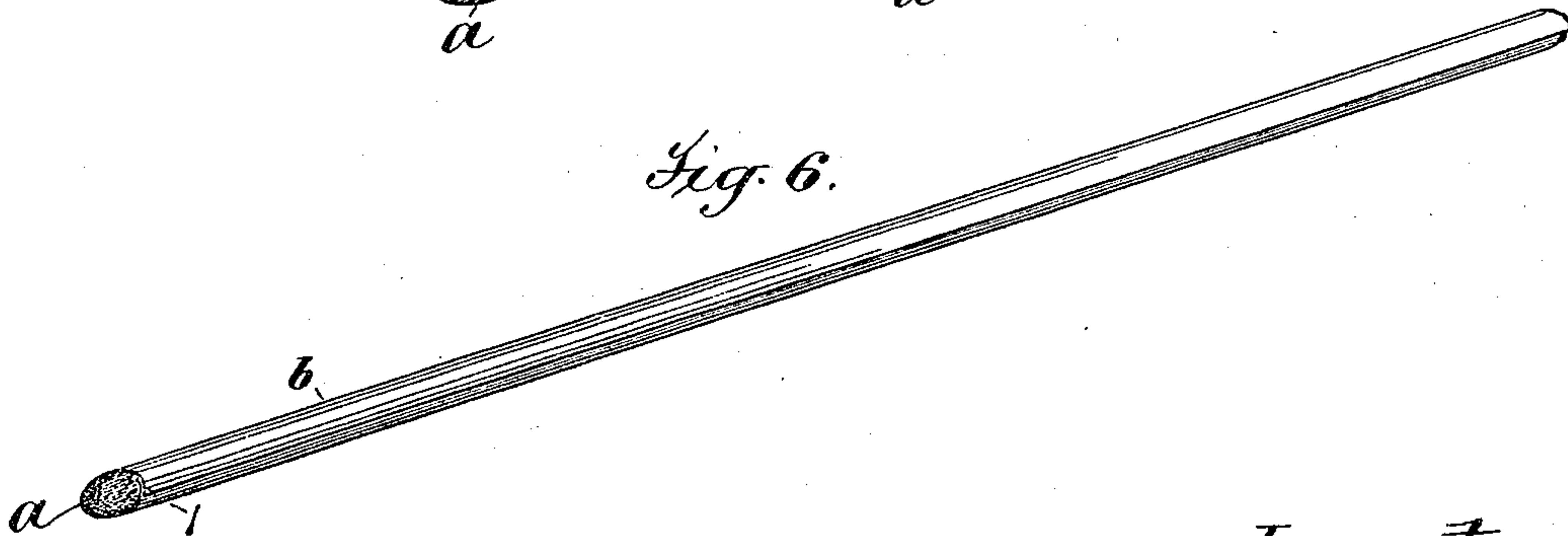
