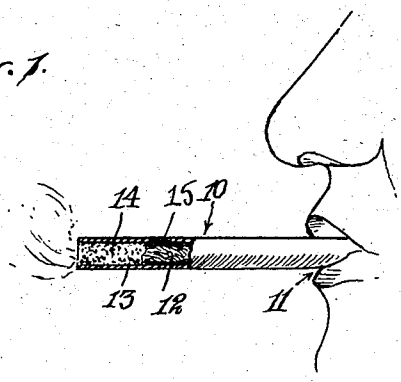
June 16, 1959 W. R. LAMM 2,890,704

CIGARETTE

Filed Nov. 10, 1954

Fig. 1.



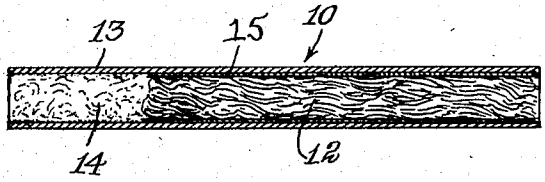




Fig. 2.

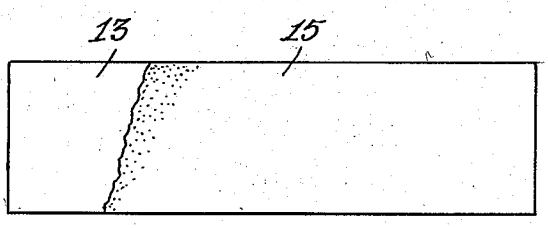



Fig. 3.

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# CIGARETTE

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Application November 10, 1954, Serial No. 467,925

2 Claims. (Cl. 131—15)

This invention relates to a new and improved cigarette, and more particularly to the wrapper therefor.

With the use of cigarettes presently manufactured the coals or ashes accumulated during the smoking thereof of necessity must be brushed from the tip from time to time. In many instances the coals or ashes inadvertently drop off causing the garments of the smoker to burn and causing damages to articles of furniture, rugs, and the like. In attempting to overcome this problem various non-combustible wrappers have been proposed for the tobacco in a cigarette, which wrappers retain the coals and ashes during the smoking thereof so that they will not accidentally drop off from the consumed end. However, the wrappings proposed did not accomplish the desired result because they did not prove feasible in that their manufacture would have necessitated a complete change-over of machinery utilized in making present-day cigarettes. In addition these wrappers were not sufficiently flexible to be accommodated by the rollers rolling the wrappers into a cylinder around the tobacco and the wrappers proposed conducted or condensed heat which was imparted into the mouth of the user. Further the proposed wrappers were expensive to manufacture.

It is an object of the present invention to provide a non-combustible wrapper for cigarettes which will retain the coals or ashes of the tobacco during the smoking thereof.

It is a further object of the present invention to provide a non-combustible wrapper for cigarettes which will retain the coals or ashes of the tobacco while burning after the cigarette is dropped, laid down, or thrown away.

It is an important object of the present invention to provide a cigarette having a non-combustible wrapper which may be utilized in presently used machines without any necessity for changing the machinery.

It is a further object of the present invention to provide a cigarette having a non-combustible wrapper whose appearance is substantially identical with conventional cigarette paper.

It is a further object of the present invention to provide a cigarette having a non-combustible wrapper which does not condense or conduct heat during smoking.

It is a further object of the present invention to provide a cigarette having a non-combustible wrapper having all the desired advantages which is nevertheless inexpensive to manufacture and easy to produce.

Other objects and advantages are set forth in greater detain in the accompanying specification taken in conjunction with the accompanying drawings, in which:

Fig. 1 is a side elevation of a cigarette of the present invention with a portion of the cigarette broken away;

Fig. 2 is an enlarged sectional view of the cigarette of the present invention with the tobacco partially consumed within the wrapper retaining the coals and ashes; and

Fig. 3 is a partially broken top view of a band comprising the wrapper for the tobacco of the present invention.



Referring to the drawings, there is shown a cigarette 10 retained in the mouth 11 of the user. The cigarette consists of a roll of tobacco 12 retained in pencil-like form by a wrapper 13 of non-combustible paper-like material. The paper-like material consists of a band or tape of interwoven glass fibres having the longitudinal edges thereof adhere to each other to surround the tobacco and maintain the same in pencil form. The glass fibre is coated with a vegetable adhesive gum which is relatively free of offensive taste and odors, as for example, gum tragacanth 15. The gum tragacanth is made into a paste by soaking flakes thereof in water and it is then applied to the glass fibre band, as shown in Fig. 3. With the use of this gum paste which will not flake off or crack and will not render the fabric non-flexible, the band or tape of glass fibre may be used in present-day machines without any necessity for any adaptation or changes of the machine. The band or tape of glass fibre having this coating can travel over the machines at the high rate of speed necessary in the present-day manufacture of cigarettes. During such operations the gum tragacanth or the like will adhere firmly to the glass fibre band even though the latter is rolled over rollers in several directions at high speed. As the cigarette is smoked, the gum is consumed and burned which furnishes sufficient air for the burning of tobacco through the porous glass fibres. While the coating is burning, however, no offensive odors or tastes are produced.

