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2,462,446

BUILT-IN CIRCUITOUS SMOKE PASSAGE

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Fig. 1.

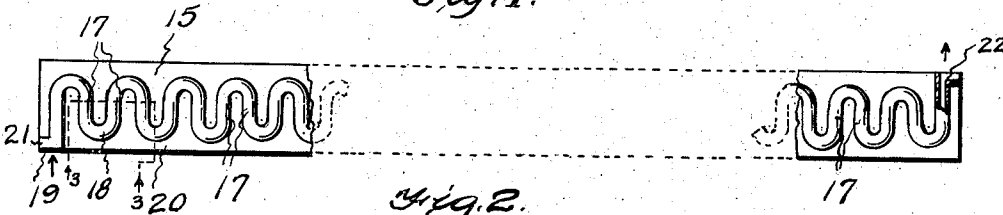


Fig. 2.

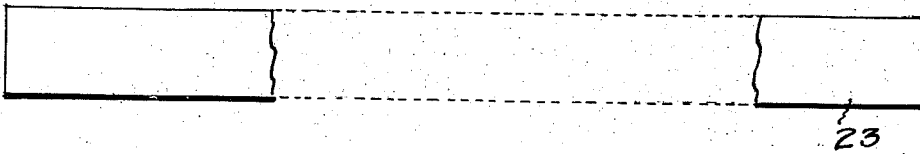


Fig. 3.



Fig. 4.

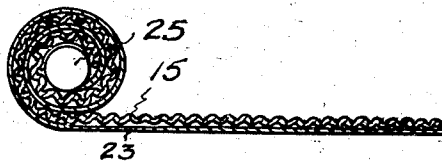


Fig. 5.

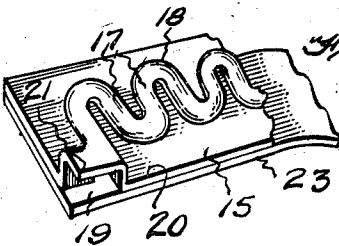
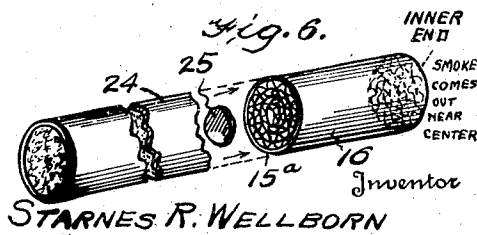


Fig. 7.



Fig. 6.



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BUILT-IN CIRCUITOUS SMOKE PASSAGE

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1 Claim. (Cl. 131—11)

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This invention relates to a cigarette tip, and has for one of its objects the production of a simple and efficient means for providing a long or circuitous smoke passage which is built-in or fitted into a compact amount of space at one end of a cigarette.

Another object of this invention is the production of a simple and efficient smoke filter tip for cigarettes, and the like, which is provided with a circuitous smoke passage to cause the smoke from burning tobacco to pass through a lengthy and irregular passage before entering the smoker's mouth.

Other objects and advantages of the present invention will appear throughout the following specification and claim.

In the drawing:

Figure 1 is a plan view of a strip from which one form of tip is constructed, certain parts being broken away;

Figure 2 is a plan view of an intermediate companion piece used in constructing the tip;

Figure 3 is a fragmentary, longitudinal, sectional view taken on line 3—3 of Figure 1;

Figure 4 is a transverse sectional view through the tip in the process of being rolled;

Figure 5 is a fragmentary perspective view of one of the corrugated strips and its companion piece of the form shown in Figure 2;

Figure 6 is an exploded view of the tip, the plug, and the cigarette;

Figure 7 is an enlarged fragmentary sectional view of one end of a cigarette tip illustrating the position of the central closure.