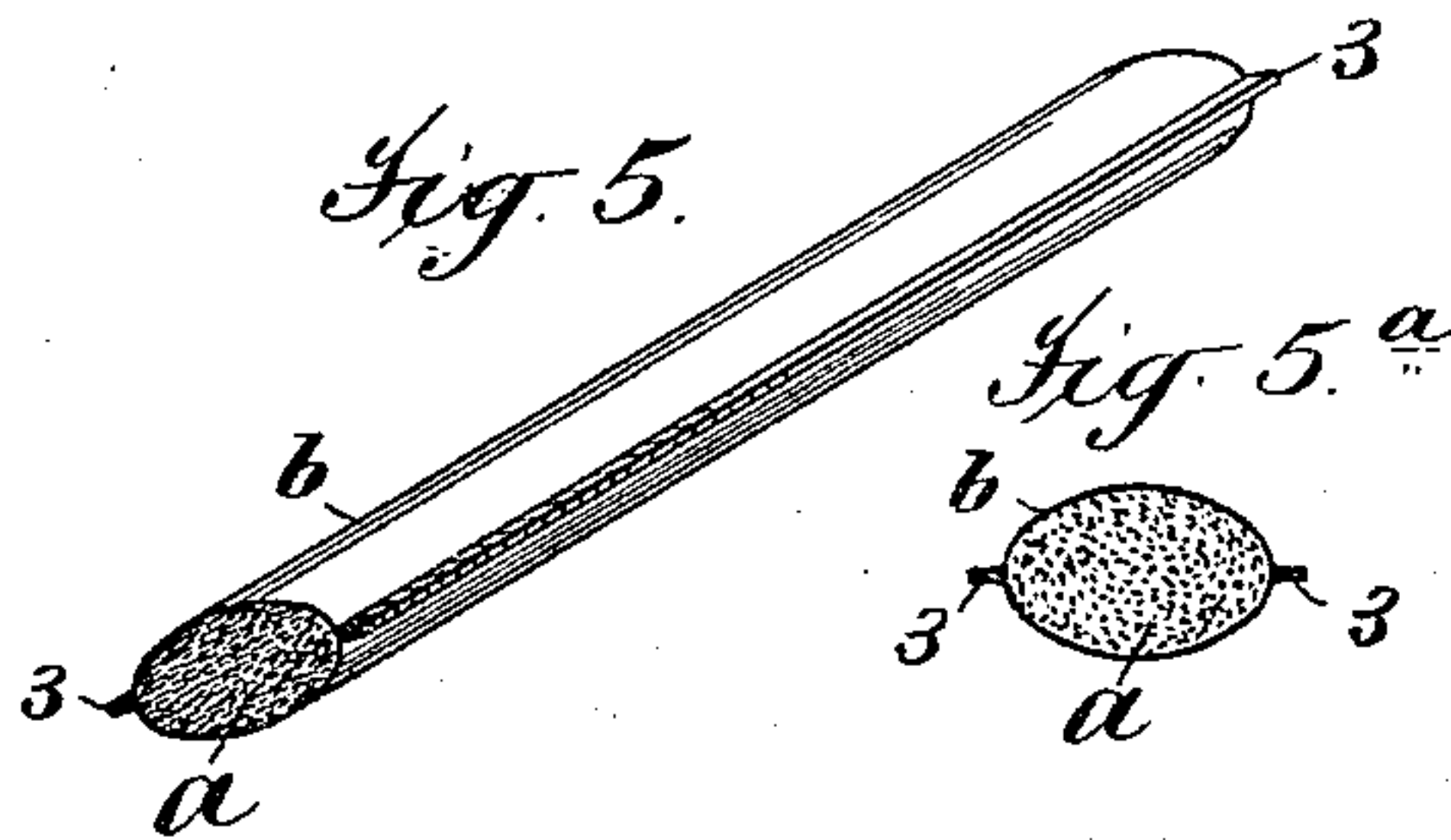
