TOBACCO SMOKER'S ARTICLE

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2 Claims. (Cl. 131—194)

This invention relates to a tobacco smoker's article, such as a pipe and a cigarette or cigar holder, and more particularly to a smoker's article that is equipped with a smoke-cooling and filtering device.

A great variety of smoke-cooling and filtering devices have been devised and are being used, but their usefulness is limited because they remove only a relatively small percentage of the harmful constituents of tobacco smoke. This lack of effectiveness is mainly due to an insufficient cooling action, and this insufficiency is again due to arrangements which are inadequate to cool the whole cross section of the stream of smoke and to dissipate the heat of the smoke quickly enough.

The primary object of my invention is to generally improve tobbaco smoke-cooling and filtering devices and smoker's articles using such devices.

An important object of the invention is to increase the effectiveness of known smoke-cooling and filtering devices.

More specific objects center about a device which is commensurate with the requirements that the entire cross section of the flow of smoke is sufficiently cooled so that undesirable components of the smoke, which are present in form of condensable vapors, are condensed, that the heat of the smoke is quickly and adequately dissipated, and that condensed matter is effectively deposited and retained.

To the accomplishment of the foregoing and other objects which will become apparent hereinafter, my invention consists in a smoker's article provided with a smoke-cooling and filtering device, as are more particularly described in the subjoined detailed description and defined in the claims.

The specification is accompanied by a drawing in which:

Fig. 1 is a longitudinal section through a tobacco smoke-cooling and filtering device as used in the tobacco smoker's article according to the invention drawn to an enlarged scale;

Fig. 2 is a longitudinal section through a modified smoke-cooling and filtering device; and

Fig. 3 is a longitudinal section through a cigarette or cigar holder.

Referring to the drawing, and initially to Fig. 3 thereof, the cigarette or cigar holder 46 is made of cardboard, a plastic material or any material that is a poor heat conductor. The tapered portion 48 is covered both interiorly and exteriorly with metal foil 50. A frustoconical cartridge 52 which is positioned in the tapered portion consists of filtering material 54 and a wrapper 56 of metal foil. The wrapper encloses the filtering material at the front end and around its side. The front end is perforated. The wrapper is in thermal contact with the metal foil lining of the holder. It will be understood that in the cigarette or cigar holder of Fig. 3 a filter cartridge of the kind shown in Fig. 1 or 2, when given a frusto-conical shape, may be used instead of the cartridge 52.

The cylindrical cartridge 18 (see Fig. 1) consists of filtering material 22, such as textile materials, cotton, absorbent paper, porous ceramic materials, asbestos, and a wrapper 24 of metal foil. The wrapper comprises a side wall 26 and end walls 28, which end walls are provided with perforations 30. Reverting to Fig. 3, with the holder in operation, tobacco smoke on its way from the smoking end of the holder to the mouth end passes through the perforations in the front wall of the cartridge. Since this wall extends across the whole cross section of the stream of smoke, and the side wall of the wrapper is in direct thermal contact with the metal foil 50, all of the smoke is effectively cooled, and quick heat dissipation is ensured. The condensing action thus achieved makes it possible for condensed undesirable substances to be deposited on the filtering material.

In Fig. 2 a cartridge 32 is shown, the filtering material 22 of which is only partly wrapped. This cartridge is to be inserted in a cigarette or cigar holder or in a smoker's pipe so that the smoke impinges the wrapper first. The end wall 28 is perforated at 30, and the side wall 34 is in thermal contact with a surrounding heat-conducting portion of the smoker's article.

Metal foil may be replaced by a metallic coating applied to a suitable base by spraying, painting, depositing and similar methods.

The invention has been shown and described in a few forms only but it will be understood that many changes and modifications may be made without departing from the spirit of the invention as defined in the following claims.

1 claim:

1. A cigarette or cigar holder comprising a mouthpiece and a member extending therefrom, said member comprising two transversely spaced integrally connected portions of good heat-conducting property, said portions being connected only at one end thereof, said mouthpiece having a part extending between the said portions and in contact therewith, and a filter having a wall of good heat-conducting property in heat-conducting contact with the inner of said portions, whereby heat absorbed from tobacco smoke by the filter is directly conducted to the inner portion and from there to the outer portion and passed to the atmosphere, and whereby only a slight portion of that heat is transmitted to the mouthpiece extension.

2. A cigarette or cigar holder comprising a mouthpiece and a member extending therefrom, said member comprising a good heat-conducting holder, said mouthpiece comprising a relatively poor heat-conducting material, the member being adapted to receive a filter, the first named material being metal foil and arranged to cover a portion of the mouthpiece both interiorly and exteriorly, said filter having a perforated transverse metal foil wall in heat-conducting contact with said interior portion of the metal foil member.

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