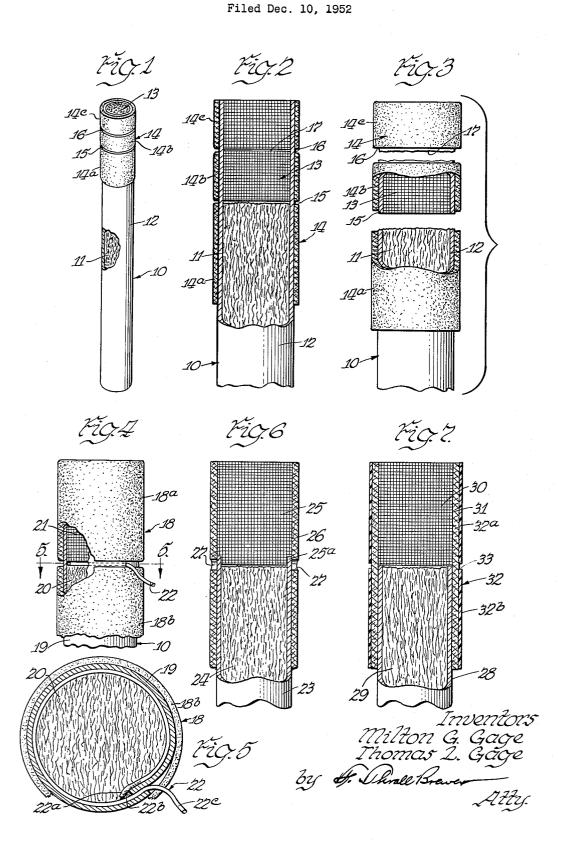
FILTER TIP CIGARETTE



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## FILTER TIP CIGARETTE

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This invention relates to improvements in filter tip 15 cigarettes, and more particularly to tipped cigarettes having provision for the removal of all or a part of the filter at the option of the smoker.

One object of the invention is to provide a filter cigarette construction which facilitates the ready removal 20 of the filter without the use of a cutting tool, such as scissors, knife, or the like. It is recognized by numerous cigarette users that filters at times reduce taste and satisfaction derived from the cigarettes. Occasionally a user of cigarettes provided with filters will remove a filter 25 from a cigarette by use of a knife or the like, and derive added pleasure from the change in taste, notwithstanding his general satisfaction with the particular brand of filter cigarettes used by him. It is to facilitate the ready removal of the filter or portion of a filter unit of a cigarette 30 by manual tearing that the present invention is directed.

The object of the invention, therefore, is to provide a cigarette construction including a filter element and a mouth piece or tip preferably of relatively non-absorbent paper or the like, which mouth piece or tip encom- 35 passes the filter element and the adjacent portion of the cigarette proper but which mouth piece is so formed that the portion encompassing the filter or a separate section thereof can readily be removed with the enclosed filter or of a cutting tool, but leaving the remainder of the tip in position for use in smoking the cigarette.

Our invention further comprehends the provision of a cigarette having a readily removable filter at one end whether the cigarette is smoked with or without the filter thereon, it has a relatively non-absorbent tip at the said one end.

The foregoing objects can be realized by different cigarette structures some of which, for illustrative pur- 50 poses, are shown in the accompanying drawings, wherein:

Figure 1 is a side elevational view of a cigarette provided with two removable filter sections, one or both of which may be removed at the option of the user and in 55which view a portion is broken away to show details of structure:

Fig. 2 is a fragmentary enlarged longitudinal sectional view of the cigarette shown in Fig. 1;

Fig. 3 is a view of the structure shown in Fig. 2 but 60 showing the two removable filter sections in severed relation;

Fig. 4 is a broken elevational view of the tip portion of a cigarette having a pull string, tape or the like, for effecting removal of the filter element when desired;

Fig. 5 is an enlarged sectional view taken substantially on a line 5—5 of Fig. 4;

Fig. 6 is a fragmentary view of a cigarette illustrating the filter end of a modified construction which permits 70 the filter and surrounding tip portions to be removed readily; and

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Fig. 7 is a view similar to Fig. 6 but illustrating a further modification of the removable filter construction.