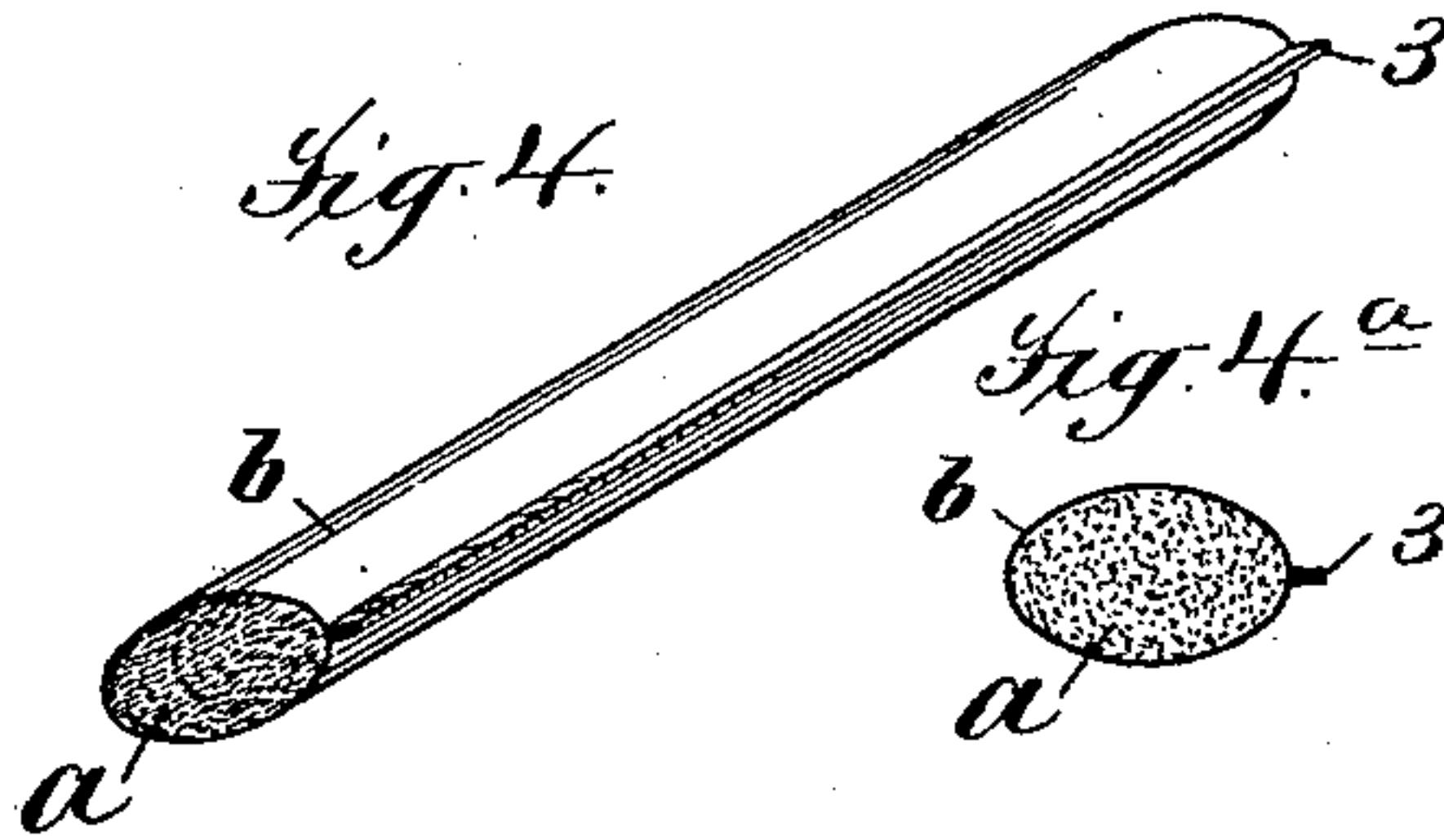