The high speed operations of crimping, rolling and adhering the longitudinal ends of the wrapper together to surround the tobacco is accomplished by the use of the interwoven glass fibres coated with gum tragacanth or the like. It is to be noted that these operations could not be conducted with other types of non-combustible material suggested prior to this time. The same adhesive means can be used for the wrapper of the present invention as are utilized in present-day operations without cracking or coming off while going through the machines at high speed. The coating consisting of gum tragacanth and the like is an essential element providing for the ability of the wrapper of the present invention to withstand the crimping, rolling and shearing operations.

The wrapper of the present invention may be rapidly and smoothly cut or sheared into the proper length for cigarettes, a necessary operation which is accomplished with great facility with the use of the interwoven glass fibre band or tape coated with gum tragacanth or the like.

While accomplishing all the desired advantages of the utilization of present-day operating machines without change-over, the cigarette of the present invention nevertheless maintains the same outward appearance as the paper utilized. However, the wrapper comprising glass fibres is non-combustible and will retain the ashes 14 consumed during smoking of a cigarette, as clearly shown in Fig. 2. This results in the prevention of accidental fall of quantities of coal ashes while the cigarette is being consumed with the consequent possibility of damage to persons or property.

Heretofore in many instances when the cigarette was dropped, laid down or thrown away, a fire hazard was created because of the exposure of the coals and ashes during the further burning of the cigarette. With the provision of the non-combustible wrapper of the present invention, however, this fire hazard is eliminated because the wrapper contains the coals and ashes without their being exposed even when the cigarette is laid down temporarily or after it is disposed of or thrown away.

The cigarette of the present invention while having this desirable coal and ash-retaining feature has a non-com-

bustible wrapper and coating of such material that there is no additional heat engendered during the consumption of the cigarette. The material of the wrapper will not conduct or condense heat, nor will the coating. Further, the coating has no disagreeable odor or taste that is in any way foreign to burning tobacco. The material utilized for the wrapper is pervious and thus does not detract in any way from providing the necessary air needed for burning the tobacco. The several advantages presented by the utilization of the wrapper of the present invention for cigarettes provide an accumulation of unexpected results while still maintaining the required economy of manufacture and usability of present-day machines.

As shown, the thickness of the wrapper used on present-day machines is critical. The thickness must not exceed approximately .005 of an inch in order to pass through the present-day high speed operations of manufacturing cigarettes and in order to be utilized with the present-day machines. The wrapper of the present invention is preferably .003 of an inch with extremely thin coating of the vegetable gum. This wrapper is extremely flexible and will not crack or tear or open so as to permit air to enter where it should not during the burning of the cigarette. During the smoking of the cigarette of the present invention the wrapper has a resultant silver hue which is very similar to the pure ash of a good cigarette. Therefore, there is no objectionable discoloration produced by the use of the wrapper of the present invention.

The wrapper of the present invention completely replaces the use of a paper or the like, but is nevertheless able to be utilized in machines presently using the paper without any change or adaptation thereof.

There has thus been provided a cigarette which will retain the coals and ashes preventing accidental dropping off during smoking and which is nevertheless flexible, attractive, and economical to produce.

While the invention has been described in some detail, it will be understood that variations and modifications



may be made without departing from the spirit thereof or the scope of the appended claims.

I claim:

1. A cigarette paper comprising a highly flexible sheet formed of interwoven glass fibers, said sheet being of a thickness in the order of .003 of an inch, said sheet being pervious, said sheet having a tasteless impervious vegetable gum coating along one surface thereof, said sheet and coating being adapted to be rolled with tobacco to form a cigarette, said coating having a flexibility in the order of that of the sheet so that the sheet and coating are capable of withstanding the rolling, crimping and shearing operations in the forming of a cigarette, the coated sheet being adapted to have its edges adhered to each other by adhesive means in the formation of a cigarette, said coating being readily combustible at the normal temperature of burning cigarette tobacco to expose the tobacco to the atmosphere through the pervious sheet.

2. The structure of claim 1 wherein said coating is gum tragacanth.

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