In Figs. 1, 2 and 3 of the drawing, a cigarette is shown which has a filter tip made in two sections, one or both of which can be removed readily by the user without employing a cutting tool or instrument. In said figures, 10 indicates generally a cigarette consisting of a filler of tobacco 11 wrapped in a paper 12. The paper 12 encloses at one end a filter 13 of any suitable filtering material. Surrounding the end of the cigarette provided with the filter 13 is a tip or mouth piece 14. This tip may be of any appropriate mateiral such as sheet cork, but it may be assumed to be of a suitable paper stock, preferably so treated or manufactured as to render it relatively nonabsorbent of saliva. The tip 14 may be secured to the enclosed portion of the paper wrapper 12 by an adhesive. The tip not only surrounds the filter but surrounds also a portion of the cigarette proper beyond the filter as shown.

The tip 14 is divided into sections 14a and 14b by a line of parting or severance 15 in the plane of the meeting ends of the filter 13 and the filler 11, as shown in Fig. This line 15 may comprise a line of perforations for weakening the tip material to enable the ready removal of the filter and surrounding portion of the tip by tearing, but, as shown, the line 15 is a continuous cut through the tip material. The cigarette paper 12 need be torn along this line 15 in removing the filter and the adjacent portion of the tip 14 from the rest of the cigarette.

In removing the filter and the surrounding portion of the tip material, the user may first moisten the paper 12 along the severance line 15 by saliva, for example. filter end can then readily be removed since the moistened paper tears easily and the filter, not being physically bonded to the adjacent filler, breaks free in a satisfactorily smooth plane upon lateral flexing of the filter end with one hand while holding the balance of the cigarette in the other hand, or between fingers thereof.

In Figs. 1-3 the filter end of the cigarette is shown as portion thereof as a unit when desired without the use 40 having a second separation or severance line 16 intermediate tip sections 14b and 14c at the tipped end of the cigarette and between the forward line 15 and the end of the tip. The filter 13 is shown with a plane of separation 17 substantially coincident with the line 16. This plane thereof and which is so constructed and arranged that 45 of separation is provided at the time of manufacture of the cigarette, as by making the filter in the two illustrated half sections. It may be understood from the foregoing description that separation may be effected along the plane of line 16 if desired, leaving the forward filtering portion in section 14b in place during smoking and thereby modifying both the taste and filtering action of the cigarette as compared with smoking it with both sections of the filter in place or with both sections removed as above described.

It will be noted that in removing both removable sections as a unit or but one thereof as herein described, the tip section 14a stiffens the cigarette at the end and hence protects the adjacent usable portion of the cigarette against excessive crushing or rupture during the removing operation. Loss of tobacco from the cigarette along the plane of separation in removing the entire filter is minimized as a result of the stiffening afforded by the tip material and, as will be noted, the unremoved portion 14a of the tip provides the advantages of a tipped cigarette even though the filter is removed. If desired, the paper 12 may be treated with a wetting agent in lines coincident with the separation lines 15 and 16 of the tip material for hastening the paper weakening action of applied moisture.

In Figs. 4 and 5, a cigarette 10 is shown provided with a tip 18 applied thereto as previously described and made of any suitable non-absorbent tip material. A paper wrapper 19 which encloses the tobacco filler 20 encloses, at the illustrated butt end of the cigarette, a filter 21 of any suitable filter material. The tip 18 is in two sections 18a and 18b spaced apart to provide a line of severance, as shown, in the plane of the abutting ends of the filter 21 and the tobacco filler 20. For the purpose of effecting separation of the paper wrapper 19 in the plane of the inner end of the filter, a tear strip in the form of a thread or cord 22 is provided. One end 22a of the member 22 is attached by adhesive 22b to the inner surface of the paper 19 at the overlapped edge thereof as shown in Fig. 5. The member 22 extends around and in contact with the inner surface of the paper and emerges from the cigarette between the overlapped margins thereof to provide a finger piece 22c which may be grasped by the user, as a tear string, and by pulling outwardly as the grasped end is moved relatively about the cigarette, the paper is severed throughout the circumference of the cigarette, thus separating the filter end from the cigarette proper.

Cigarettes of the type shown in Figs. 4 and 5 may be smoked with or without the filter. Unless the paper is severed by the cord or thread as described, the cigarette is sealed throughout the area exposed by the line of separation between the two filter sections by the paper 25

wrapper 19.

In the form of the cigarette illustrated in Fig. 6, a paper wrapper 23 extends slightly beyond the end of the tobacco filler 24. A filter 25 abuts the end of the filler and is enclosed by the tip 26 which extends beyond the end of the paper wrapper and tobacco filler about the adjacent end portion of the cigarette proper and is adhered thereto by a suitable adhesive. The tip 26 is of non-absorbent material and is provided with a row of perforations 27 in the plane of the abutting ends of the filler 24 and filter 25. These perforations are sealed against admission of air during use of the complete cigarette by the extending end 25a of the paper wrapper 23.