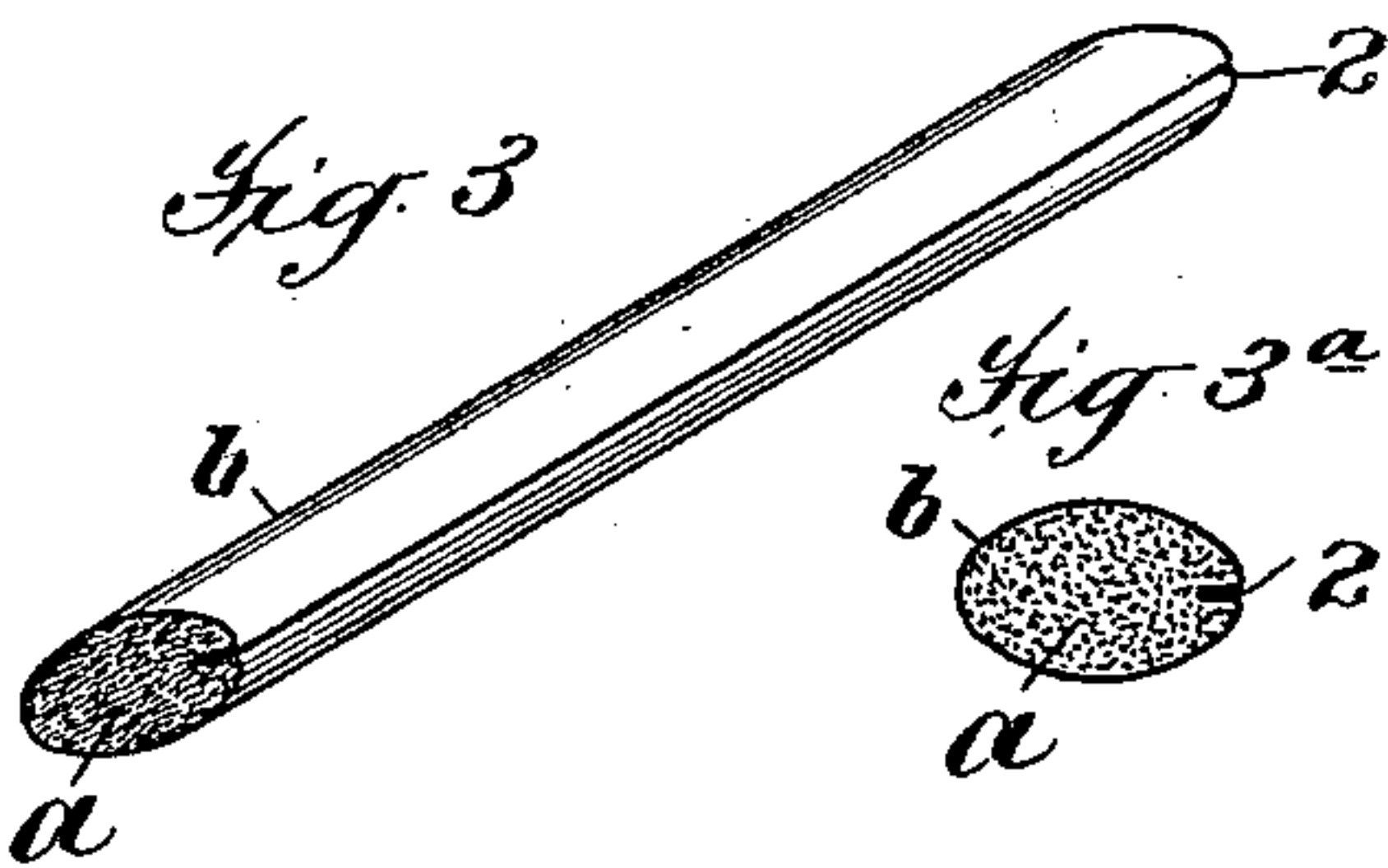
