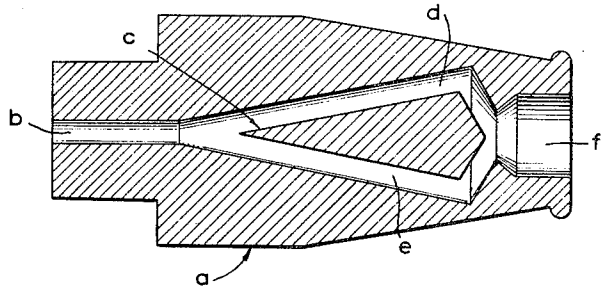
May 13, 1958 I. J. GRUNTFEST 2,834,355

MOUTHPIECES

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INVENTOR

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MOUTHPIECES

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2 Claims. (Cl. 131—216)

My invention relates to the improvement of devices for smoking tobacco and in particular to the design of mouthpieces for pipes and cigar and cigarette holders.

Many smokers find that an objectionable soreness of the tongue or other parts of the mouth develops after smoking. This is particularly true of pipe smokers and many people who otherwise would use a pipe for smoking resort to the use of cigarettes or cigars.

I have studied the causes of this soreness and have discovered that while some of the irritation is due to the high temperature of the smoke, a substantial part is due to the high velocity of the gas from the burning zone as it emerges from the end of the mouthpiece and into the mouth. This hot, high velocity gas jet penetrates the protective mouth juices and causes irritation of the mouth tissue.

I have found that if the velocity of this stream is reduced so that the gas diffuses slowly into the mouth instead of being injected as a high velocity jet, the protective influence of the mouth juices is not impaired and no soreness of the mouth tissue is produced. In my invention, the gas stream from the zone of burning is divided into a plurality of streams which are recombined at the exit end by impinging on one another in such a way as to produce a turbulence which causes the gas to diffuse gently into the mouth instead of entering as a jet.

There are several ways in which the desired reduction of the gas velocity can be accomplished. One of the easiest is shown in the schematic drawing presented.

In the drawing, the mouthpiece (*a*), which may be made of hard rubber or other plastic material, and which serves to connect the burning zone of the pipe, cigarette

or cigar to the mouth, is provided with an axial channel (*b*) through which the gas from the burning zone initially passes. This channel then bifurcates to form two diverging channels (*d*) and (*e*) which after some distance reverse their direction and are recombined at (*f*) in a common enlarged space at the bit end of the holder. The smoke path is such that the two confluent smoke streams meeting in the space (*f*) impinge on one another to provide local turbulence which tends to reduce the high velocity of the smoke as it emerges from the bit.

I claim:

1. A mouthpiece for smoking pipes and cigarette and cigar holders consisting of a single unit having one end adapted for connectoin to a zone where tobacco is burned, having a second end containing a terminal chamber and being adapted for holding the said mouthpiece in the mouth of the smoker, and having a plurality of passages converging and merging in one face of said chamber at an obtuse angle to one another, and said chamber being open to the mouth of the smoker.

2. A mouthpiece for smoking pipes and cigarette and cigar holders consisting of a single unit having one end adapted for connection to a zone where tobacco is burned and a second end containing a terminal chamber and being adapted for holding the said mouthpiece in the mouth of the smoker, said unit having a plurality of converging passages merging in one face of said chamber at an obtuse angle to one another and extending backwardly through the unit to form at least one opening to the zone where the tobacco is burned, and said chamber being opened to the mouth of the smoker.

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