In the event the user desires to remove the filter from the cigarette shown in Fig. 6, he can break the tip at the plane of perforations 27. Such removal of the filter and the surrounding portion of the tip will remove also the end portion 25a of the paper wrapper which is adhered to the tip. Such severance of the filter end from the cigarette proper leaves the forward portion of the tip material on the cigarette as in the previously described

modifications of the invention.

In the form of the invention shown in Fig. 7, the paper wrapper 28 of the cigarette proper terminates in the plane of the rear end of the tobacco filler 29. A filter 30 abuts the end of the tobacco and is enclosed within a moisture absorbent supplemental wrapper 31 of paper which encloses also the butt portion of the filler, as shown, and preferably is adhered to the paper wrapper 28. Surrounding the absorbent supplemental wrapper section 31 is a relatively non-absorbent tip 32 which is adhered to the supplemental absorbent wrapper 31. The tip of the illustrated cigarette is in two sections 32a and 32b separated slightly, as shown at 33, in a plane coincident with the abutting ends of the filler and filter.

When a cigarette of the type shown in Fig. 7 is used, the absorbent wrapper 31 prevents ingress of air through the line of severance 33 of the tip sections 32a and 32b. If the cigarette is to be used without the filter, the user tears the filter end from the cigarette at the plane of the line 33. For facilitating the tearing of the wrapper 31 the latter may first be moistened with saliva along the line 33. If desired, the section 33 may have a wetting agent applied thereto in registration with the line 33, as during the manufacture of the cigarette. After removal of the filter end portion, the tip section 32b of the cigarette proper constitutes a usable tip during smoking. The absorbent wrapper 31 may be considered as a portion of or extension of the wrapper 28 in the complete cigarette, and the tip sections 32a and 32b may be provided by 75

the application of a layer of moisture proof or nonabsorbent material, in the form of a coating, to the wrapper.

In all forms of the cigarette described herein, filters are included as parts thereof, but are removable at the option of the user without the use of a cutting instrument. The severance lines which facilitate the manual separation of the filter ends from the remainder of the cigarettes by tearing may be interrupted or discontinuous, as shown in Fig. 6, but may also be continuous, as depicted in the remaining figures. In all instances moisture may be applied at the severance lines, if desired, to weaken the subjacent registering portions of the wrapper, thereby to facilitate the rupturing of the wrapper at the filter end portions (or between sections thereof, in the form shown in Figs. 1–3) to facilitate removal. The use of a wetting agent on the rupturable portion of the wrapper facilitates the action of the applied moisture in weakening the wrapper.

The forms of cigarettes shown and described are illustrative of the present invention, and it will be apparent that variations of such forms may be utilized without departing from the spirit of the invention as defined by

the following claims.

We claim:

1. A cigarette comprising a filler of tobacco enclosed within a paper wrapper, a filter element at one end of the filler, said filter element and filler having adjacent ends in abutting contact lying in a plane and a tip of relatively non-absorbent material encompassing the filter element and contiguous portion of the filler, said tip comprising two cylindrical sections slightly spaced axially to provide therebetween a severance line for the wrapper extending circumferentially of the cigarette in the plane of the abutting ends of the filter and filler for exposing the wrapper at said plane to facilitate manual separation of the filter and the surrounding portion of the tip as a unit from the contiguous portions of the filler and tip.

2. A cigarette comprising a tobacco filler, a ruptur-40 able paper wrapper therefor, a filter in abutting contact with one end of the filler within the confines of said wrapper, the abutting ends of said filter and filler lying in a plane, a tip of relatively non-absorbent material surrounding the filter and the adjacent portion of the filler, said tip comprising two cylindrical sections slightly spaced axially to provide therebetween an uninterrupted severance line thereabout in the plane of the abutting ends of the filter and filler, said filter being sealed against admission of air by the portion of the wrapper at the severance line, and a tear strip encircling the wrapper at the inner surface thereof in the plane of said severance line and having a finger engageable end protruding from the wrapper and disposed in the axial space between the tip sections for facilitating the rupturing of the wrapper circumferentially in the plane of said severance line to remove the filter and surrounding portion of the tip from the remainder of the cigarette.

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