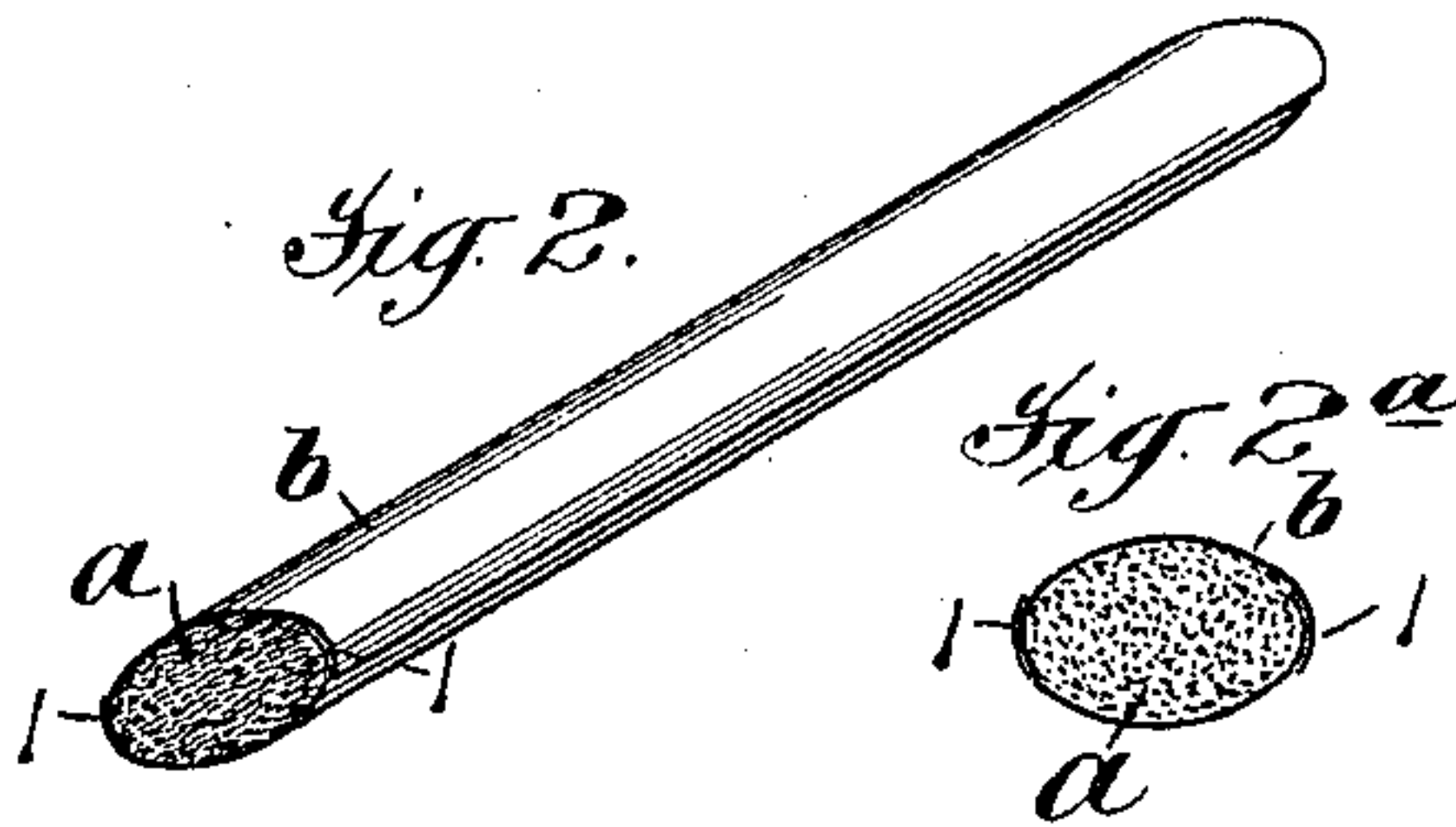
