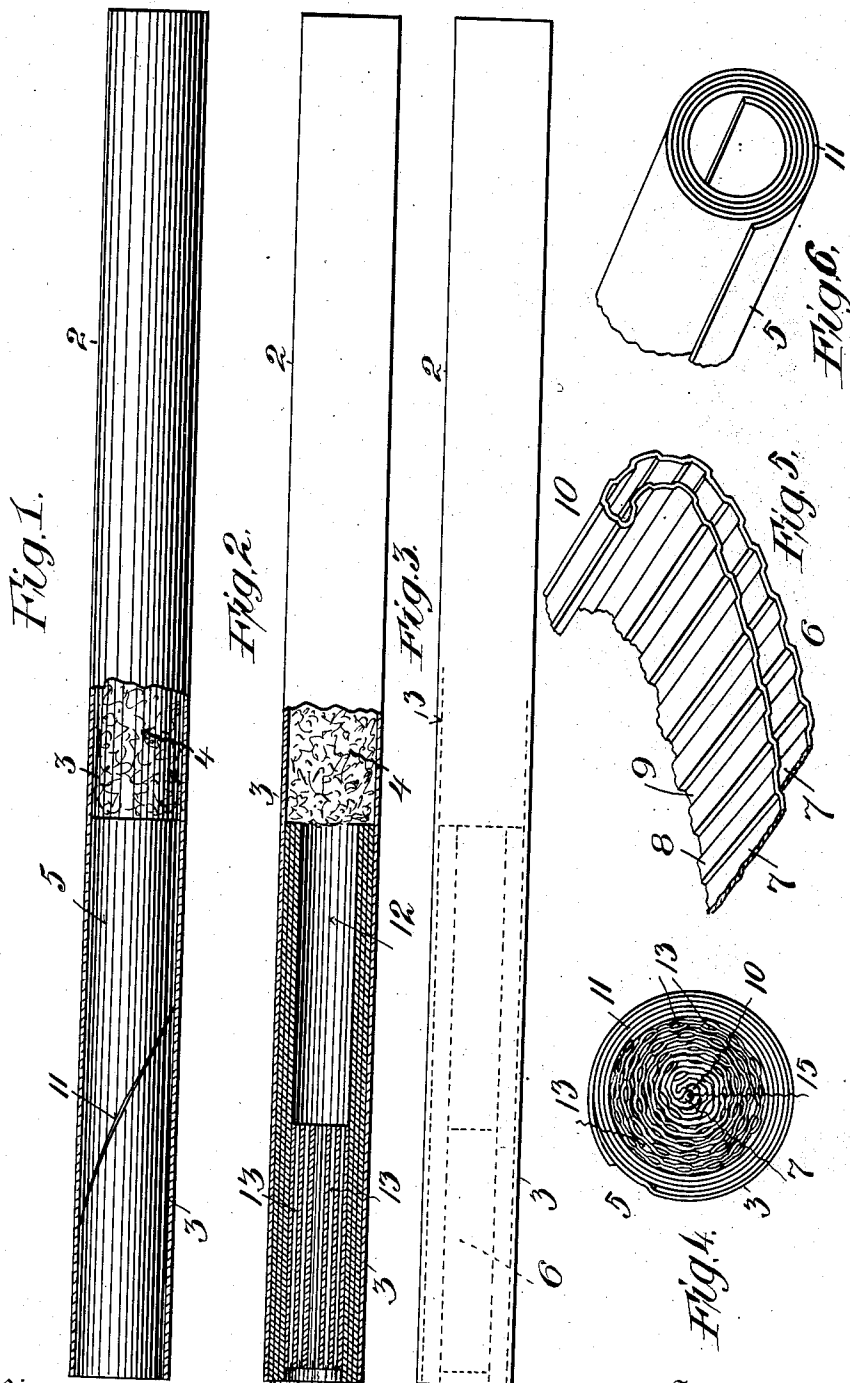


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MOUTHPIECE FOR CIGARETTES AND THE LIKE.
APPLICATION FILED SEPT. 2, 1909.

973,890.

Patented Oct. 25, 1910.



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UNITED STATES PATENT OFFICE.

JOHN W. SURBRUG, OF MONTCLAIR, NEW JERSEY.

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To all whom it may concern:

Be it known that I, JOHN W. SURBRUG, a citizen of the United States, and a resident of the city of Montclair, county of Essex, State of New Jersey, have invented certain new and useful Improvements in Mouthpieces for Cigarettes and the Like, of which the following is a specification.

The object of my invention is to produce in a simple and efficient manner, a mouthpiece or device to be inserted in the smoking end of a cigarette or other like article, which will readily absorb from the tobacco and paper smoke or other products of combustion, considerable if not all of the harmful elements.