By referring to the drawing, it will be seen that 15 designates one type of corrugated strip of paper or other suitable material which may be used in forming the filter tip 16. The strip 15 is provided with transverse corrugations 17. These transverse corrugations are connected to provide a continuous serpentine smoke passage 18 extending from one end of the strip 15 to the other, as shown in Figure 1. One end of the smoke passage 18 is provided with an enlarged entrance opening 19, which entrance opening extends to the forward edge 20 of the strip 15 and to the corner 21. The opposite end of the smoke passage 18 is provided with a smoke outlet opening 22 similar in construction to the entrance opening 19.

A companion piece 23 of flat paper or other suitable material is fitted against the corrugated serpentine passage 18 in the manner shown in Figures 3 and 4, and the strip 15 and companion piece 23 are then coiled or rolled together as

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shown in Figure 4, to provide the tip 16. The tip 16 is placed at the end of the cigarette 24 and is enclosed with the conventional cigarette paper to provide a built-in serpentine circuitous smoke filter passage. This construction will provide a filter similar to the lengthy cigarette holder, but will require little extra length in the cigarette while giving the same or better results and at the same time eliminating the necessity of a special holder.

In the form shown in Figure 1, the tip is placed at one end of the cigarette so that the entrance opening 19 abuts the tobacco in the cigarette and the outlet opening 22 is located at the outer end of the tip which enters the mouth of the smoker. It is preferable to plug or seal the center passage of the tip when the same is constructed and this may be done by means of a sealing disc 25 of paper or other material which may be pasted in place as shown in Figure 7.

By noting Figure 6 it will be seen that a disc 25 is adapted to be pasted in place over the center of the filter tip near the inner end of the tip so as to close the central portion of the tip at the point thereof adjacent the tobacco in the cigarette 24. This will cause the smoke to enter the tip 16—note Figure 6—near the periphery of the tip, as at 15^a. In other words the smoke is drawn into the filter or tip 16 through the passage or passages located near the circumference of the tip 16 and the smoke comes out of the tip at its outer end or at the smoker's end near the center of the tip, in this way providing the long or circuitous passage within the filter or tip. In view of the fact that the disc 25 which forms a closure at the center of the tip 16 is fixed to the end of the filter or tip thereby providing the smoke inlet near the outer circumference, a great degree of accuracy in placing of the disc 25 is not required. All that is necessary is to seal-off the central draft or block the central draft. In view of the simplicity of the structure and the elimination of accurate closure placement, the danger of "duds" in faultily manufactured filters is eliminated. It is not desired to restrict the present application to the particular location of the disc 25, but the arrangement as illustrated is found to be preferable.

It should be noted that the structure shown in detail in Figure 5, the smoke passage terminal serves a dual purpose:

1. It provides an enlarged, extended mouth or terminal at the opening of the passage;
2. It serves as an obstruction to prevent a direct

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passage of smoke and forces the smoke to pass only through the extended passages.

By considering Figure 6 it will be seen that the smoke passages at the end of the cigarette which is placed in the mouth of the smoker would have outlets near the center of the tip 16 and this is preferable due to the fact that the moisture and pressure from the lips of the smoker might tend to seal-off or crush the corrugations near the periphery and prevent the smoke from being discharged from the end of the cigarette tip 16. Consequently, by placing the smoke outlet near the center this difficulty is eliminated. It has been found that the draft upon the tobacco is sufficient even when the passages are located in the manner as described.

Having described the invention, what is claimed as new is:

An article of the class described comprising a strip of material having a plurality of parallel transverse passageways extending in a direction from one side edge of the strip toward the opposite side edge and terminating short of said side edges, the ends of the passageways having alternate connections near said side edges to provide a serpentine, continuous, smoke conveying channel of greater length than the length of the

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strip, said smoke conveying channel having a smoke inlet at one end and at one side of the strip and having a smoke exit at the opposite end and upon the opposite side, said strip being adapted to assume the form of a roll constituting a cylindrical body, the parallel passageways of said smoke conveying channel thereof extending in a direction substantially perpendicular to the base of the formed cylindrical body.

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