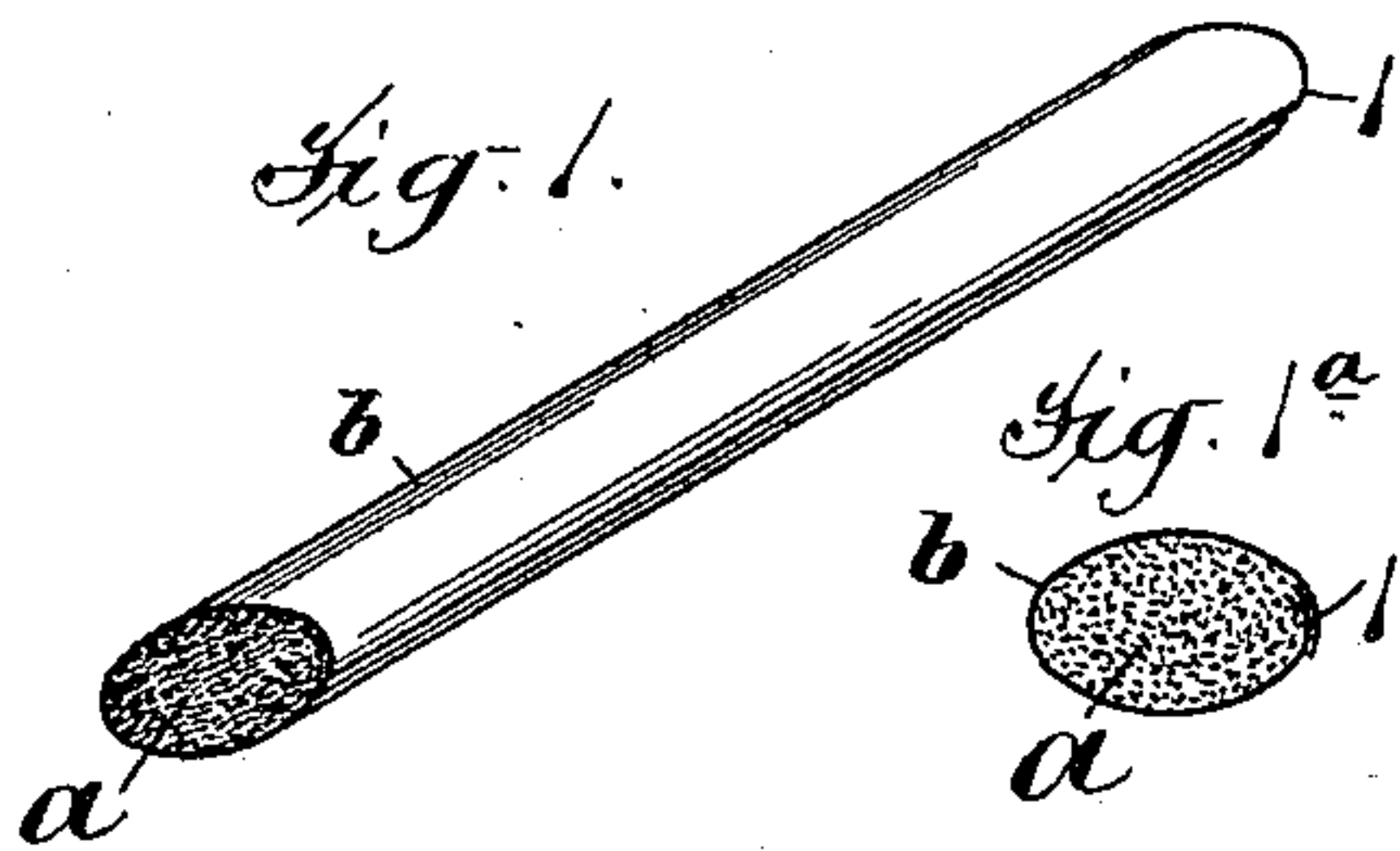