My invention consists in the article of manufacture hereinafter described, and in its structural combination with a cigarette or like article, likewise as hereinafter described and more fully pointed out in the claims appended hereto.

In the drawing forming part of this specification in which I have shown an embodiment of my invention, Figure 1 is a side elevation, very much enlarged, of a cigarette embodying my improvements, a portion of the outer tube or covering being broken away to disclose a part of the interior. Fig. 2 is a like view, partly in section, the section being taken transversely through the longitudinal center of the cigarette. Fig. 3 is a like view showing the exterior of the cigarette provided with my improvements, the interior construction being indicated by dotted lines. Fig. 4 is an end elevation, further enlarged, showing my absorbent device as held within a holder removed from the cigarette. Fig. 5 is a perspective view, much enlarged, of a specific form of an absorbent plug, partly unrolled. Fig. 6 is a perspective view of a fragment of the plug holder employed.

Similar numerals of reference indicate like parts, throughout the several views.

My invention in its broad aspect consists in providing a plug or like device which is to be inserted within the body or tube of a cigarette or the like, to intercept the passage of the smoke or products of combustion, the characteristics of which are that it is transversely corrugated so as to produce, when it is inserted within the tube of a cigarette, a series of channels through which the smoke or products of combustion may readily pass, and which I preferably make

of some absorbent material such a pulpy uncalendered paper. My improved plug may, therefore, be employed in various ways. It may be made up separately and sold for use on cigarettes, pipes, and on varied forms of smoking devices, or it may be as hereinafter shown, retained within a plug holder and it and the holder inclosed within the tube of a cigarette.

In the drawing, 2 indicates a cigarette comprising an outer tube 3 of combustible material such as paper, an interior rod 4 of tobacco, a plug holder 5 of the desired length held within the tube 3 and the plug 6 held within the holder and preferably as located in Fig. 2, a short distance from the mouth-end of the cigarette so as to keep the tongue of the smoker coming in contact, as much as possible, with the plug.

As shown in Fig. 5, the preferred form of plug 6 is in the shape of a strip of paper 7 or other desired material provided with longitudinal corrugations which form elevations 8 and depressions 9 therein. This strip of paper, of sufficient length, is preferably folded over upon itself, as indicated at 10, Fig. 5, so as to produce two plies of material, and then rolled upon itself with the fold 10 centrally located so as to form a plug as indicated in Figs. 2 and 4. This plug is placed within the holder which comprises a strip of paper 11, spirally disposed upon itself as seen in Fig. 1 so that the free end of the strips 7 may spring out and engage the interior of the holder 5 with sufficient friction to retain the plug in its proper position in the holder. The outer tube 3 of the cigarette is formed about the tobacco rod and the plug-holder 5 in any manner well-known in the art of making cigarettes. This disposition of the strip of material of which the holder is made causing it to spring out and be retained by the friction of its free end against the inside of the said tube.

As indicated in Fig. 2, the products of combustion pass through the interior or bore 12 of the holder 5 and thence through the channels 13 formed in the plug by the overlapping and overlying of the indentations or corrugations in the body of the material of which the plug is composed, which channels, as shown in Fig. 2, lie in the direction of the length of the cigarette, the products of combustion leaving the same as indicated in Fig. 2.

It will be noted by reference to Fig. 4 that by reason of the spiral disposition of the material of which the plug is made, the same has sprung out to a greater extent at the center than at the circumference, thereby leaving a somewhat larger opening, as shown at 15, at the center of the plug than if removed from the center. This insures a central draft which is highly desirable as producing an even burning of the cigarette without impairing the special function of the plug of separating into numerous small streams the products of combustion, and preferably simultaneously absorbing the absorbent elements thereof. The multiplicity of independent channels thus formed in the mouth-end of the cigarette, which while large enough to permit of a sufficient draft, are small enough to retain the heavier particles of carbon, etc., thereby performing the additional function of straining the smoke before it passes out of the cigarette.

It is clear that my invention may be embodied in various ways without departing from its spirit, and particularly that it is not essential that I employ two overlying strips of material to form the plug, or that the channels be formed by corrugating the

surface, as a single strip of material may be employed and the channels otherwise formed.

Having described my invention, I claim:

1. As an article of manufacture, a plug for cigarettes and the like, comprising a strip of material folded over on to itself and rolled into the plug with the line of the fold centrally located.

2. As a product of manufacture, a plug for cigarettes and the like, comprising a strip of material folded over upon itself to constitute a double ply, said double ply being rolled upon itself, and said strip having an opposite or broken surface.

3. In a cigarette or the like, the combination of an outer tubular covering, of a plug comprising a strip of corrugated material folded over on itself and rolled into the plug with the line of the fold centrally located said plug being frictionally held within said tube.

Signed at the city, county and State of New York, the 1st day of September, 1909.

JOHN W. SURBRUG.

Witnesses:

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