(No Model.)

D. J. CAMPBELL.  
ELLIPTICAL CIGARETTE.

No. 582,266.

Patented May 11, 1897.



Attest:  
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Attys



# UNITED STATES PATENT OFFICE.

DANIEL J. CAMPBELL, OF NEW YORK, N. Y., ASSIGNOR TO THE AMERICAN TOBACCO COMPANY, OF NEWARK, NEW JERSEY.

## ELLIPTICAL CIGARETTE.

SPECIFICATION forming part of Letters Patent No. 582,266, dated May 11, 1897.

Application filed March 31, 1896. Serial No. 585,531. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL J. CAMPBELL, a citizen of the United States, residing at New York, county of New York, and State of New York, have invented certain new and useful Improvements in Elliptical Cigarettes, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

10 The object of the present invention is to provide an improved cigarette of elliptical form in cross-section, which form fits better between the lips and avoids the necessity for moistening and flattening the ends, as in the  
15 ordinary cylindrical cigarettes.

The invention relates especially to elliptical cigarettes with the wrapper-seam on the edge of the cigarette; and the present invention, broadly considered, consists in an elliptical  
20 cigarette having a pasted seam on the edge or each edge of the cigarette, by which construction many advantages are secured over elliptical cigarettes with a pasted seam on the broad or flat side, of which advantages the  
25 following are the most important.

As is well known, the paste of pasted-seam cigarettes is sometimes unpleasant to the lips, being somewhat liable to harden and stick thereto, and this objectionable result occurs  
30 especially in elliptical cigarettes having a pasted seam on the broad or flat side in that one of the lips is constantly in contact with the pasted seam, the cigarette being naturally held flatwise in the mouth. With the pasted  
35 seam on the edge, however, the lips do not come in contact with the seam to the same extent as when the seam is upon the broad or flat side and the above objection is practically avoided. In such elliptical cigarettes with  
40 the seam on the broad or flat side, moreover, the paste of the seam is very liable to be softened by the saliva, so as to loosen the wrapper, on account of the constant contact of the moist lips with the seam, but the use  
45 of the pasted seam on the edge avoids this objection also. This feature of less contact between the lips and seam, moreover, avoids largely the rough feeling of the cigarette to the lips and removes largely the objection to  
50 cigarettes made with the edges of the wrapper

turned outwardly and pasted together so as to form a slight rib projecting from the cigarette, this rib being very objectionable when placed on the broad or flat side of an elliptical cigarette but hardly noticeable when placed  
55 on one or both edges.

My improved elliptical cigarettes with the pasted seam on the edge also burn better than either the cylindrical cigarettes or the elliptical cigarettes with the pasted seam on the  
60 broad or flat side and avoid largely the objectionable angular burning of such cigarettes, as the seam burns more readily and with the rest of the cigarette, and in case of any irregularity of burning the angle is very  
65 slight, so as to be hardly noticeable.

My improved cigarettes with the pasted seam on the edge, moreover, secure largely the result, which has long been desired, of a  
70 seamless cigarette, or one having the appearance of being seamless, as by making the seam of the elliptical cigarette on its edge the cigarettes, which lie on their broad or flat sides when packed, will then appear to the eye seam-  
75 less, and even when handled separately have approximately that appearance. The formation of pasted elliptical cigarettes with the seam on the edge also secures a seamless surface for printing on the broad or flat side after  
80 the seam is formed, which is very important, as it is very difficult to produce a good impression on the top of a seam with the flat type necessarily used, as the printing will not be uniform, being heavy on the seam and faint at each side of the seam, the type in  
85 some cases failing to print throughout. Such cigarettes, moreover, may readily be printed on a seamless surface on both sides, so that in packing it is unnecessary to place the cigarettes with a certain side up, but the printing  
90 will always be uppermost and exposed whichever side is up.

My improved elliptical cigarettes also are stronger than with the pasted seam on the broad or flat side, as the strain comes pri-  
95 marily on the flat side and the pull upon the edges is sidewise of the seam, tending to drag the pasted edges upon each other, instead of largely transverse to the seam, as is the case where the seam is made on the flat side of the  
100



cigarette, so that a weaker seam will hold the wrapper or the same seam will produce a stronger cigarette.

My invention, broadly considered, may be made by different methods and by apparatus of widely-different character, and the pasted seam or seams by which the wrapper is secured may be of any suitable form. I prefer, however, to make my improved cigarette by a method similar to that now in use in connection with cylindrical cigarettes, by which a continuous filler is inclosed within a wrapper-strip and the latter secured to form a continuous cigarette-rod, which is subsequently divided into proper lengths to form cigarettes, the seam or seams preferably being formed by lapping the edges of the wrapper and pasting them together so as to form a flat seam, as common in pasted-seam cigarettes.

The invention includes, in addition to the broad invention above stated, various features of invention in elliptical cigarettes and continuous cigarette-rods having a pasted wrapper-seam on one or both edges, and for a full understanding of the invention a detailed description of constructions embodying the invention in the preferred forms will now be given in connection with the accompanying drawings, and the features forming the invention will then be specifically pointed out in the claims.

In the drawings, Figures 1 and 1<sup>a</sup> are respectively a perspective view and cross-section of a cigarette having a single pasted seam of the common form on one edge. Figs. 2 and 2<sup>a</sup> are similar views showing a modified form with a similar seam on each edge. Figs. 3 and 3<sup>a</sup> are similar views showing a cigarette with the edges turned inwardly and pasted together so as to form a rib inside the wrapper. Figs. 4 and 4<sup>a</sup> are similar views showing a cigarette with the edges turned outwardly and secured together so as to form a rib outside the wrapper. Figs. 5 and 5<sup>a</sup> are similar views showing a cigarette with the same seam as in Fig. 4 on each edge. Fig. 6 is a perspective view of a continuous cigarette-rod, with a single seam of the same form as shown in Fig. 1.

In each of the figures of the drawings, *a* is the tobacco filler, and *b* the wrapper, preferably of paper, as usual in cigarettes, forming a tube inclosing the filler, so as to form with the latter a cigarette of substantially elliptical form in cross-section.

The seam 1 shown in Figs. 1 and 6 is the common pasted seam formed by overlapping the edges of the wrapper and pasting them together flat, and the same seam 1 is shown in Fig. 2, in which case, however, the wrapper is formed of two strips secured together by such a seam at each edge of the cigarette.

The seam 2 of Fig. 3 is made by turning the

edges of the wrapper inwardly, so as to form a rib projecting inside the wrapper and pasting them together, a very desirable seam being thus produced which gives closely the appearance of a seamless cigarette and is smooth in handling.

Seams 3 of Figs. 4 and 5 are formed by pasting together the outwardly-turned edges of the wrapper, so as to form a rib projecting from the edge of the cigarette, the cigarette shown in Fig. 4 being made from a single strip of wrapper-paper and with the seam at one edge, and that shown in Fig. 5 being made from two strips of wrapper-paper with a seam at each edge. It will be understood that these external ribs may be rolled, folded, or pressed down upon the cigarette, if desired.

Various other forms of seams embodying the invention may be used, but those shown are sufficient to illustrate the invention and will suggest to those skilled in the art such modifications therein as are within the invention.

As above stated, the cigarettes embodying the present invention are preferably made by the continuous-rod method, and any suitable method and apparatus may be used for this purpose, so as to secure a continuous cigarette-rod and cigarette with the filler uniformly compressed and properly filling the wrapper-tube.

It will be understood that the term "elliptical" used herein is not intended to limit the invention to a cigarette-rod of exactly elliptical form in cross-section, but is intended to cover any modifications of form so long as it is substantially elliptical.

What I claim is—

1. An elliptical cigarette having a pasted wrapper-seam on the edge.
2. An elliptical cigarette having a pasted wrapper-seam on each edge.
3. An elliptical cigarette having the edges of the wrapper overlapped and pasted together to form a flat pasted seam on the edge of the cigarette.
4. An elliptical cigarette having a wrapper formed of two strips with the edges overlapped and pasted together to form a flat pasted seam on each edge of the cigarette.
5. A continuous elliptical cigarette-rod having a pasted wrapper-seam on the edge.
6. A continuous elliptical cigarette-rod having the edges of the wrapper overlapped and pasted together to form a flat pasted seam on the edge of the cigarette.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

DANIEL J. CAMPBELL.

Witnesses:

C. J. SAWYER,  
A. L. KENT.